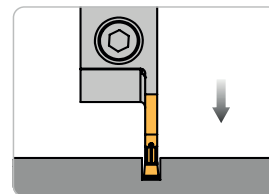


A close-up photograph of a lathe tool cutting a groove into a metal workpiece. The tool is a turning tool with a sharp cutting edge, and the workpiece is rotating. The background is blurred, showing other parts of the lathe. The image is framed by a blue border with diagonal lines.

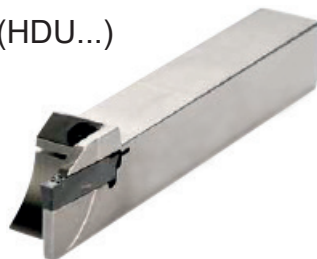
**KONRAD  
TOOLS**

**GROOVING - PARTING**

## PARTING - GROOVING



### MONOBLOCK HOLDERS (HDU...)



- shank sizes from 8 x 8 to 32 x 32 mm
- groove widths from 1.5 to 10 mm
- possibility of internal cooling

PAGE 2 - 14

### MODULES (MDG...)



- exchange module system
- groove widths from 1.5 to 4 mm
- possibility of internal cooling

PAGE 16 - 25

### BLADES (KDG...)



- sizes 26 and 32 mm
- groove widths from 1.5 to 4 mm
- possibility of internal cooling

PAGE 27 - 34

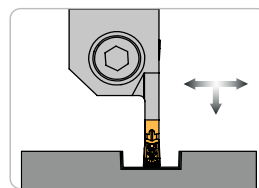
### INSERTS (DG...)



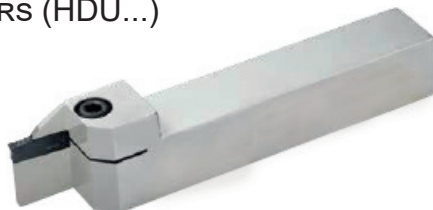
- insert length 16, 17, 24 and 35 mm
- groove widths from 1.5 to 10 mm
- wide range of geometries and grades

PAGE 36 - 46

## GROOVING - COPY TURNING



### MONOBLOCK HOLDERS (HDU...)



- shank sizes from 16 x 16 to 25 x 25 mm
- inserts widths from 2 to 6 mm
- possibility of internal cooling

PAGE 36 - 46

### INSERTS (DU...)



- insert length 24 mm
- straight and full-radius version
- wide range of geometries and grades

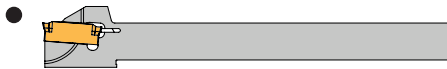
PAGE 36 - 46

# PARTING - GROOVING MONOBLOCK HOLDERS



<b>HDG</b>	<b>1616</b>	<b>R/L</b>	<b>.32</b>	<b>-A1</b>	<b>-LS1</b>	<b>-DG24.20</b>
TOOL TYPE	SHANK SIZE	ORIENTATION	MAX DIAMETER	INTERNAL COOLING	COOLING CONETION	INSERT
<b>HD - HOLDER</b>	<b>1616 - 16 x 16 mm</b>	<b>R - RIGHT</b>	<b>.32 - 32 mm</b>	- NO COOLANT	<b>S - FROM SIDE</b>	<b>24 - LENGTH 24 mm</b>
<b>G - GROOVING</b>		<b>L - LEFT</b>		<b>A1 - FROM ABOVE</b>	<b>B - FROM BACK</b>	<b>20 - WIDTH 2 mm</b>
				<b>A2 - FROM ABOVE AND BELOW</b>		

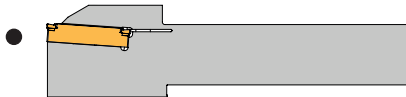
## SLIDING AUTO LATHE VERSION HOLDER



- shank size 8 x 8 to 20 x 20 mm
- width 1,5 to 3 mm
- maximum groove depth 3 - 16 mm

PAGE 2-3

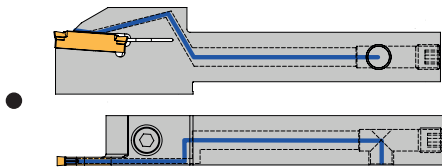
## HOLDER WITHOUT THROUGH COOLANT



- shank size 16 x 16 to 32 x 32 mm
- width 1,5 to 10 mm
- maximum groove depth 10 - 37,5 mm

PAGE 4

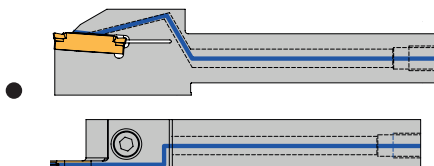
## HOLDER WITH THROUGH COOLANT SUPPLY (A1) FROM THE SIDE



- shank size 10 x 10 to 25 x 25 mm
- width 2 to 3 mm
- maximum groove depth 6 - 32,5 mm

PAGE 5 - 10

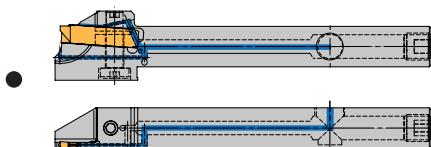
## HOLDER WITH THROUGH COOLANT SUPPLY (A1) FROM THE BACK



- shank size 16 x 16 to 25 x 25 mm
- width 2 to 3 mm
- maximum groove depth 16 - 32,5 mm

PAGE 11 - 13

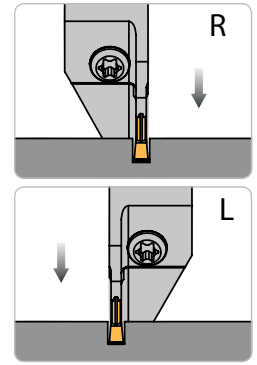
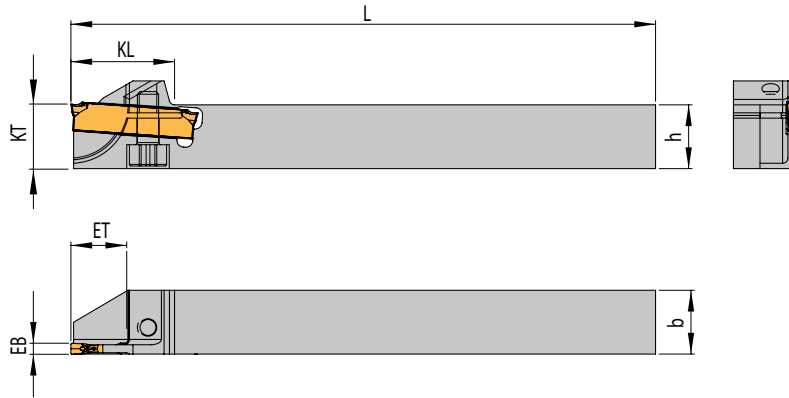
## HOLDER WITH THROUGH COOLANT SUPPLY (A2) FROM THE SIDE



- shank size 12 x 12 mm
- width 2 mm
- maximum groove depth 10 mm

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**HDG-B**

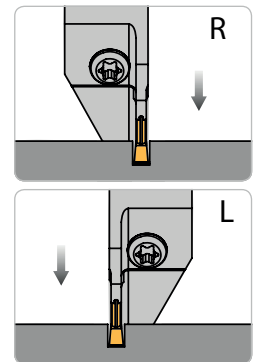
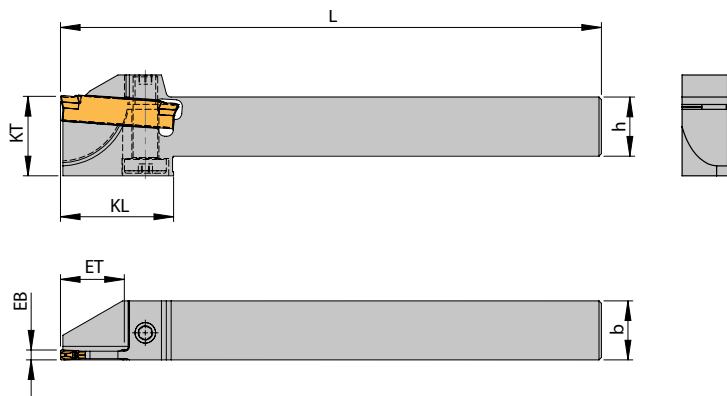


FOR SLIDING HEAD AUTO LATHES

LOCKING FROM BELOW

DESIGNATION	EB	ET	D <sub>max</sub>	h	b	L	KL	KT	INSERT
HDG 1212L/R.20-B-DG16.15	1,5	10	20	12	12	110	19,5	12	DG16-15...
HDG 1212L/R.20-B-DG24.15	1,5	10	20	12	12	110	19,5	12	DG24-15...
HDG 1212R.6-DG24.20	2	3	6	12	12	110	19,5	12	DG24-20...
HDG 1212L/R.12-B-DG24.20	2	6	12	12	12	110	19,5	12	
HDG 1212L/R.20-B-DG24.20	2	10	20	12	12	110	19,5	12	
HDG 1616L/R.32-B-DG24.20	2	16	32	16	16	110	25,5	16	

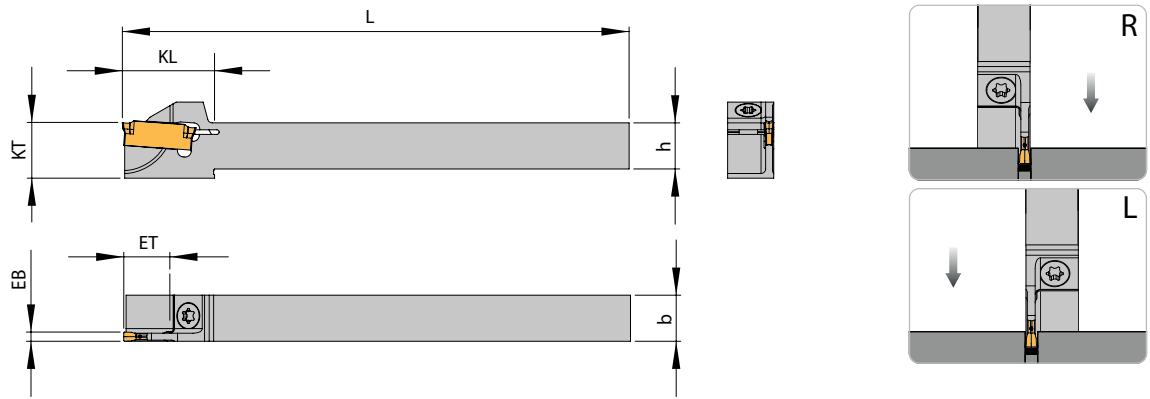
**HDG-BT**



LOCKING FROM TOP AND BOTTOM

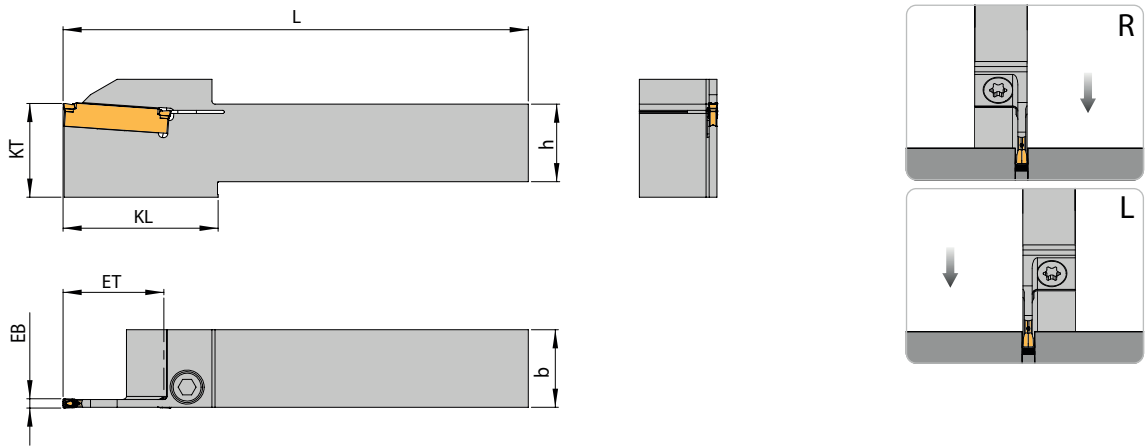
DESIGNATION	EB	ET	D <sub>max</sub>	h	b	L	KL	KT	INSERT
HDG 1212L/R.26-BT-DG24.20	2	13	26	12	12	110	23	16	DG24-20...

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

**HDG**


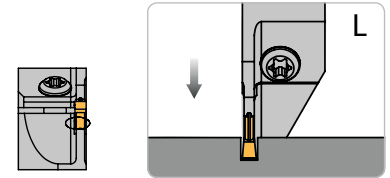
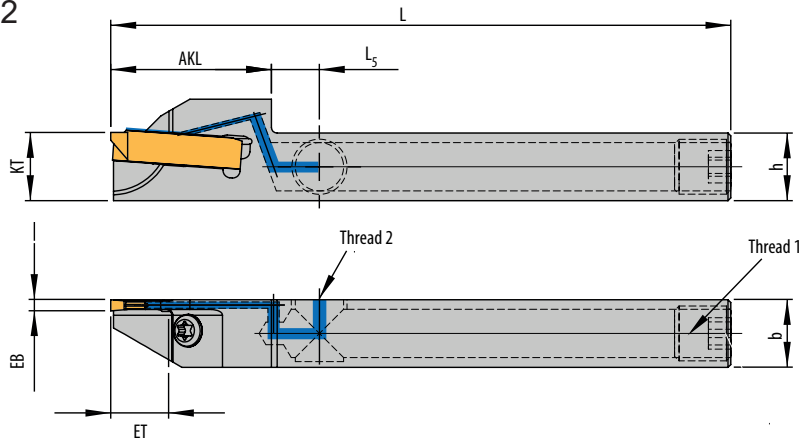
FOR SLIDING HEAD AUTO LATHES

DESIGNATION	EB	ET	D <sub>max</sub>	h	b	L	KL	KT	INSERT
HDG 0808L/R.12-DG16.15	1,5	6	12	8	8	110	16	10	DG16-15...
HDG 0808L/R.16-DG16.15	1,5	8	16	8	8	110	18	10	
HDG 1010L/R.20-DG16.15	1,5	10	20	10	10	110	20	12	
HDG 1212L/R.20-DG16.15	1,5	10	20	12	12	110	19,5	-	
HDG 1010L/R.20-DG16.20	2	10	20	10	10	110	20	12	DG16-20...
HDG 1212L/R.20-DG16.20	2	10	20	12	12	110	-	-	
HDG 1616L/R.26-DG16.20	2	13	26	16	16	110	-	-	
HDG 1212L/R.26-DG16.30	3	13	26	12	12	110	-	-	DG16-30...
HDG 1616L/R.26-DG16.30	3	13	26	16	16	110	-	-	
HDG 2020L/R.26-DG16.30	3	13	26	20	20	110	22,5	-	
HDG 0808L/R.12-DG24.15	1,5	6	12	8	8	110	16	10	DG24-15...
HDG 1010L/R.20-DG24.15	1,5	10	20	10	10	110	20	12	
HDG 1212L/R.20-DG24.15	1,5	10	20	12	12	110	-	-	
HDG 1212L/R.26-DG24.15	1,5	13	26	12	12	110	22,5	-	
HDG 1616L/R.32-DG24.15	1,5	16	32	16	16	110	-	-	
HDG 1010L/R.20-DG24.20	2	10	20	10	10	110	20	12	DG24-20...
HDG 1212L/R.20-DG24.20	2	10	20	12	12	110	-	-	
HDG 1212L/R.26-DG24.20	2	13	26	12	12	110	-	-	
HDG 1212L/R.32-DG24.20	2	16	32	12	12	110	26	16	
HDG 1616L/R.32-DG24.20	2	16	32	16	16	110	-	-	
HDG 2020L/R.20-DG24.20	2	10	20	20	20	110	-	-	
HDG 2020L/R.32-DG24.20	2	16	32	20	20	110	25,5	20	
HDG 1212L/R.26-DG24.25	2,5	13	26	12	12	110	22,5	-	DG24-25...
HDG 1212L/R.32-DG24.25	2,5	16	32	12	12	110	26	16	
HDG 1616L/R.32-DG24.25	2,5	16	32	16	16	110	-	-	
HDG 2020L/R.32-DG24.25	2,5	16	32	20	20	110	26	20	
HDG 1616L/R.20-DG24.30	3	10	20	16	16	110	-	-	DG24-30...
HDG 1616L/R.32-DG24.30	3	16	32	16	16	110	-	-	
HDG 2020L/R.32-DG24.30	3	16	32	20	20	110	-	-	

**HDG**


DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	h	b	L	KL	KT	INSERT
HDG 1616L/R.44-DG24.15	1,5	22	44	61	16	16	125	40	20	DG 24-15...
HDG 2020L/R.44-DG24.15	1,5	22	44	61	20	20	125	-	-	
HDG 1616L/R.44-DG24.20	2	22	44	61	16	16	125	40	20	DG 24-20...
HDG 2020L/R.44-DG24.20	2	22	44	61	20	20	125	-	-	
HDG 2525L/R.44-DG24.20	2	22	44	61	25	25	150	-	-	
HDG 2020L/R.44-DG24.25	2,5	22	44	61	20	20	125	-	-	DG 24-25...
HDG 1616L/R.44-DG24.30	3	22	44	61	16	16	125	40	20	DG 24-30...
HDG 2020L/R.44-DG24.30	3	22	44	61	20	20	125	-	-	
HDG 2525L/R.44-DG24.30	3	22	44	61	25	25	150	-	-	
HDG 3225L/R.44-DG24.30	3	22	44	61	32	25	170	-	-	
HDG 2020L/R.44-DG24.40	4	22	44	61	20	20	125	-	-	DG 24-40...
HDG 2525L/R.44-DG24.40	4	22	44	61	25	25	150	-	-	
HDG 3225L/R.44-DG24.40	4	22	44	61	32	25	170	-	-	
HDG 2525L/R.44-DG24.50	5	22	44	61	25	25	150	-	-	DG 24-50...
HDG 2020L/R.65-DG35.20	2	32,5	65	80	20	20	150	50	30	DG 35-20...
HDG 2525L/R.65-DG35.20	2	32,5	65	80	25	25	150	50	30	
HDG 2020L/R.52-DG35.30	3	26	52	68	20	20	150	44	30	DG 35-30...
HDG 2020L/R.65-DG35.30	3	32,5	65	80	20	20	150	50	30	
HDG 2525L/R.65-DG35.30	3	32,5	65	80	25	25	150	50	30	
HDG 3225L/R.65-DG35.30	3	32,5	65	80	32	25	170	50	32	
HDG 2020L/R.65-DG35.40	4	32,5	65	80	20	20	150	50	30	DG 35-40...
HDG 2525L/R.65-DG35.40	4	32,5	65	80	25	25	150	50	30	
HDG 3225L/R.65-DG35.40	4	32,5	65	80	32	25	170	-	-	
HDG 2020L/R.65-DG35.60	6	32,5	65	80	20	20	150	50	30	DG 35-60...
HDG 2525L/R.65-DG35.60	6	32,5	65	80	25	25	150	50	30	
HDG 3232L/R.65-DG35.60	6	32,5	65	80	32	32	170	-	-	
HDG 2525L/R.65-DG35.80	8	32,5	65	80	25	25	170	50	30	DG 35-80...
HDG 3232L/R.65-DG35.80	8	32,5	65	80	32	32	170	-	-	
HDG 3232L/R.75-DG40.10	10	37,5	75	90	32	32	170	-	-	DG 40-100...

HDG-A1-S2



FOR SWISS TYPE MACHINES

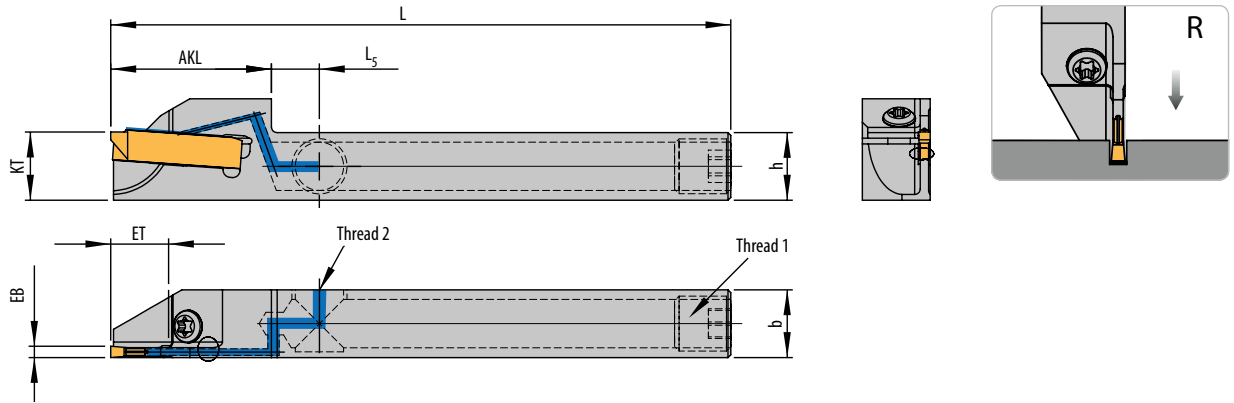
THROUGH TOOL COOLANT (A1) ACCESS FROM THE SIDE, THREAD 1: G 1/8", THREAD 2: G 1/8"

DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	h	b	L	KL	KT	INSERT
HDG 1212L.20-A1-S2-DG24.02	2	10	20	12	12	110	8,5	28,5	12	DG 24-20...
HDG 1212L.26-A1-S2-DG24.02	2	13	26	12	12	110	8,5	31,5	12	
HDG 1616L.32-A1-S2-DG24.02	2	16	32	16	16	110	8,5	34,5	16	
HDG 1616L.36-A1-S2-DG24.02	2	18	36	16	16	110	8,5	36,5	16	
HDG 1616L.32-A1-S2-DG24.025	2,5	16	32	16	16	110	8,5	34,5	16	DG 24-25...
HDG 1616L.36-A1-S2-DG24.025	2,5	18	36	16	16	110	8,5	36,5	16	
HDG 1616L.32-A1-S2-DG24.03	3	16	32	16	16	110	8,5	36,5	16	DG 24-30...
HDG 1616L.36-A1-S2-DG24.03	3	18	36	16	16	110	8,5	36,5	16	

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

D<sub>R</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN FORM OF TUBE

**HDG-A1-ST2**



FOR SWISS TYPE MACHINES

THROUGH TOOL COOLANT (A1) ACCESS FROM THE SIDE, THREAD 1: G 1/8", THREAD 2: G 1/8"

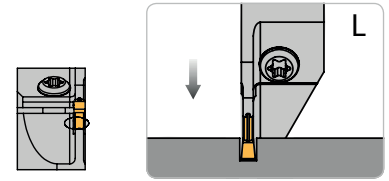
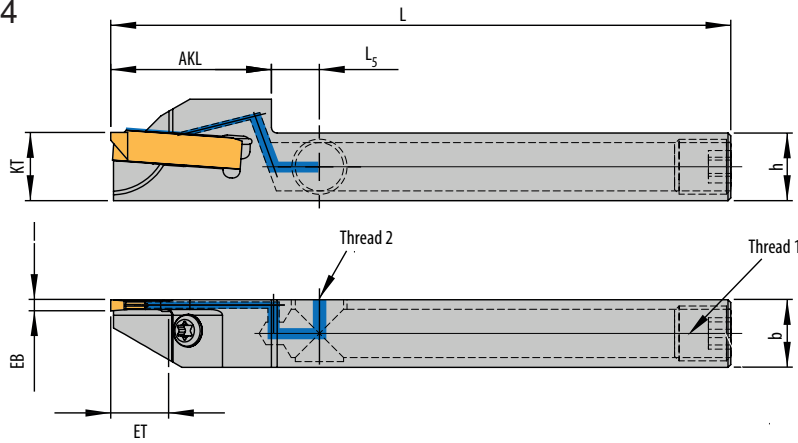
DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	h	b	L	KL	KT	INSERT
HDG 1212R.20-A1-ST2-DG24.02	2	10	20	12	12	110	8,5	28,5	12	DG 24-20...
HDG 1212R.26-A1-ST2-DG24.02	2	13	26	12	12	110	8,5	31,5	12	
HDG 1616R.32-A1-ST2-DG24.02	2	16	32	16	16	110	8,5	34,5	16	
HDG 1616R.36-A1-ST2-DG24.02	2	18	36	16	16	110	8,5	36,5	16	
HDG 1616R.32-A1-ST2-DG24.025	2,5	16	32	16	16	110	8,5	34,5	16	DG 24-25...
HDG 1616R.36-A1-ST2-DG24.025	2,5	18	36	16	16	110	8,5	36,5	16	
HDG 1616R.32-A1-ST2-DG24.03	3	16	32	16	16	110	8,5	36,5	16	DG 24-30...
HDG 1616R.36-A1-ST2-DG24.03	3	18	36	16	16	110	8,5	36,5	16	

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

D<sub>R</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN FORM OF TUBE



**HDG-A1-S4**

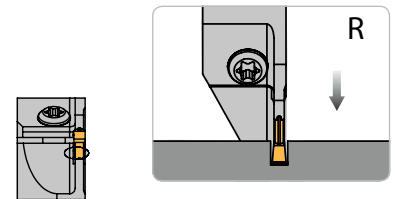
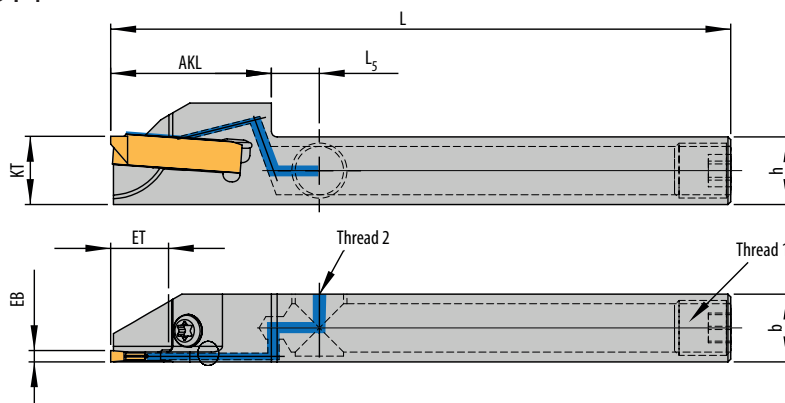


FOR SWISS TYPE MACHINES

THROUGH TOOL COOLANT (A1) ACCESS FROM THE SIDE, THREAD 1: UNF 5/16"x24, THREAD 2: UNF 5/16"x24

DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	h	b	L	KL	KT	INSERT
HDG 1010L.12-A1-S4-DG24.02	2	6	12	10	10	110	8,5	24,5	10	DG 24-20...
HDG 1010L.16-A1-S4-DG24.02	2	8	16	10	10	110	8,5	26,5	10	

**HDG-A1-ST4**



FOR SWISS TYPE MACHINES

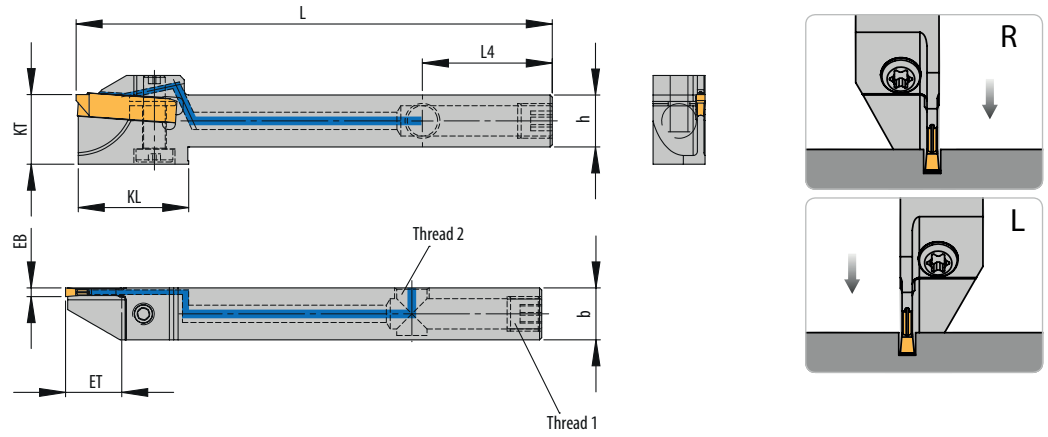
THROUGH TOOL COOLANT (A1) ACCESS FROM THE SIDE, THREAD 1: UNF 5/16"x24, THREAD 2: UNF 5/16"x24

DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	h	b	L	KL	KT	INSERT
HDG 1010R.12-A1-ST4-DG24.02	2	6	12	10	10	110	8,5	24,5	10	DG 24-20...
HDG 1010R.16-A1-ST4-DG24.02	2	8	16	10	10	110	8,5	26,5	10	

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

D<sub>R</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN FORM OF TUBE

**HDG-A1-S1U/ST1U**

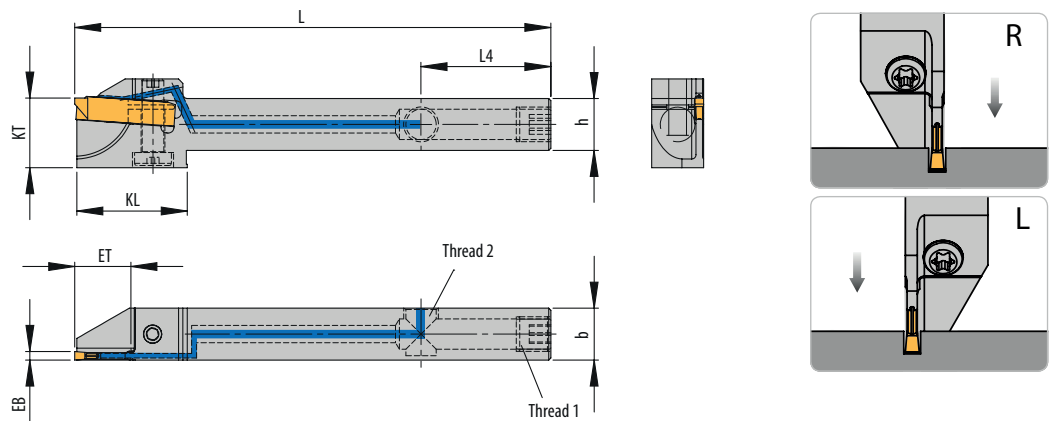


LOCKING FROM TOP AND BOTTOM

THROUGH TOOL COOLANT (A1) ACCESS FROM THE SIDE, THREAD 1: M8x1, THREAD 2: M8x1

DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	h	b	L	KL	KT	INSERT
HDG 1212L.26-A1-S1U-DG24.02	2	13	26	12	12	110	30	26	16	DG 24-20...
HDG 1212R.26-A1-ST1U-DG24.02	2	13	26	12	12	110	30	26	16	

**HDG-A1-S2U/ST2U**



FOR SWISS TYPE MACHINES

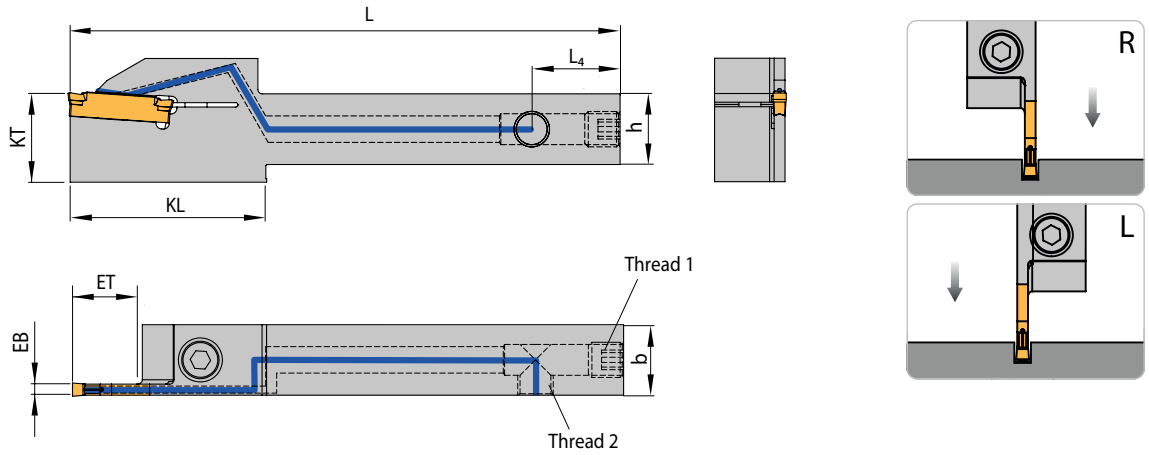
THROUGH TOOL COOLANT (A1) ACCESS FROM THE SIDE, THREAD 1: M8x1, THREAD 2: G 1/8"

DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	h	b	L	KL	KT	INSERT
HDG 1212L.26-A1-S2U-DG24.02	2	13	26	12	12	110	30	26	16	DG 24-20...
HDG 1212R.26-A1-ST2U-DG24.02	2	13	26	12	12	110	30	26	16	

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

D<sub>R</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN FORM OF TUBE

**HDG-A1-LS1**



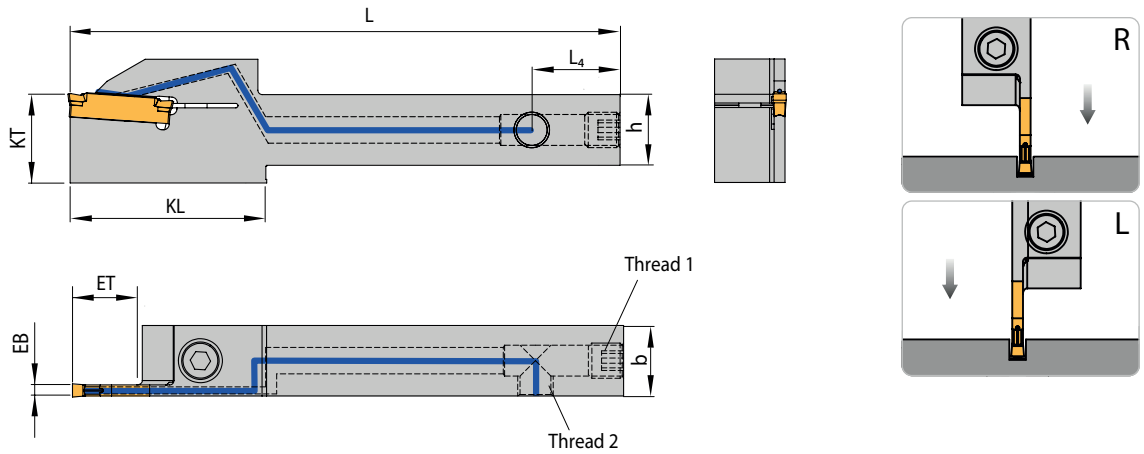
THROUGH TOOL COOLANT (A1) ACCESS FROM THE SIDE, THREAD 1: M8x1, THREAD 2: M8x1

DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	h	b	L	KL	KT	INSERT
HDG 1616L/R.32-A1-LS1-DG24.20	2	16	32	-	16	16	125	38	20	DG 24-20...
HDG 2020L/R.44-A1-LS1-DG24.25	2,5	22	44	61	20	20	125	-	-	DG 24-25...
HDG 1616L/R.32-A1-LS1-DG24.30	3	16	32	-	16	16	125	38	20	DG 24-20...
HDG 1616L/R.44-A1-LS1-DG24.30	3	22	44	61	16	16	125	45	20	
HDG 2020L/R.32-A1-LS1-DG24.30	3	16	32	-	20	20	125	-	-	
HDG 2020L/R.44-A1-LS1-DG24.30	3	22	44	61	20	20	125	-	-	
HDG 2525L/R.44-A1-LS1-DG24.30	3	22	44	61	25	25	150	-	-	
HDG 2020L/R.52-A1-LS1-DG35.30	3	26	52	68	20	20	150	44	30	
HDG 2020L/R.65-A1-LS1-DG35.30	3	32,5	65	80	20	20	150	50	30	
HDG 2525L/R.52-A1-LS1-DG35.30	3	26	52	68	25	25	150	44	30	
HDG 2525L/R.65-A1-LS1-DG35.30	3	32,5	65	80	25	25	150	50	30	

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

D<sub>R</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN FORM OF TUBE

**HDG-A1-LS2**



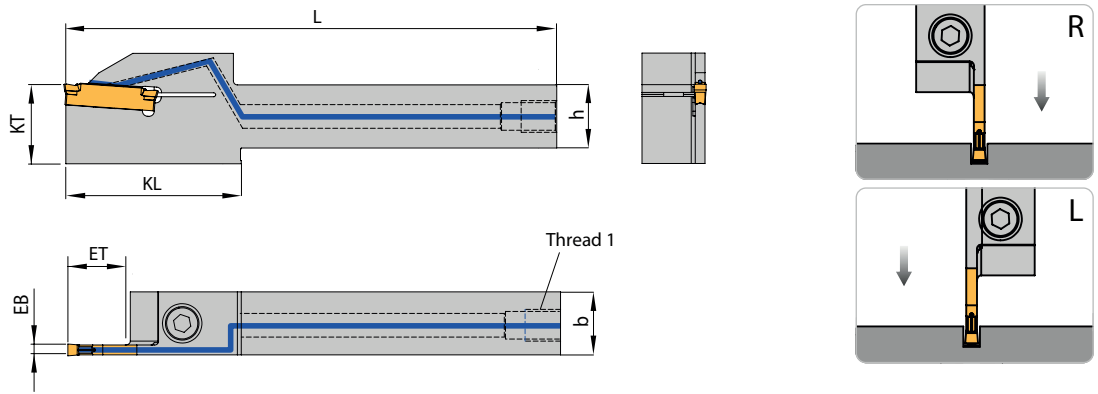
THROUGH TOOL COOLANT (A1) ACCESS FROM THE SIDE, THREAD 1: M8x1, THREAD 2: G 1/8"

DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	h	b	L	KL	KT	INSERT
HDG 1616L/R.32-A1-LS2-DG24.20	2	16	32	-	16	16	125	38	20	DG 24-20...
HDG 2020L/R.44-A1-LS2-DG24.25	2,5	22	44	61	20	20	125	-	-	DG 24-25...
HDG 1616L/R.32-A1-LS2-DG24.30	3	16	32	-	16	16	125	38	20	DG 24-30...
HDG 1616L/R.44-A1-LS2-DG24.30	3	22	44	61	16	16	125	45	20	
HDG 2020L/R.32-A1-LS2-DG24.30	3	16	32	-	20	20	125	-	-	
HDG 2020L/R.44-A1-LS2-DG24.30	3	22	44	61	20	20	125	-	-	
HDG 2525L/R.44-A1-LS2-DG24.30	3	22	44	61	25	25	150	-	-	
HDG 2020L/R.52-A1-LS2-DG35.30	3	26	52	68	20	20	150	44	30	
HDG 2020L/R.65-A1-LS2-DG35.30	3	32,5	65	80	20	20	150	50	30	
HDG 2525L/R.52-A1-LS2-DG35.30	3	26	52	68	25	25	150	44	30	
HDG 2525L/R.65-A1-LS2-DG35.30	3	32,5	65	80	25	25	150	50	30	

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

D<sub>R</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN FORM OF TUBE

**HDG-A1-B1**



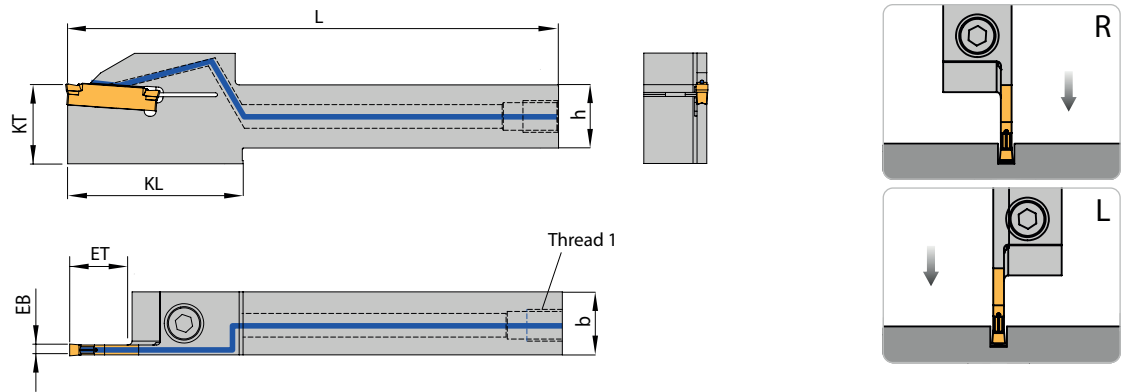
THROUGH TOOL COOLANT (A1) ACCESS FROM THE BACK, THREAD 1: M8x1

DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	h	b	L	KL	KT	INSERT
HDG 1616L/R.32-A1-B1-DG24.20	2	16	32	-	16	16	125	38	20	DG 24-20...
HDG 2020L/R.32-A1-B1-DG24.25	2,5	16	32	-	20	20	125	36	20	DG 24-25...
HDG 2020L/R.44-A1-B1-DG24.25	2,5	22	44	61	20	20	125	-	-	
HDG 1616L/R.32-A1-B1-DG24.30	3	16	32	-	16	16	125	38	20	DG 24-30...
HDG 1616L/R.44-A1-B1-DG24.30	3	22	44	61	16	16	125	45	20	
HDG 2020L/R.32-A1-B1-DG24.30	3	16	32	-	20	20	125	-	-	
HDG 2020L/R.44-A1-B1-DG24.30	3	22	44	61	20	20	125	-	-	
HDG 2525L/R.44-A1-B1-DG24.30	3	22	44	61	25	25	150	-	-	
HDG 2020L/R.52-A1-B1-DG35.30	3	26	52	68	20	20	150	44	30	DG 35-30...
HDG 2020L/R.65-A1-B1-DG35.30	3	32,5	65	80	20	20	150	50	30	
HDG 2525L/R.52-A1-B1-DG35.30	3	26	52	68	25	25	150	44	30	
HDG 2525L/R.65-A1-B1-DG35.30	3	32,5	65	80	25	25	150	50	30	

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

D<sub>R</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN FORM OF TUBE

**HDG-A1-B2**



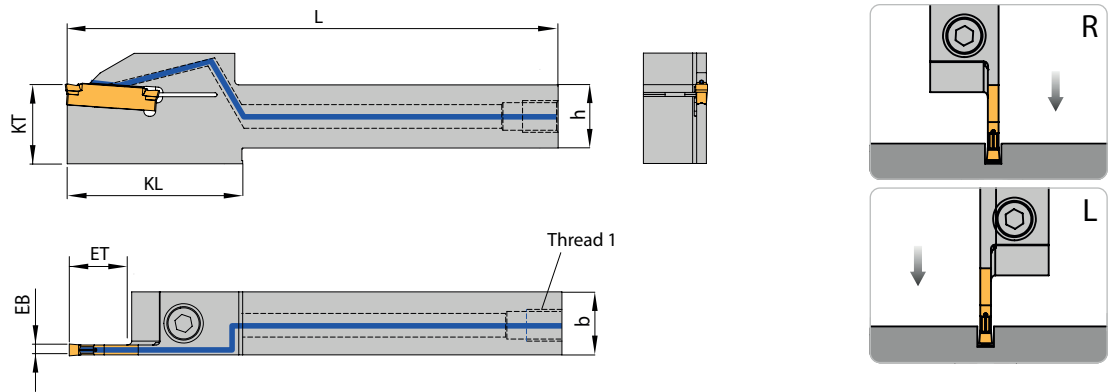
THROUGH TOOL COOLANT (A1) ACCESS FROM THE BACK, THREAD 1: G 1/8"

DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	h	b	L	KL	KT	INSERT
HDG 1616L/R.32-A1-B2-DG24.02	2	16	32	-	16	16	125	38	20	DG 24-20...
HDG 2020L/R.44-A1-B2-DG24.25	2,5	22	44	61	20	20	125	-	-	DG 24-25...
HDG 1616L/R.32-A1-B2-DG24.30	3	16	32	-	16	16	125	38	20	DG 24-30...
HDG 1616L/R.44-A1-B2-DG24.30	3	22	44	61	16	16	125	45	20	
HDG 2020L/R.32-A1-B2-DG24.30	3	16	32	-	20	20	125	-	-	
HDG 2020L/R.44-A1-B2-DG24.30	3	22	44	61	20	20	125	-	-	
HDG 2525L/R.44-A1-B2-DG24.30	3	22	44	61	25	25	150	-	-	
HDG 2020L/R.52-A1-B2-DG35.30	3	26	52	68	20	20	150	44	30	DG 35-30...
HDG 2020L/R.65-A1-B2-DG35.30	3	32,5	65	80	20	20	150	50	30	
HDG 2525L/R.52-A1-B2-DG35.30	3	26	52	68	25	25	150	44	30	
HDG 2525L/R.65-A1-B2-DG35.30	3	32,5	65	80	25	25	150	50	30	

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

D<sub>R</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN FORM OF TUBE

**HDG-A1-B3**



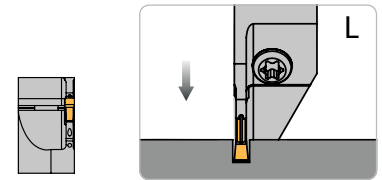
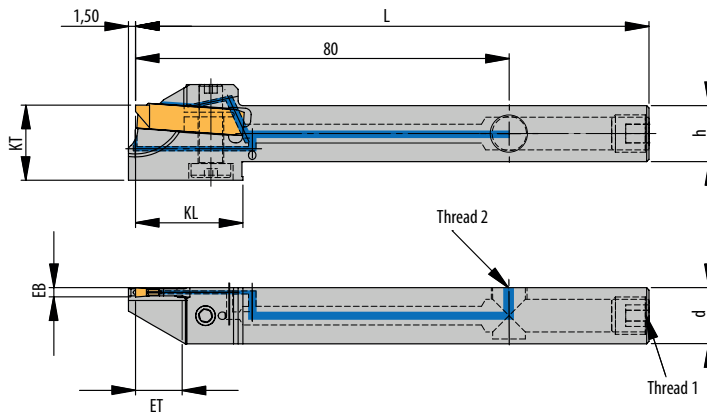
THROUGH TOOL COOLANT (A1) ACCESS FROM THE BACK, THREAD 1: G 1/4"

DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	h	b	L	KL	KT	INSERT
HDG 1616L/R.32-A1-B3-DG24.02	2	16	32	-	16	16	125	38	20	DG 24-20...
HDG 2020L/R.44-A1-B3-DG24.25	2,5	22	44	61	20	20	125	-	-	DG 24-25...
HDG 1616L/R.32-A1-B3-DG24.03	3	16	32	-	16	16	125	38	20	DG 24-30...
HDG 1616L/R.44-A1-B3-DG24.30	3	22	44	61	16	16	125	45	20	
HDG 2020L/R.32-A1-B3-DG24.30	3	16	32	-	20	20	125	-	-	
HDG 2020L/R.44-A1-B3-DG24.30	3	22	44	61	20	20	125	-	-	
HDG 2525L/R.44-A1-B3-DG24.30	3	22	44	61	25	25	150	-	-	
HDG 2020L/R.52-A1-B3-DG35.30	3	26	52	68	20	20	150	44	30	DG 35-30...
HDG 2020L/R.65-A1-B3-DG35.30	3	32,5	65	80	20	20	150	50	30	
HDG 2525L/R.52-A1-B3-DG35.30	3	26	52	68	25	25	150	44	30	
HDG 2525L/R.65-A1-B3-DG35.30	3	32,5	65	80	25	25	150	50	30	

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

D<sub>R</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN FORM OF TUBE

**HDG-A2-S1U**

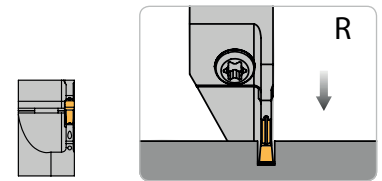
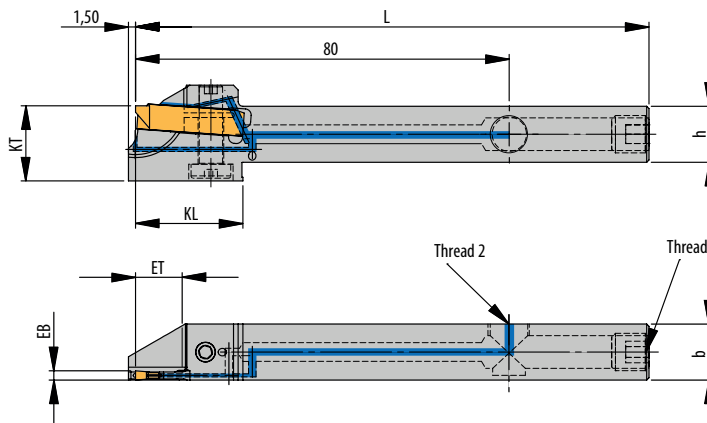


LOCKING FROM TOP AND BOTTOM

THROUGH TOOL COOLANT (A2) ACCESS FROM THE SIDE, THREAD 1: M8x1, THREAD 2: M8x1

DESIGNATION	EB	ET	D <sub>max</sub>	h	b	L	KL	KT	INSERT
HDG 1212L.20-A2-S1U-DG24.02	2	10	20	12	12	110	23	16	DG 24-20...

**HDG-A2-ST1U**



LOCKING FROM TOP AND BOTTOM

THROUGH TOOL COOLANT (A2) ACCESS FROM THE SIDE, THREAD 1: M8x1, THREAD 2: M8x1

DESIGNATION	EB	ET	D <sub>max</sub>	h	b	L	KL	KT	INSERT
HDG 1212R.20-A2-ST1U-DG24.02	2	10	20	12	12	110	23	16	DG 24-20...

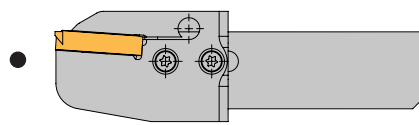
D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID



# PARTING - GROOVING MODULES



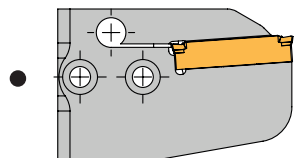
<b>MDG</b>	<b>R/L</b>	<b>65</b>	<b>-A1</b>	<b>-35.30</b>
TOOL TYPE	ORIENTATION	MAX DIAMETER	INTERNAL COOLING	INSERT
<b>MD - MODUL</b>	<b>R - RIGHT</b>	<b>65 - 65 MM</b>	- NO COOLANT	<b>35 - LENGTH 35 MM</b>
<b>G - GROOVING</b>	<b>L - LEFT</b>		<b>A1 - FROM ABOVE</b>	<b>30 - WIDTH 2 MM</b>
	<b>N - NEUTRAL</b>		<b>A2 - FROM ABOVE AND BELOW</b>	



## MODULS HOLDERS

- shank size 20 x 20 to 25 x 25 mm
- no coolant and through tool coolant version

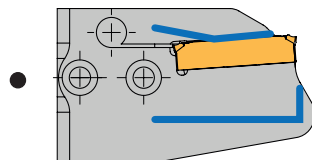
PAGE 16



## CLASIC MODULS

- maximum depth of groove 40 - 52,5 mm
- inserts length 17 - 35 mm
- groove width 1,5 to 4 mm

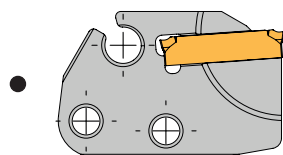
PAGE 17 - 18



## CLASIC MODULS WITH INTERNAL COOLANT

- maximum depth of groove 22 - 52,5 mm
- through coolant supply possibilities A1 and A2
- inserts length 24 and 35 mm
- groove width 2 to 6 mm

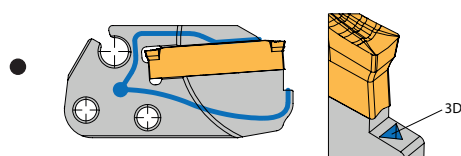
PAGE 19 - 20



## MODULS COMPATIBLE WITH ISCAR HOLDERS

- maximum depth of groove 6 - 26 mm
- no coolant and through tool coolant version (A1)
- groove width 1,5 to 3 mm

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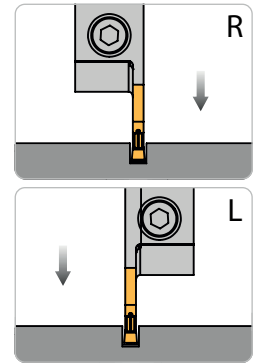
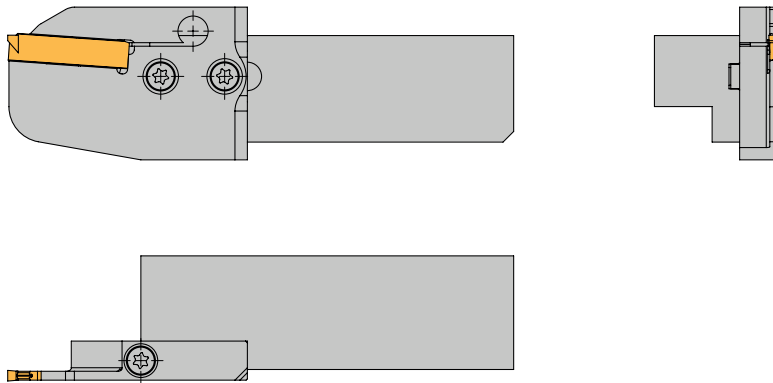
## 3D PRINTED MODULS

- classic and Iscar compatible version
- maximum depth of groove 10 - 32,5 mm
- through tool coolant version (A2)
- groove width 2 to 3 mm

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**HOLDERS FOR PARTING - GROOVING MODULS**

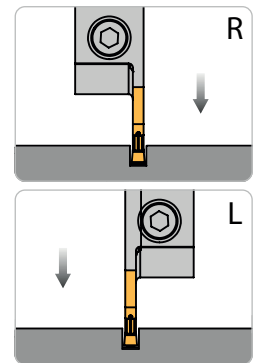
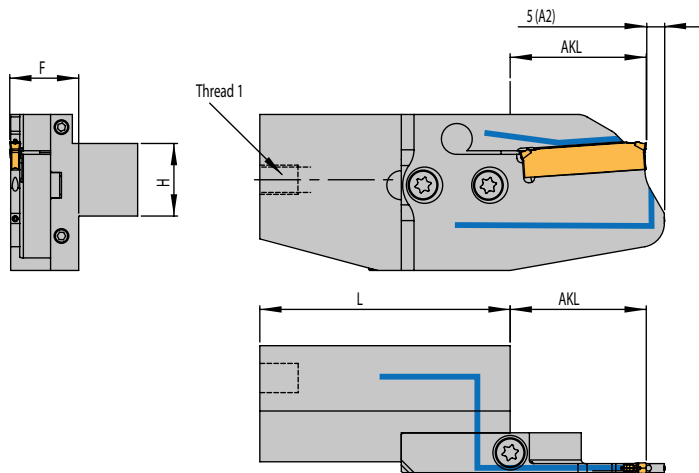
**HDG-M**



MODUL HOLDER DESIGNATION	H	L
HDG-M 20L-MDG32.140	20	105
HDG-M 20R-MDG32.140	20	105
HDG-M 25L-MDG32.140	25	120
HDG-M 25R-MDG32.140	25	120

MODUL DESIGNATION	AKL	F
MDG...32	22,0	19
MDG...44	27,0	
MDG...52	37,5	
MDG...65	37,5	
MDG...80	45,0	
MDG...105	58,0	
MDG...125	68,0	
MDG...140	75,5	

**HDG-M A2**



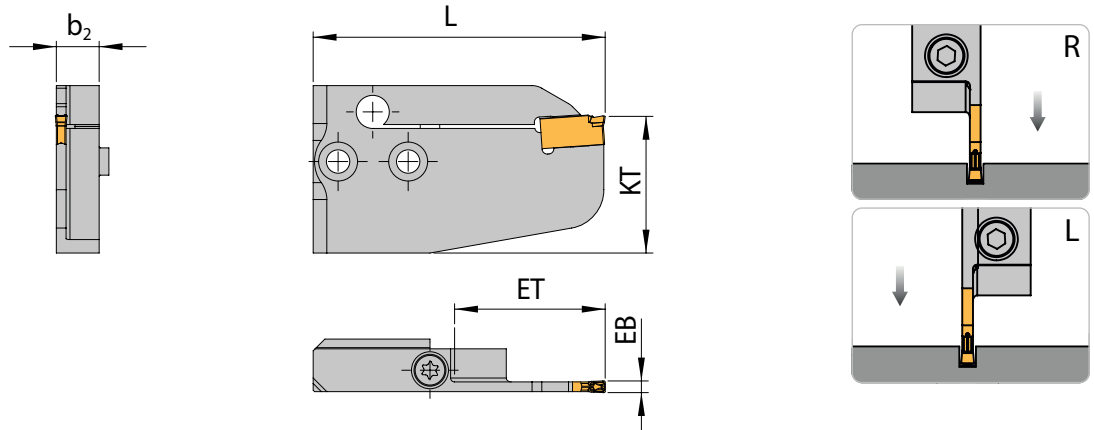
A2 INTERNAL COOLANT FROM TOP AND BELOW

COOLANT CONNECTION THREAD B1 - M8x1, B2 - G1/8", B3 - G1/4"

MODUL HOLDER DESIGNATION	H	L
HDG-M 16L.A2-B1-MDG32.105	16	54
HDG-M 16R.A2-B1-MDG32.105	16	54
HDG-M 20L.A2-B1-MDG32.105	20	69
HDG-M 20R.A2-B1-MDG32.105	20	69
HDG-M 25L.A2-B1-MDG32.105	25	84
HDG-M 25R.A2-B1-MDG32.105	25	84

MODUL DESIGNATION	AKL	F
MDG...32	22,0	19
MDG...44	27,0	
MDG...52	37,5	
MDG...65	37,5	
MDG...69	39,5	
MDG...80	45,0	
MDG...90	50,0	
MDG...105	58,0	

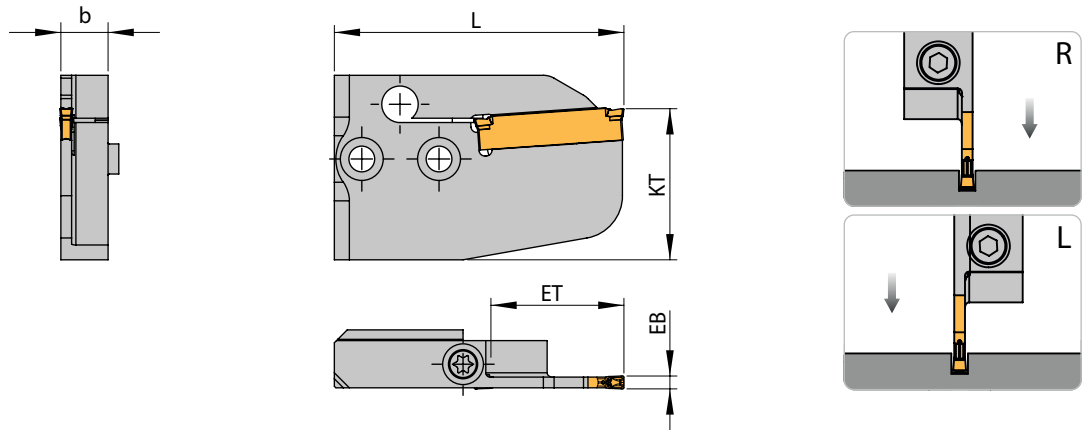
MDG-17



DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	b <sub>2</sub>	L	KT	INSERT
MDG L/R80-17.30	3	40	80	80	11	75	35	DG 17-30...
MDG L105-DG17.30	3	52,5	105	105	11	88	35	
MDG L/R80-17.40	4	40	80	80	11	75	35	DG 17-40...
MDG L/R105-17.40	4	52,5	105	105	11	88	35	

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

D<sub>R</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN FORM OF TUBE

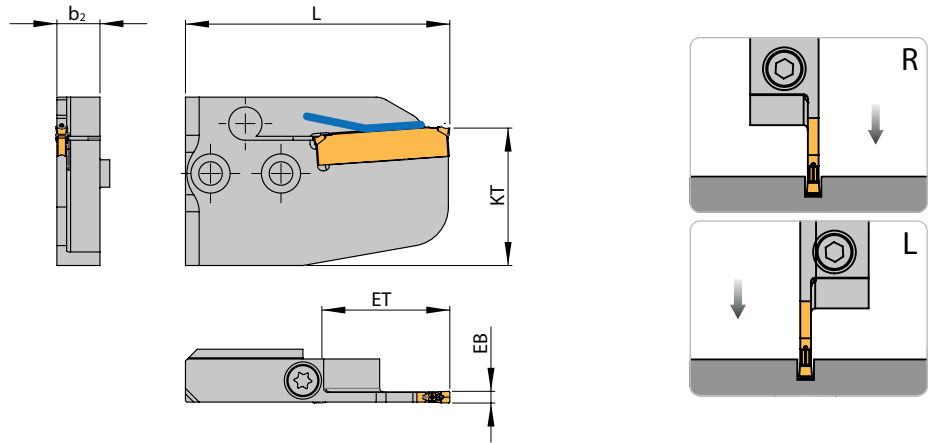
**MDG**


DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	b <sub>2</sub>	L	KT	INSERT
MDG L/R32-24.15	1,5	16	32	48	11	52	35	DG 24-15...
MDG L/R44-24.15	1,5	22	44	61	11	57	35	
MDG L/R32-24.20	2	16	32	48	11	52	35	DG 24-20...
MDG L/R44-24.20	2	22	44	61	11	57	35	
MDG L/R32-24.30	3	16	32	48	11	52	35	DG 24-30...
MDG L/R44-24.30	3	22	44	61	11	57	35	
MDG L/R44-24.40	4	22	44	61	11	57	35	DG 24-40...
MDG L/R52-35.20	2	26	52	68	11	67,5	35	DG 35-20...
MDG L/R65-35.20	2	32,5	65	80	11	67,5	35	
MDG L/R105-35.20	2	52,5	105	105	11	88	35	
MDG L/R52-35.30	3	26	52	68	11	67,5	35	DG 35-30...
MDG L/R65-35.30	3	32,5	65	80	11	67,5	35	
MDG L/R105-35.30	3	52,5	105	105	11	88	35	
MDG L/R125-35.30	3	62,5	125	125	11	97,5	48,5	DG 35-40...
MDG R140-DG35.30	3	70	140	140	11	105,5	48,5	
MDG L/R52-35.40	4	26	52	68	11	67,5	35	
MDG L/R65-35.40	4	32,5	65	80	11	67,5	35	DG 35-40...
MDG L/R105-35.40	4	52,5	105	105	11	88	35	

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

D<sub>R</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN FORM OF TUBE

**MDG A1**

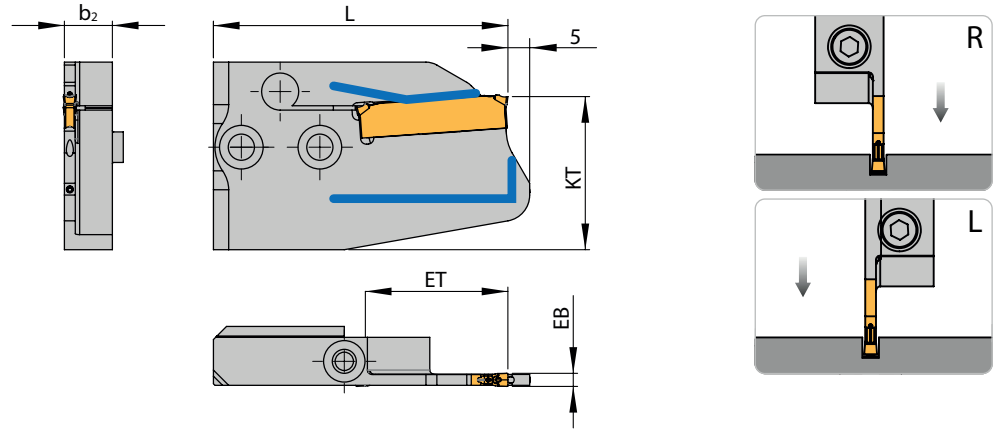


MODUL WITH THROUGH TOOL COOLANT (A1)

DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	b <sub>2</sub>	L	KT	INSERT
MDG L/R44-A1-24.20	2	22	44	61	11	57	35	DG 24-20...
MDG L/R44-A1-24.30	3	22	44	61	11	57	35	DG 24-30...
MDG L/R65-A1-35.20	2	32,5	65	80	11	67,5	35	DG 35-20...
MDG L/R90-A1-35.20	2	45	90	90	11	80	35	
MDG L/R65-A1-35.30	3	32,5	65	80	11	67,5	35	DG 35-30...
MDG L/R105-A1-35.30	3	52,5	105	105	11	88	35	
MDG L105-A1-DG35.40	4	52,5	105	105	11	88	35	DG 35-40...
MDG L65-A1-DG35.60	6	32,5	65	80	12	67,5	35	DG 35-60...
MDG L105-A1-DG35.60	6	52,5	105	105	12	88	35	DG 35-60...

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

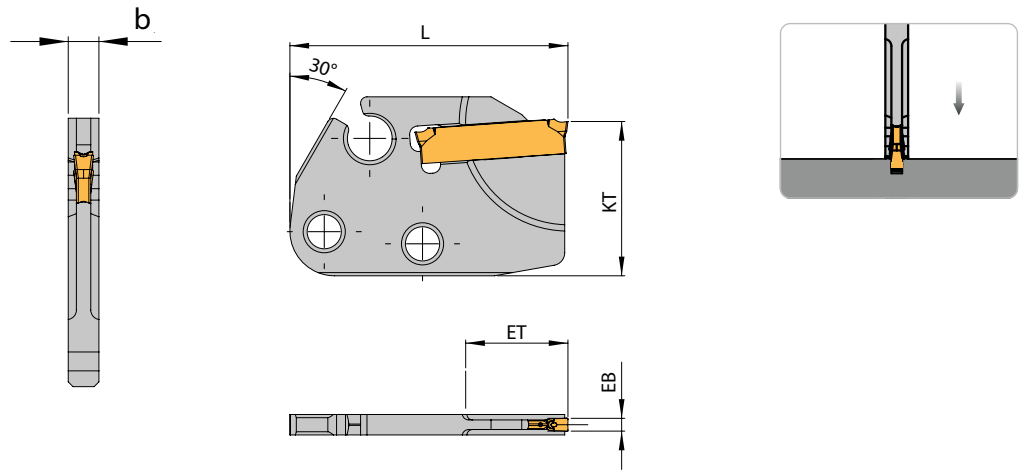
D<sub>R</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN FORM OF TUBE

**MDG A2**

**MODUL WITH THROUGH TOOL COOLANT (A2)**

DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	b <sub>2</sub>	L	KT	INSERT
MDG L/R32-A2-24.20	2	16	32	48	11	52	35	DG 24-20...
MDG L/R44-A2-24.20	2	22	44	61	11	57	35	
MDG L/R32-A2-24.30	3	16	32	48	11	52	35	DG 24-30...
MDG L/R44-A2-24.30	3	22	44	61	11	57	35	
MDG L/R52-A2-35.30	3	26	52	68	11	67,5	35	DG 35-30...
MDG L/R65-A2-35.30	3	32,5	65	80	11	67,5	35	
MDG L/R69-A2-35.30	3	34,5	69	80	11	69,5	35	
MDG L/R80-A2-35.30	3	40	80	80	11	75	35	
MDG L/R90-A2-35.30	3	45	90	90	11	80	35	
MDG L/R105-A2-35.30	3	52,5	105	105	11	88	35	
MDG L/R65-A2-35.40	4	32,5	65	80	11	67,5	35	DG 35-40...
MDG L/R105-A2-35.40	4	52,5	105	105	11	88	35	

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

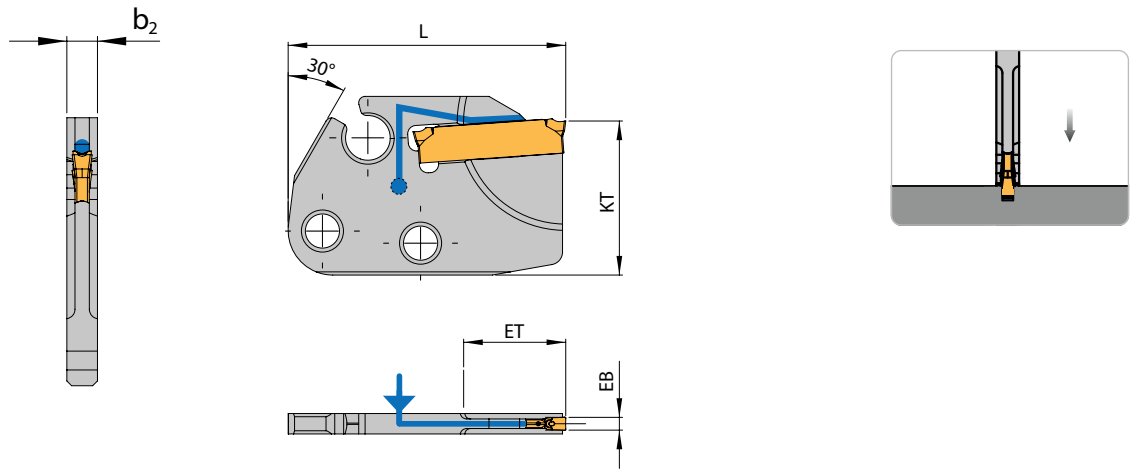
D<sub>R</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN FORM OF TUBE

**MDG-IN**


MODUL COMPATIBLE WITH ISCAR HOLDERS

DESIGNATION	EB	ET	D <sub>max</sub>	b <sub>2</sub>	L	KT	INSERT
MDG-1 N12-DG16.15	1,5	6	12	3,2	43,5	24	DG 16-15...
MDG-1 N16-DG16.15	1,5	8	16	3,2	43,5	24	
MDG-1 N20-DG16.20	2	10	20	3,2	35,5	24	DG 16-20...
MDG-1 N26-DG16.20	2	13	26	3,2	35,5	24	
MDG-1 N20-DG24.15	1,5	10	20	3,2	43,5	24	DG 24-15...
MDG-1 N32-DG24.15	1,5	16	32	3,2	43,5	24	
MDG-1 N20-DG24.20	2	10	20	3,2	43,5	24	DG 24-20...
MDG-1 N26-DG24.20	2	13	26	3,2	43,5	24	
MDG-1 N32-DG24.20	2	16	32	3,2	43,5	24	
MDG-1 NL26-DG24.20	2	13	26	3,2	54	24	
MDG-1 N32-DG24.30	3	16	32	3,2	43,5	24	DG 24-30...
MDG-1 NL52-DG35.30	3	26	52	3,2	54,5	24	DG 35-30...

 D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

**MDG-I A1**


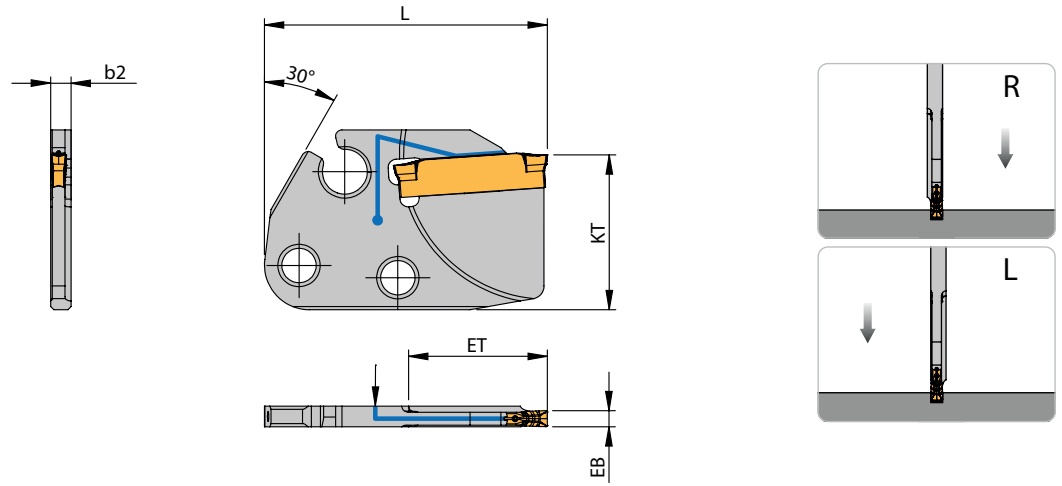
MUDUL COMPATIBLE WITH ISCAR HOLDERS, WITH THROUGH TOOL COOLANT (A1)

DESIGNATION	EB	ET	D <sub>max</sub>	b <sub>2</sub>	L	KT	INSERT
MDG-1 L/R20-A1-16.20	2	10	20	3,2	37	24	DG 16-20...
MDG-1 L/R20L-A1-16.20	2	10	20	3,2	41	24	
MDG-1 L/R26-A1-16.20	2	13	26	3,2	43,5	24	
MDG-1 L/R22-A1-16.20	2	11	22	3,2	45,5	24	
MDG-1 L/R46-A1-24.20	2	23	46	3,2	44	24	DG 24-20...
MDG-1 L/R32-A1-24.20	2	16	32	3,2	45,5	24	
MDG-1 L20-A1-DG24.20	2	10	20	3,2	48,5	24	
MDG-1 L/R42-A1-24.20	2	21	42	3,2	48,5	24	
MDG-1 L.32L-A1-DG24.20	2	16	32	3,2	56	24	
MDG-1 L/R32-A1-24.30	3	16	32	3,2	45,5	24	DG 24-30...
MDG-1 L/R42-A1-24.30	3	21	42	3,2	48,5	24	
MDG-1 L/R52-A1-35.20	2	26	52	3,2	55	24	DG 35-20...
MDG-1 L/R52-A1-35.30	3	26	52	3,2	55	24	DG 35-30...

 D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID



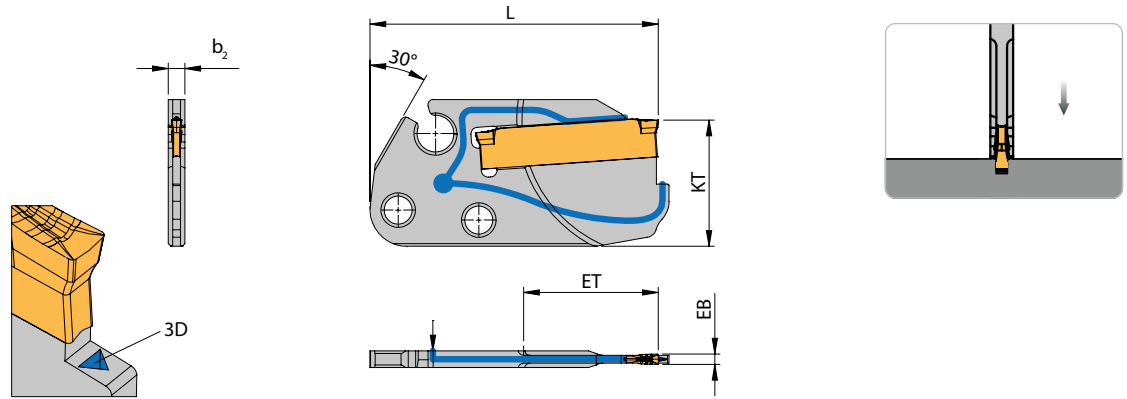
**MDG-ILR A1**



MUDUL COMPATIBLE WITH ISCAR HOLDERS, WITH THROUGH TOOL COOLANT (A1)

DESIGNATION	EB	ET	D <sub>max</sub>	b <sub>2</sub>	L	KT	INSERT
MDG-11 L22-A1-DG16.20	2	11	22	3,2	45,5	24	DG16-20...
MDG-11 L44-A1-DG24.25	2,5	22	44	3,2	44	24	DG24-25...
MDG-11 R44-A1-DG24.25	2,5	22	44	3,2	44	24	
MDG-11 L46-A1-DG24.25	2,5	23	46	3,2	51	24	

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

**MDG-I-3D A2**


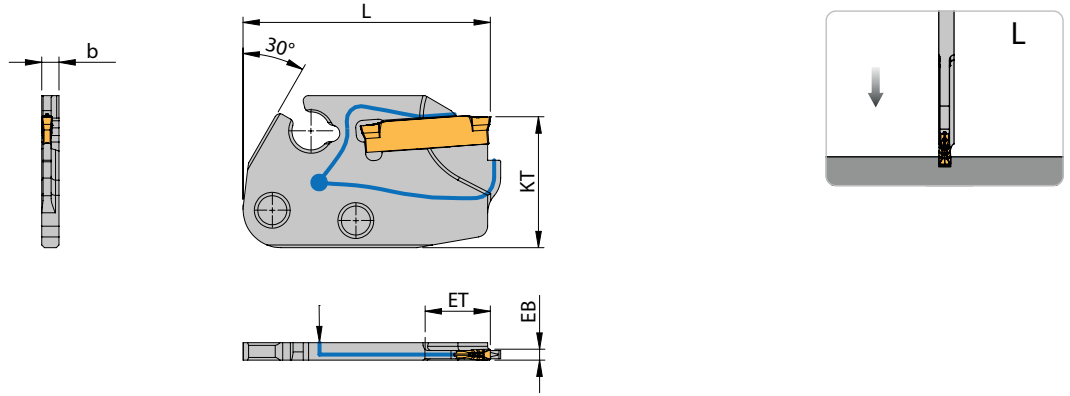
MUDUL COMPATIBLE WITH ISCAR HOLDERS

3D PRINTED DESIGN ENABLES INNOVATIVE SHAPE OF COOLANT CHANNELS (A2)

DESIGNATION	EB	ET	D <sub>max</sub>	b <sub>2</sub>	L	KT	INSERT
MDG-1 L/R20-A2S-16.20	2	10	20	3,2	41	24	DG 16-20...
MDG-1 L/R22-A2S-16.20	2	11	22	3,2	45,5	24	
MDG-1 L/R32-A2S-24.20	2	16	32	3,2	45,5	24	DG 24-20...
MDG-1 L/R20-A2S-24.20	2	10	20	3,2	48,5	24	
MDG-1 L/R24-A2S-24.20	2	12	24	3,2	48,5	24	
MDG-1 L/R42-A2S-24.20	2	21	42	3,2	48,5	24	
MDG-1 L/R32L-A2S-24.20	2	16	32	3,2	56	24	
MDG-1 L/R32-A2S-24.30	3	16	32	3,2	45,5	24	DG 24-30...
MDG-1 L/R42-A2S-24.30	3	21	42	3,2	48,5	24	
MDG-1 L/R52-A2S-35.20	2	26	52	3,2	55	24	DG 35-20...
MDG-1 L/R52-A2S-35.30	3	26	52	3,2	55	24	DG 35-30...

 D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

**MDG-IL-3D A2**

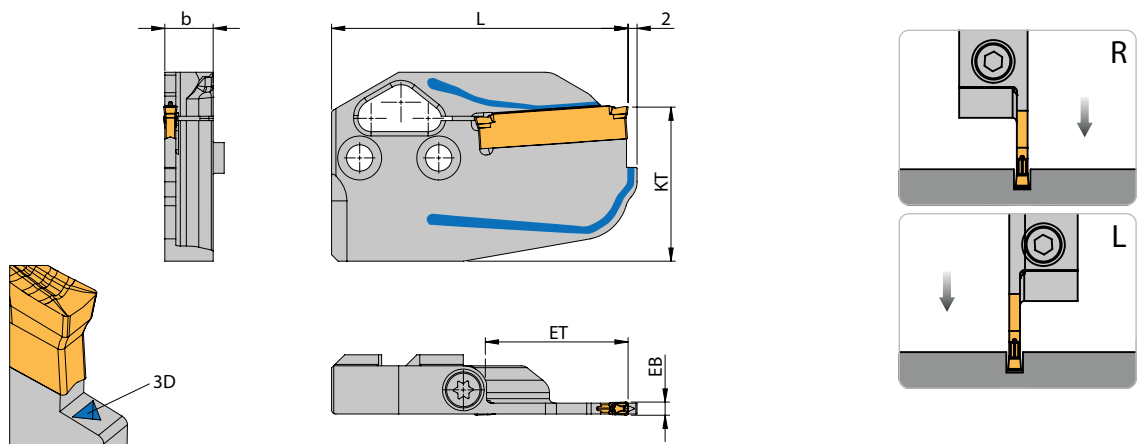


MUDUL COMPATIBLE WITH ISCAR HOLDERS

3D PRINTED DESIGN ENABLES INNOVATIVE SHAPE OF COOLAN CHANNELS (A2)

DESIGNATION	EB	ET	D <sub>max</sub>	b <sub>2</sub>	L	KT	-	INSERT
MDG-11 L24-A2S-24.20	2	12	24	3,2	45,5	24		DG 24-20...
MDG-11 L46-A2S-24.25	2,5	23	46	3,2	51	24		DG 24-25...

**MDG-3D A2**



3D PRINTED DESIGN ENABLES INNOVATIVE SHAPE OF COOLAN CHANNELS (A2)

DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	b <sub>2</sub>	L	KT	INSERT
MDG-1 L/R44-A2S-24.20	2	22	44	61	11	57	35	DG 24-20...
MDG-1 L/R65-A2S-35.30	3	32,5	65	80	11	67,5	35	DG 35-30...

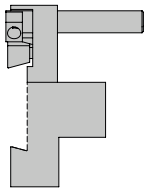
D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

D<sub>R</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN FORM OF TUBE

# PARTING - GROOVING BLADES

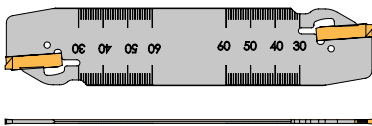


KDG	-U	3208	N	105	-A1	-DG17.30
TOOL TYPE	TYPE	BLADE DIMENSIONS	ORIENTATION	MAX DIAMETER	INTERNAL COOLING	INSERT
<b>KD</b> - BLADE	<b>PB</b> - PARTING BLADE	<b>32</b> - HEIGHT 32 MM	<b>R</b> - RIGHT	<b>105</b> - 105 MM	- NO COOLANT	<b>17</b> - LENGTH 17 MM
<b>G</b> - GROOVING	<b>U</b> - UPSIDE DOWN	<b>08</b> - WIDTH 8 MM	<b>L</b> - LEFT		<b>A1</b> - FROM ABOVE	<b>30</b> - WIDTH 3 MM
	<b>T</b> - TRAUB MACHINE		<b>N</b> - NEUTRAL		<b>A2</b> - FROM ABOVE AND BELOW	



## BLADE HOLDERS

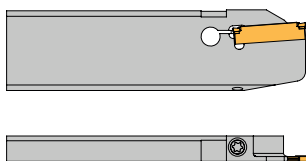
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## PARTING OFF SELF CLAMPING BLADES

- width 2 to 4 mm
- single and double side blade

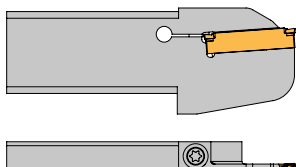
PAGE 28 - 29



## TRAUB MACHINES BLADES

- width 1,5 to 3 mm
- maximum depth of groove 10 - 20 mm

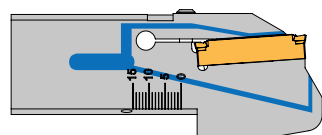
PAGE 30 - 31



## CLASIC BLADES

- width 1,5 to 3 mm
- maximum depth of groove 10 - 32,5 mm

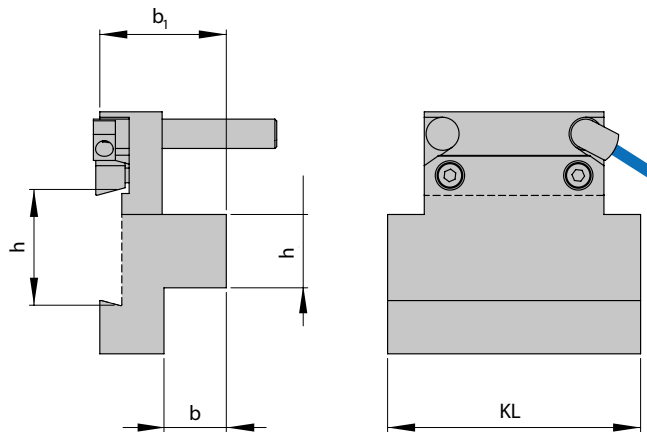
PAGE 32 - 33



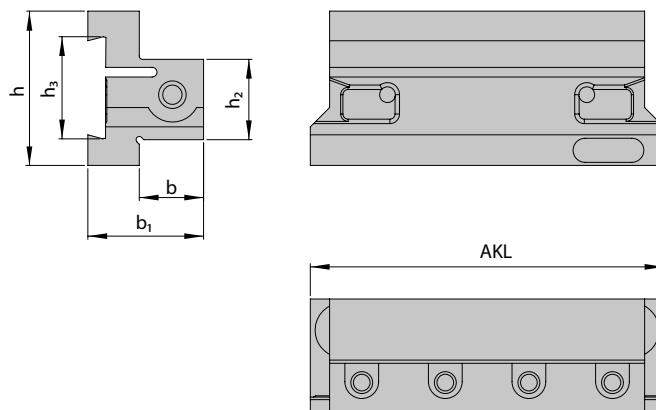
## CLASIC BLADES WITH INTERNAL COOLANT

- width 3 to 4 mm
- maximum depth of groove 22 - 52,5 mm

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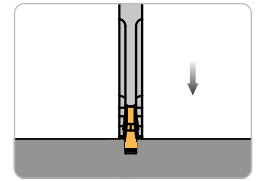
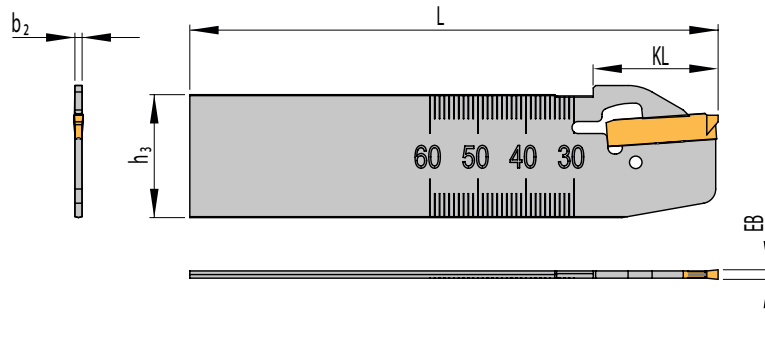
**CLAMPING BLOCK FOR PARTING - GROOVING BLADES**
**TBH**


DESIGNATION	d	h	l <sub>1</sub>	l <sub>2</sub>	f	D <sub>min</sub>	INSERT
TBH 1613-KDG26	16	13	26	54	30,5	55	KDG 26...
TBH 2017-KDG26	20	17	26	69	64,5	66	
TBH 2521-KDG26	25	21	26	84	41,5	76	
TBH 1613-KDG32	16	13	32	54	30,5	61	KDG 32...
TBH 2017-KDG32	20	17	32	69	34,5	66	
TBH 2521-KDG32	25	21	32	84	41,5	76	
TBH 3223-KDG32	32	23.V	32	99	44	80	

**TBH**


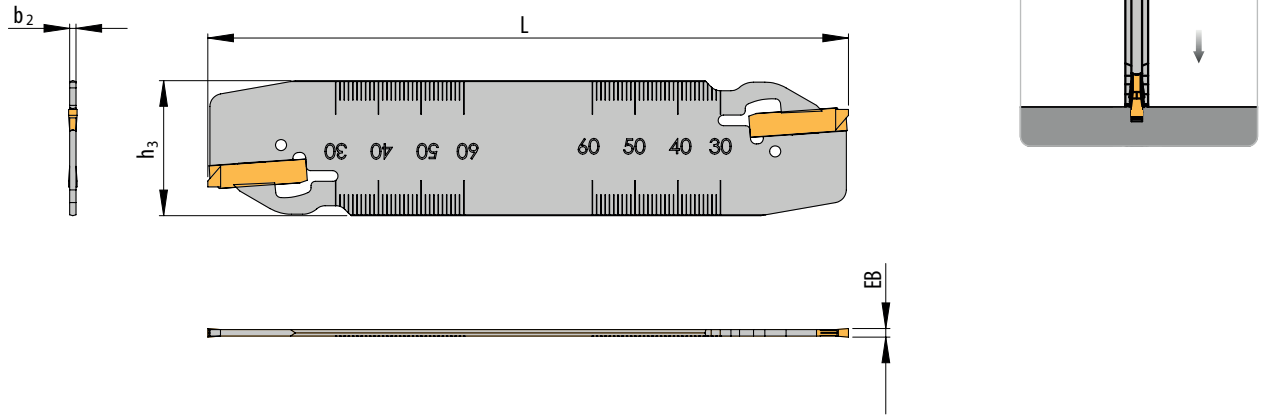
DESIGNATION	d	h	l <sub>1</sub>	l <sub>2</sub>	f	D <sub>min</sub>	INSERT
TBH 2020-KDG26	20	20	26	90	33	39	KDG 26...
TBH 2520-KDG32	25	20	32	110	36	48	
TBH 3229-KDG32	32	29	32	120	44,5	48	

KDG-PB



DESIGNATION	EB	h <sub>3</sub>	b <sub>2</sub>	L	KL	-	INSERT
KDG-PB 26N-DG24.20	2	26	1,5	110	26		DG24-20...
KDG-PB 32N-DG24.20	2	32	1,5	110	-		
KDG-PB 26N-DG24.25	2,5	26	2	110	26		DG24-25...
KDG-PB 32N-DG24.25	2,5	32	2	110	-		
KDG-PB 26N-DG24.30	3	26	2,5	110	26		DG24-30...
KDG-PB 32N-DG24.30	3	32	2,5	110	-		
KDG-PB 32LN-DG24.30	3	32	2,5	150	-		DG24-30... /SE24-30...
KDG-PB 32N-DG35.30	3	32	2,5	150	-		DG35-30...
KDG-PB 32N-DG35.40	4	32	3,5	150	-		DG35-40...

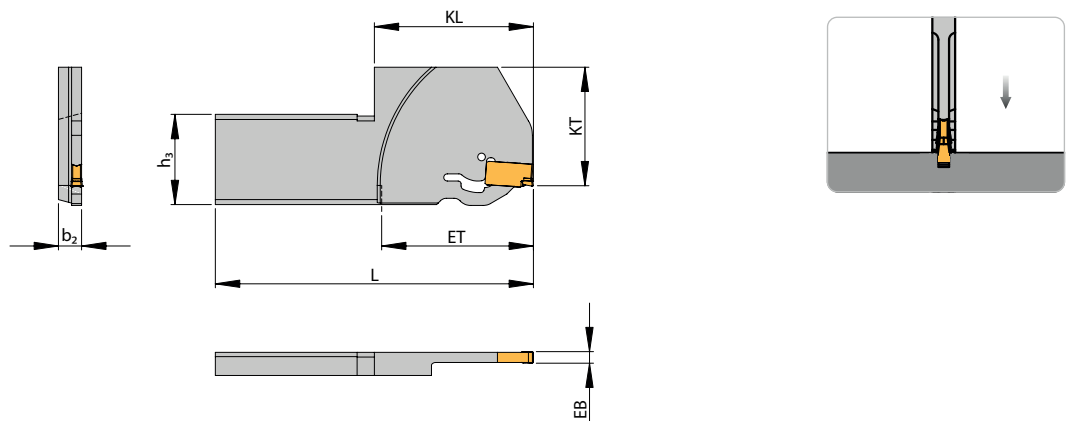
**KDG-PB2**



DOUBLE SIDED BLADE

DESIGNATION	EB	h <sub>3</sub>	b <sub>2</sub>	L	-	-	-	-	INSERT
KDG-PB2 32N-DG2.20	2	32	1,5	150					DG24-20..
KDG-PB2 32N-DG2.30	3	32	2,5	150					DG24-30..

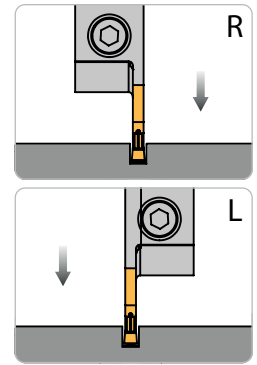
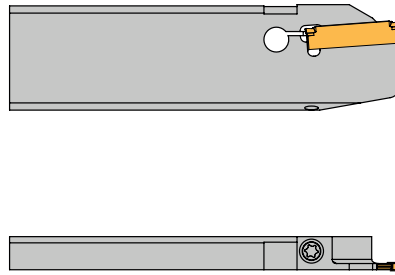
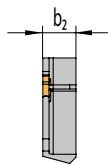
**KDG-U1**



UPSIDE DOWN BLADE

DESIGNATION	EB	ET	D <sub>max</sub>	h <sub>3</sub>	b <sub>2</sub>	L	KL	KT	INSERT
KDG-U1 3208N105-DG17.40	4	52,5	105	32	8	110	55	41	DG 17-40...

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

**KDG-T**


FOR EMCO / INDEX / TRAUB MACHINES

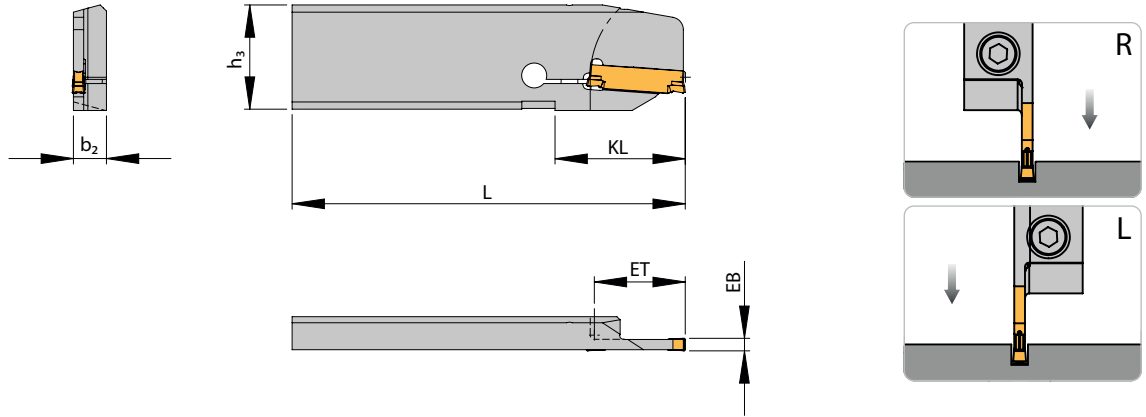
DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	h <sub>3</sub>	b <sub>2</sub>	L	KL	INSERT
KDG-T 26L/R.20-DG16.20	2	10	20	-	26	8	95	19,5	DG 16-20...
KDG-T 2608L20-DG24.15	1,5	10	20	-	26	8	95	19,5	DG 24-15...
KDG-T 2608R42-DG24.15	1,5	16	32	-	26	8	95	25,5	
KDG-T 2608L/R32-24.20	2	16	32	-	26	8	95	25,5	DG 24-20...
KDG-T 3208L/R44-24.20	2	22	44	61	32	8	95	31,5	DG 24-30...
KDG-T 2608L/R32-24.30	3	16	32	-	26	8	95	25,5	
KDG-T 2608L/R44-24.30	3	22	44	61	26	8	95	31,5	
KDG-T 3208L/R44-24.30	3	22	44	61	32	8	95	31,5	

 D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

 D<sub>R</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN FORM OF TUBE



**KDG-TU**



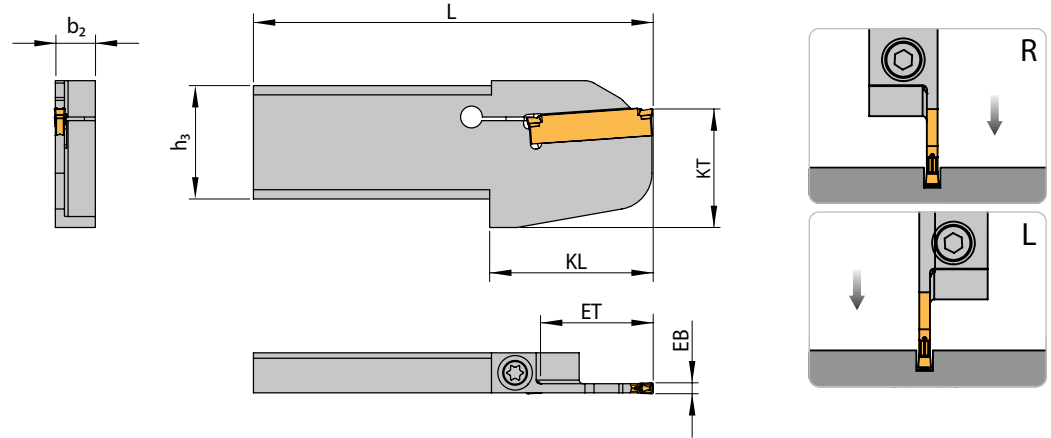
UPSIDE DOWN BLADE

FOR EMCO / INDEX / TRAUB MACHINES

DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	h <sub>3</sub>	b <sub>2</sub>	L	KL	INSERT
KDG-TU 2608R20-DG24.15	1,5	10	20	-	26	8	95	19,5	DG 24-15...
KDG-TU 2608R32-DG24.15	1,5	16	32	-	26	8	95	25,5	
KDG-TU 2608L/R44-24.15	1,5	22	44	61	26	8	95	31,5	
KDG-TU 3208L/R44-24.20	2	22	44	61	32	8	95	31,5	DG 24-20...
KDG-TU 2608L/R32-24.30	3	16	32	-	26	8	95	25,5	DG 24-30...
KDG-TU 2608L/R44-24.30	3	22	44	61	26	8	95	31,5	
KDG-TU 3208L/R44-24.30	3	22	44	61	32	8	95	31,5	

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

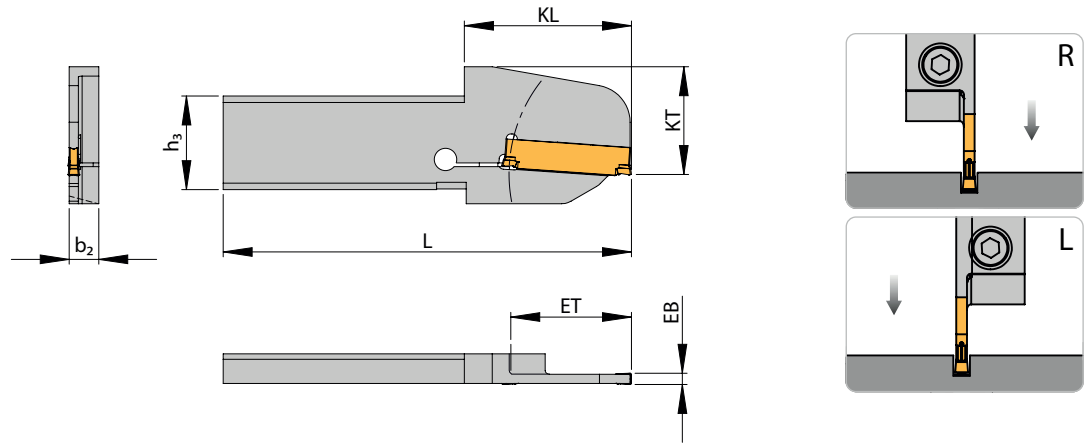
D<sub>R</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN FORM OF TUBE

**KDG**


DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	h <sub>3</sub>	b <sub>2</sub>	L	KL	KT	INSERT
KDG 2608L/R20-24.15	1,5	10	20	-	26	8	110	-	-	DG 24-15...
KDG 2608L32-DG24.15	1,5	16	32	-	26	8	110	-	-	
KDG 2608L/R44-24.15	1,5	22	44	61	26	8	110	-	-	
KDG 2608L/R32-24.20	2	16	32	-	26	8	110	-	-	DG 24-20...
KDG 2608L/R44-24.20	2	22	44	61	26	8	110	-	-	
KDG 3208L/R44-24.20	2	22	44	61	32	8	110	-	-	
KDG 2608L/R26-24.30	3	13	26	-	26	8	110	-	-	DG 24-30...
KDG 2608L/R65-35.20	2	32,5	65	80	26	8	110	45	29	DG 35-20...
KDG 3208L/R65-35.20	2	32,5	65	80	32	8	110	45	32,5	
KDG 2608L/R65-35.30	3	32,5	65	80	26	8	110	45	29	DG 35-30...
KDG 2611L/R65-35.30	3	32,5	65	80	26	11	110	45	29	
KDG 3208L/R65-35.30	3	32,5	65	80	32	8	110	45	32,5	
KDG 3211L/R65-35.30	3	32,5	65	80	32	11	110	45	32,5	
KDG 3208L/R65-35.40	4	32,5	65	80	32	8	110	45	32,5	DG 35-40...

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

D<sub>R</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN FORM OF TUBE

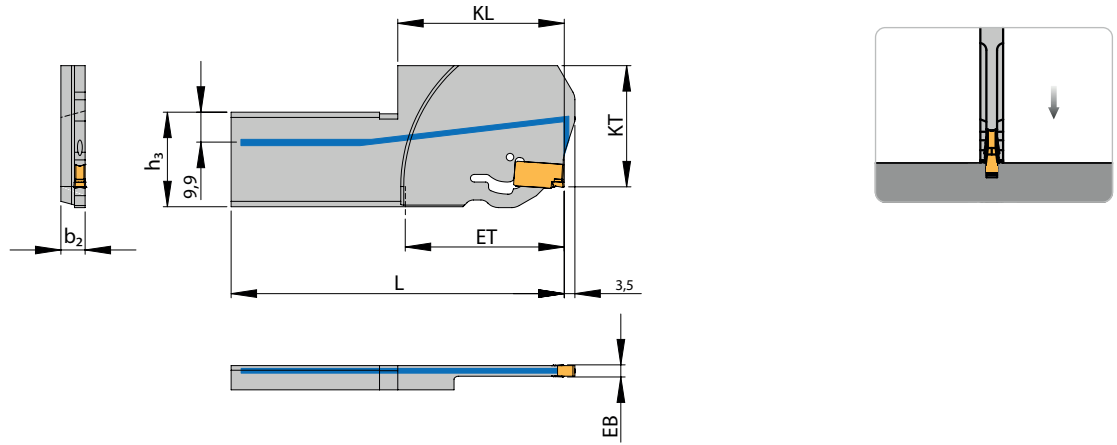
**KDG-U**

**UPSIDE DOWN BLADE**

DESIGNATION	EB	ET	D <sub>max</sub>	D <sub>R</sub>	h <sub>3</sub>	b <sub>2</sub>	L	KL	KT	INSERT
KDG-U 2608L32-8DG24.15	1,5	16	32	-	26	8	110	-	-	DG 24-15...
KDG-U 2608L/R44-24.15	1,5	22	44	61	26	8	110	-	-	
KDG-U 2608L/R32-24.20	2	16	32	-	26	8	110	-	-	DG 24-20...
KDG-U 2608L/R44-24.20	2	22	44	61	26	8	110	-	-	
KDG-U 3208L/R44-24.20	2	22	44	61	32	8	110	-	-	
KDG-U 2608L/R65-35.20	2	32,5	65	80	26	8	110	45	29	DG 35-20...
KDG-U 3208L/R65-35.20	2	32,5	65	80	32	8	110	45	32,5	
KDG-U 2608L/R65-35.30	3	32,5	65	80	26	8	110	45	29	DG 35-30...
KDG-U 2611L/R65-35.30	3	32,5	65	80	26	11	110	45	29	
KDG-U 3208L/R65-35.30	3	32,5	65	80	32	8	110	45	32,5	
KDG-U 3211L/R65-35.30	3	32,5	65	80	32	11	110	45	32,5	
KDG-U 3208L/R65-35.40	4	32,5	65	80	32	8	110	45	32,5	DG 35-40...
KDG-U 3211L/R65-35.40	4	32,5	65	80	32	11	110	45	32,5	

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

D<sub>R</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN FORM OF TUBE

**KDG-U A1**

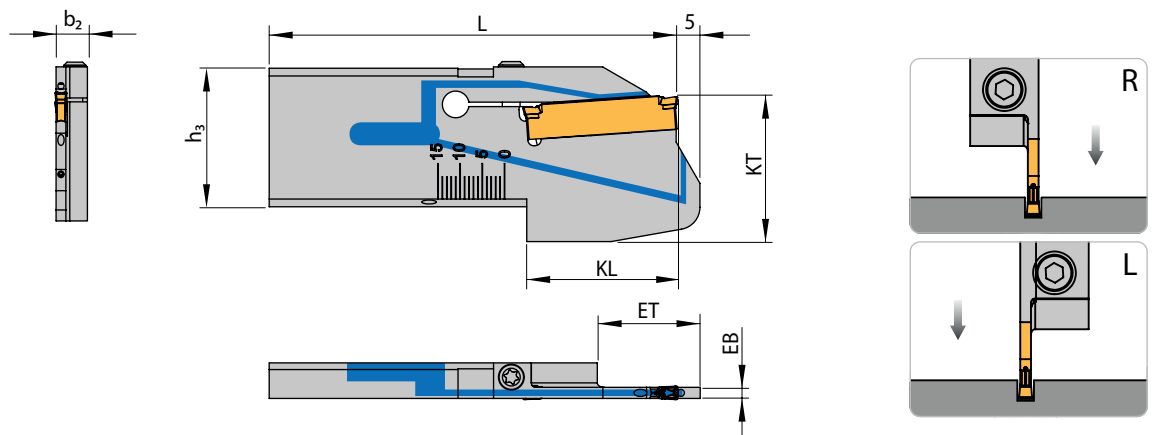


UPSIDE DOWN BLADE

THROUGH TOOL COOLANT (A1)

DESIGNATION	EB	ET	D <sub>max</sub>	h <sub>3</sub>	b <sub>2</sub>	L	KL	KT	INSERT
KDG-U 3208N105-A1-DG17.30	3	52,5	105	32	8	110	55	40	DG 17-30...
KDG-U 3208N105-A1-DG17.40	4	52,5	105	32	8	100	55	40	DG 17-40...

**KDG A2**



THROUGH TOOL COOLANT (A2)

DESIGNATION	EB	ET	D <sub>max</sub>	h <sub>3</sub>	b <sub>2</sub>	L	KL	KT	INSERT
KDG-F 3208L44-A2-DG24.30	3	22	44	32	8	81,5	23,5	32,5	DG 24-30...
KDG-F 3208R44-A2-DG24.30	3	22	44	32	8	81,5	23,5	32,5	
KDG-F 3208R65-A2-DG35.30	3	32,5	65	32	8	92	34	32,5	DG 35-30...
KDG-F 3208L65-A2-DG35.30	3	32,5	65	32	8	92	34	32,5	

D<sub>max</sub> = MAXIMUM DIAMETER OF MACHINING MATERIAL IN SOLID

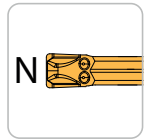
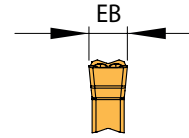
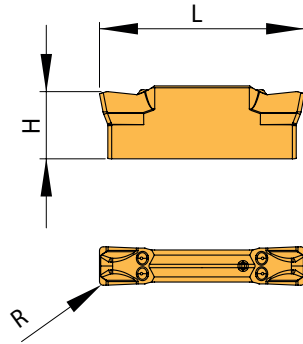
# PARTING - GROOVING INSERTS



DG24	-30	03	N	-AF1	A4M-E2
INSERT LENGTH	INSERT WIDTH	CORNER RADIUS	ORIENTATION	CHIPBREAKER	GRADE
24 - 24 MM	30 - 3 MM	03 - 0,3 MM	R - RIGHT		
			L - LEFT		
			N - NEUTRAL		

• 	DG16	- length 16 mm - width 1,5 to 3 mm - double side insert - 4 chipbreaker geometries	PAGE 35 - 37
• 	DG17	- length 17 mm - width 3 to 4 mm - single side insert - 6 chipbreaker geometries	PAGE 38 - 39
• 	DG24	- length 24 mm - width 1,5 to 5 mm - double side insert - 5 chipbreaker geometries	PAGE 40 - 42
• 	DG35	- length 35 mm - width 2 to 8 mm - double side insert - 5 chipbreaker geometries	PAGE 43 - 45
• 	DG40	- length 40 mm - width 10 mm - double side insert - 1 chipbreaker geometrie	PAGE 46

DG16-N



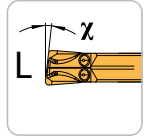
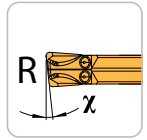
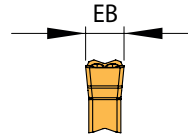
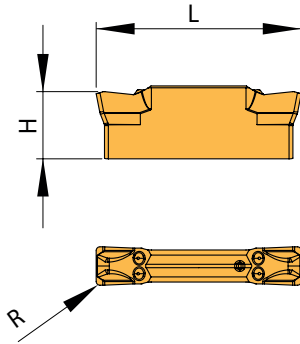
MACHINING MATERIAL	STEEL	P	●	●	●	●	●	○				
	STAINLESS STEEL	M		○	○	○	○	●				
	CAST IRON	K	●				●		●	○		
	NON-FERROUS METAL	N			○				●	●	●	●
	EXOTIC ALLOY	S		●	○	○			○	○	○	
	HARDENED STEEL	H										

GEOMETRIES	P	M	K	N	S	H
AF1	●	●	○	○	●	
BS1	○	●		○	○	
AN1	●	○	●			
ALU				●		
AD1	●	○	○		○	
DK1	●					
AS1	●	●			○	○

Vc (M/MIN) CUTTING SPEED →	70-180	60-160	50-150	50-150	70-180	40-120	80-200	100-500	800-2500	80-240
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GEOMETRY ↓	GRADE → DESIGNATION ↓	A4M-B2	A4M-D2	A4M-E2	A6M-F2	A8M-C2	B8M-S2	C3M-A2	D3M-AL2	D42-BH2	D4M-B2	EB	H	L	R	χ	F(MM/REV) FEED RATE ↓
		AF1	DG16-2002N-AF1	●	●												
	DG16-3003N-AF1	●	●									3	5,5	16	0,3	0°	0,03 - 0,15
BS1	DG16-1502N-BS1			●								1,5	5,5	16	0,2	0°	0,01 - 0,10
	DG16-2002N-BS1			●		●	●					2	5,5	16	0,2	0°	0,03 - 0,12
	DG16-3003N-BS1			●			●					3	5,5	16	0,3	0°	0,03 - 0,15
AN1	DG16-3003N-AN1	●	●									3	5,5	16	0,3	0°	0,08 - 0,18
AS1	DG16-2002N-AS1	●	●									2	5,5	16	0,2	0°	0,01 - 0,10

DG16-L/R

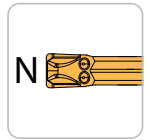
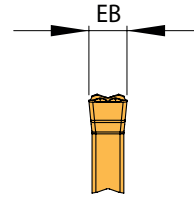
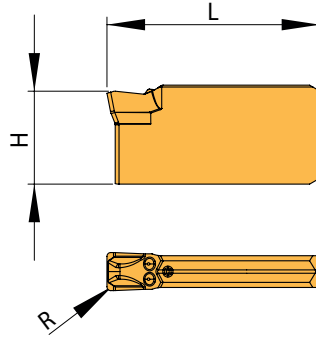


<b>MACHINING MATERIAL</b>	STEEL	P	●	●	●	●	●	○					
	STAINLESS STEEL	M		○	○	○	○	●					
	CAST IRON	K	●				●		●	○			
	NON-FERROUS METAL	N			○				●	●	●	●	
	EXOTIC ALLOY	S		●	○	○			○	○	○		
	HARDENED STEEL	H											

GEOMETRIES	P	M	K	N	S	H
AF1	●	●	○	○	●	
BS1	○	●		○	○	
AN1	●	○	●			
ALU				●		
AD1	●	○	○		○	
DK1	●					
AS1	●	●			○	○

GEOMETRY ↓	GRADE → DESIGNATION ↓	Vc (M/MIN) CUTTING SPEED →										EB	H	L	R	χ	F(MM/REV) FEED RATE ↓	
		A4M-B2	A4M-D2	A4M-E2	A6M-F2	A8M-C2	B8M-S2	C3M-A2	D3M-AL2	D42-BH2	D4M-B2							
<b>AF1</b> 	DG16-2001.15G.L/R-AF1	●		●									2	5,5	16	0,1	15°	0,03 - 0,12
	DG16-3003.6G.L/R-AF1	●		●									3	5,5	16	0,3	6°	0,03 - 0,15
<b>BS1</b> 	DG16-1501.15G.R-BS1			●									1,5	5,5	16	0,1	15°	0,01 - 0,10
	DG16-2001.12G.L/R-BS1							●					2	5,5	16	0,1	12°	0,03 - 0,12
	DG16-3002.12G.L/R-BS1							●					3	5,5	16	0,2	12°	0,03 - 0,15
	DG16-3003.6G.L/R-BS1							●					3	5,5	16	0,3	6°	0,03 - 0,15
<b>AN1</b> 	DG16-3003.6G.L/R-AN1	●		●									3	5,5	16	0,3	6°	0,08 - 0,18






DG17-N



<b>MACHINING MATERIAL</b>	STEEL	P	●	●	●	●	●	○						
	STAINLESS STEEL	M		○	○	○	○	●						
	CAST IRON	K	●				●		●	○				
	NON-FERROUS METAL	N			○				●	●	●	●		
	EXOTIC ALLOY	S		●	○	○			○	○	○			
	HARDENED STEEL	H												

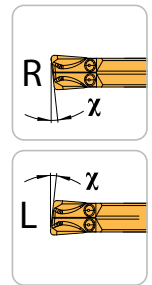
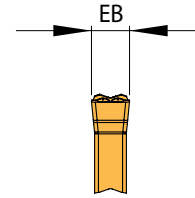
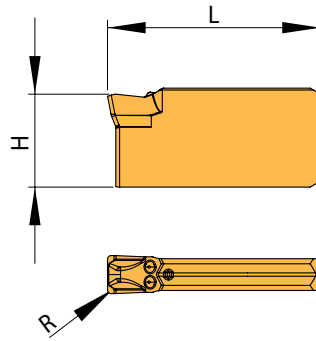
GEOMETRIES	P	M	K	N	S	H
AF1	●	●	○	○	●	
BS1	○	●		○	○	
AN1	●	○	●			
ALU				●		
AD1	●	○	○		○	
DK1	●					
AS1	●	●			○	○

Vc (M/MIN) CUTTING SPEED →	70-180	60-160	50-150	50-150	70-180	40-120	80-200	100-500	800-2500	80-240
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GEOMETRY ↓	GRADE → DESIGNATION ↓	A4M-B2	A4M-D2	A4M-E2	A6M-F2	A8M-C2	B8M-S2	C3M-A2	D3M-AL2	D42-BH2	D4M-B2	EB	H	L	R	χ	F(MM/REV) FEED RATE ↓	
		<b>AF1</b>	DG17-3003N-AF1			●												
																		
<b>BS1</b>	DG17-4004N-BS1						●					4	7,5	16,75	0,4	0°	0,04 - 0,18	
																		
<b>AN1</b>	DG17-3003N-AN1	●		●								3	7,5	16,75	0,3	0°	0,08 - 0,18	
	DG17-4004N-AN1	●		●								4	7,5	16,75	0,4	0°	0,08 - 0,25	
																		
<b>ALU</b>	DG17-3003N-ALU								●			3	7,5	16,75	0,3	0°	0,025 - 0,15	
																		
<b>AD1</b>	DG17-3003N-AD1			●								3	7,5	16,75	0,3	0°	0,05 - 0,20	
																		




DG17-L/R



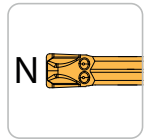
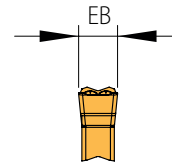
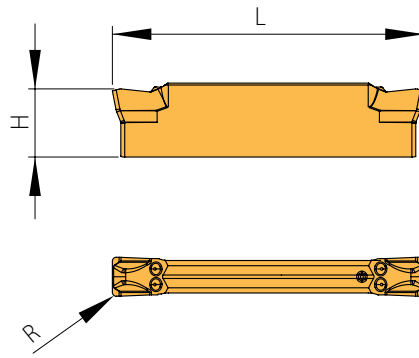
<b>MACHINING MATERIAL</b>	STEEL	P	●	●	●	●	●	○						
	STAINLESS STEEL	M		○	○	○	○	●						
	CAST IRON	K	●				●	●	○					
	NON-FERROUS METAL	N			○			●	●	●	●			
	EXOTIC ALLOY	S		●	○	○		○	○	○				
	HARDENED STEEL	H												

GEOMETRIES	P	M	K	N	S	H
AF1	●	●	○	○	●	
BS1	○	●		○	○	
AN1	●	○	●			
ALU				●		
AD1	●	○	○		○	
DK1	●					
AS1	●	●			○	○

	Vc (M/MIN) CUTTING SPEED →	70-180	60-160	50-150	50-150	70-180	40-120	80-200	100-500	800-2500	80-240
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GEOMETRY ↓	GRADE → DESIGNATION ↓	A4M-B2	A4M-D2	A4M-E2	A6M-F2	A8M-C2	B8M-S2	C3M-A2	D3M-AL2	D42-BH2	D4M-B2	EB	H	L	R	χ	F(MM/REV) FEED RATE ↓
		<b>ALU</b> 	DG17-3002.15G.L/R-ALU								●			3	7,5	16,75	0,2

DG24-N



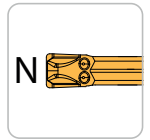
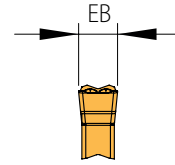
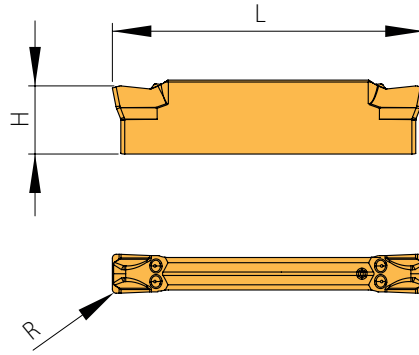
<b>MACHINING MATERIAL</b>	STEEL	P	●	●	●	●	●	○				
	STAINLESS STEEL	M		○	○	○	○	●				
	CAST IRON	K	●				●		●	○		
	NON-FERROUS METAL	N			○				●	●	●	●
	EXOTIC ALLOY	S		●	○	○			○	○	○	
	HARDENED STEEL	H										

GEOMETRIES	P	M	K	N	S	H
AF1	●	●	○	○	●	
BS1	○	●		○	○	
AN1	●	○	●			
ALU				●		
AD1	●	○	○		○	
DK1	●					
AS1	●	●			○	○

Vc (M/MIN) CUTTING SPEED →	70-180	60-160	50-150	50-150	70-180	40-120	80-200	100-500	800-2500	80-240
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GEOMETRY ↓	GRADE → DESIGNATION ↓	A4M-B2	A4M-D2	A4M-E2	A6M-F2	A8M-C2	B8M-S2	C3M-A2	D3M-AL2	D42-BH2	D4M-B2	EB	H	L	R	χ	F(MM/REV) FEED RATE ↓
		<b>AF1</b>	DG24-1502N-AF1		●	●			●								
	DG24-2002N-AF1	●	●	●		●	●					2	5,5	24	0,2	0°	0,03 - 0,12
	DG24-2502N-AF1		●									2,5	5,5	24	0,2	0°	0,03 - 0,13
	DG24-2503N-AF1			●	●	●						2,5	5,5	24	0,3	0°	0,03 - 0,13
	DG24-3003N-AF1	●	●	●	●	●	●					3	5,5	24	0,3	0°	0,03 - 0,15
	DG24-4004N-AF1			●								4	5,5	24	0,4	0°	0,04 - 0,18
	DG24-5005N-AF1			●								5	7,5	24	0,5	0°	0,05 - 0,20
<b>BS1</b>	DG24-1502N-BS1			●			●				●	1,5	5,5	24	0,2	0°	0,01 - 0,10
	DG24-2002N-BS1			●		●	●				●	2	5,5	24	0,2	0°	0,03 - 0,12
	DG24-2503N-BS1			●		●	●					2,5	5,5	24	0,3	0°	0,03 - 0,12
	DG24-3003N-BS1			●	●	●	●					3	5,5	24	0,3	0°	0,03 - 0,15
	DG24-4004N-BS1						●					4	5,5	24	0,4	0°	0,04 - 0,18
	DG24-5005N-BS1			●								5	7,5	24	0,5	0°	0,05 - 0,20
<b>AN1</b>	DG24-2002N-AN1	●	●			●						2	5,5	24	0,2	0°	0,07 - 0,15
	DG24-2503N-AN1			●		●						2,5	5,5	24	0,3	0°	0,07 - 0,15
	DG24-3003N-AN1	●	●			●						3	5,5	24	0,3	0°	0,08 - 0,18
	DG24-4004N-AN1	●	●									4	5,5	24	0,4	0°	0,08 - 0,25
	DG24-5005N-AN1			●								5	7,5	24	0,5	0°	0,08 - 0,25
<b>ALU</b>	DG24-1502N-ALU							●				1,5	5,5	24	0,2	0°	0,01 - 0,10
	DG24-2002N-ALU							●				2	5,5	24	0,2	0°	0,01 - 0,10
	DG24-3003N-ALU							●				3	5,5	24	0,3	0°	0,025 - 0,15

DG24-N



MACHINING MATERIAL	STEEL	P	●	●	●	●	●	○				
	STAINLESS STEEL	M		○	○	○	○	●				
	CAST IRON	K	●				●		●	○		
	NON-FERROUS METAL	N			○				●	●	●	●
	EXOTIC ALLOY	S		●	○	○			○	○	○	
	HARDENED STEEL	H										

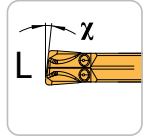
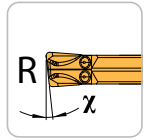
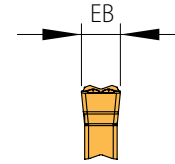
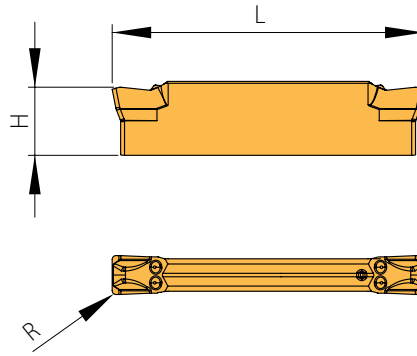
GEOMETRIES	P	M	K	N	S	H
AF1	●	●	○	○	●	
BS1	○	●		○	○	
AN1	●	○	●			
ALU				●		
AD1	●	○	○		○	
DK1	●					
AS1	●	●			○	○

Vc (M/MIN) CUTTING SPEED →	70-180	60-160	50-150	50-150	70-180	40-120	80-200	100-500	800-2500	80-240
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GEOMETRY ↓	GRADE → DESIGNATION ↓	A4M-B2	A4M-D2	A4M-E2	A6M-F2	A8M-C2	B8M-S2	C3M-A2	D3M-AL2	D42-BH2	D4M-B2	EB	H	L	R	χ	F(MM/REV) FEED RATE ↓
		AS1	DG24-2002N-AS1	●		●								2	5,5	24	0,2



DG24-L/R



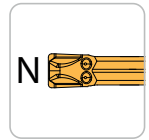
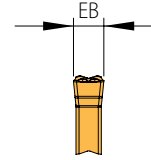
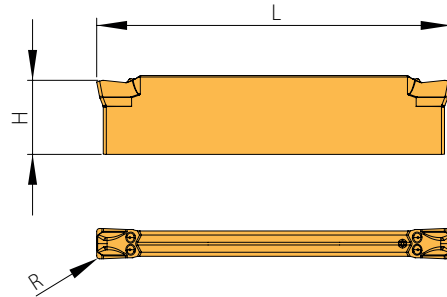
<b>MACHINING MATERIAL</b>	STEEL	P	●	●	●	●	●	○						
	STAINLESS STEEL	M		○	○	○	○	●						
	CAST IRON	K	●				●		●	○				
	NON-FERROUS METAL	N			○				●	●	●	●		
	EXOTIC ALLOY	S		●	○	○			○	○	○			
	HARDENED STEEL	H												

GEOMETRIES	P	M	K	N	S	H
AF1	●	●	○	○	●	
BS1	○	●		○	○	
AN1	●	○	●			
ALU				●		
AD1	●	○	○		○	
DK1	●					
AS1	●	●			○	○

Vc (M/MIN) CUTTING SPEED →	70-180	60-160	50-150	50-150	70-180	40-120	80-200	100-500	800-2500	80-240
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GEOMETRY ↓	GRADE → DESIGNATION ↓	A4M-B2	A4M-D2	A4M-E2	A6M-F2	A8M-C2	B8M-S2	C3M-A2	D3M-AL2	D42-BH2	D4M-B2	EB	H	L	R	χ	F(MM/REV) FEED RATE ↓
		<b>AF1</b>	DG24-15005.15G.L/R-AF1			●								1,5	5,5	24	0,05
	DG24-2000.15G.R-AF1			●								2	5,5	24	0	15°	0,03 - 0,12
	DG24-2001.15G.L/R-AF1			●								2	5,5	24	0,1	15°	0,03 - 0,12
	DG24-2502.6G.L/R-AF1			●								2,5	5,5	24	0,2	6°	0,03 - 0,13
	DG24-3002.15G.L-AF1			●								3	5,5	24	0,2	15°	0,03 - 0,15
	DG24-3003.6G.L/R-AF1	●		●		●	●					3	5,5	24	0,3	6°	0,03 - 0,15
<b>BS1</b>	DG24-1500.15G.L/R-BS1			●							●	1,5	5,5	24	0	15°	0,01 - 0,10
	DG24-1501.15G.L/R-BS1			●								1,5	5,5	24	0,1	15°	0,01 - 0,10
	DG24-1502.6G.L/R-BS1			●								1,5	5,5	24	0,2	6°	0,01 - 0,10
	DG24-2000.15G.L/R-BS1			●							●	2	5,5	24	0	15°	0,03 - 0,12
	DG24-2001.15G.L/R-BS1			●			●					2	5,5	24	0,1	15°	0,03 - 0,12
	DG24-2002.8G.L/R-BS1			●								2	5,5	24	0,2	8°	0,03 - 0,12
	DG24-2502.6G.L/R-BS1			●			●					2,5	5,5	24	0,2	6°	0,03 - 0,12
	DG24-3002.12G.L/R-BS1			●			●					3	5,5	24	0,2	12°	0,03 - 0,15
	DG24-3003.6G.L/R-BS1			●			●					3	5,5	24	0,3	6°	0,03 - 0,15
<b>AN1</b>	DG24-3003.6G.L/R-AN1	●		●		●	●					3	5,5	24	0,3	6°	0,08 - 0,18
<b>ALU</b>	DG24-2001.15.L/R-ALU								●			2	5,5	24	0,1	15°	0,01 - 0,10
	DG24-3002.15.L/R-ALU								●			3	5,5	24	0,2	15°	0,025 - 0,15

DG35-N

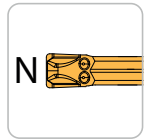
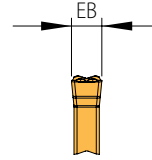
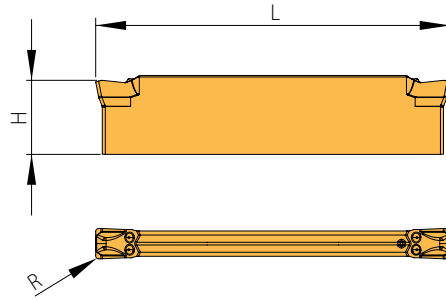


<b>MACHINING MATERIAL</b>	STEEL	P	●	●	●	●	●	○					
	STAINLESS STEEL	M		○	○	○	○	●					
	CAST IRON	K	●				●		●	○			
	NON-FERROUS METAL	N			○				●	●	●	●	
	EXOTIC ALLOY	S		●	○	○			○	○	○		
	HARDENED STEEL	H											

GEOMETRIES	P	M	K	N	S	H
AF1	●	●	○	○	●	
BS1	○	●		○	○	
AN1	●	○	●			
ALU				●		
AD1	●	○	○		○	
DK1	●					
AS1	●	●			○	○

GEOMETRY	GRADE → DESIGNATION ↓	Vc (M/MIN) CUTTING SPEED →										EB	H	L	R	χ	F(MM/REV) FEED RATE ↓		
		A4M-B2	A4M-D2	A4M-E2	A6M-F2	A8M-C2	B8M-S2	C3M-A2	D3M-AL2	D42-BH2	D4M-B2								
<b>AF1</b> 	DG35-2002N-AF1	●		●										2	7,5	35	0,2	0°	0,03 - 0,12
	DG35-3003N-AF1			●		●	●							3	7,5	35	0,3	0°	0,03 - 0,15
	DG35-4004N-AF1			●										4	7,5	35	0,4	0°	0,04 - 0,18
<b>BS1</b> 	DG35-2002N-BS1			●		●	●							2	7,5	35	0,2	0°	0,03 - 0,12
	DG35-3003N-BS1		●	●	●	●	●							3	7,5	35	0,3	0°	0,03 - 0,15
	DG35-4004N-BS1						●							4	7,5	35	0,4	0°	0,04 - 0,18
<b>AN1</b> 	DG35-2002N-AN1			●										2	7,5	35	0,2	0°	0,07 - 0,15
	DG35-3003N-AN1	●		●		●	●							3	7,5	35	0,3	0°	0,08 - 0,18
	DG35-4004N-AN1	●		●		●								4	7,5	35	0,4	0°	0,08 - 0,25
	DG35-5005N-AN1			●										5	7,5	35	0,5	0°	0,08 - 0,25
	DG35-6006N-AN1			●										6	7,5	35	0,6	0°	0,08 - 0,25
	DG35-8008N-AN1			●										8	8	35	0,8	0°	0,10 - 0,35
<b>ALU</b> 	DG35-2002N-ALU										●			2	7,5	35	0,2	0°	0,01 - 0,10
	DG35-3003N-ALU										●			3	7,5	35	0,3	0°	0,025 - 0,15
	DG35-4004N-ALU										●			4	7,5	35	0,4	0°	0,025 - 0,17

DG35-N



<b>MACHINING MATERIAL</b>	STEEL	P	●	●	●	●	●	○					
	STAINLESS STEEL	M		○	○	○	○	●					
	CAST IRON	K	●				●		●	○			
	NON-FERROUS METAL	N			○				●	●	●	●	
	EXOTIC ALLOY	S		●	○	○			○	○	○		
	HARDENED STEEL	H											

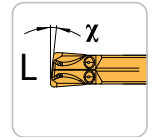
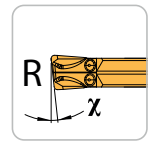
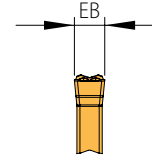
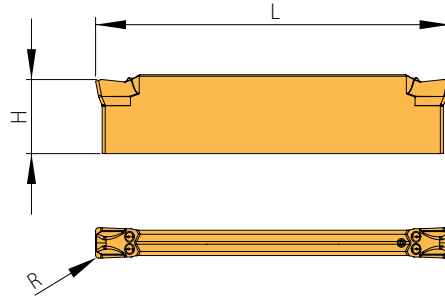
GEOMETRIES	P	M	K	N	S	H
AF1	●	●	○	○	●	
BS1	○	●		○	○	
AN1	●	○	●			
ALU				●		
AD1	●	○	○		○	
DK1	●					
AS1	●	●			○	○

Vc (M/MIN) CUTTING SPEED →	70-180	60-160	50-150	50-150	70-180	40-120	80-200	100-500	800-2500	80-240
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GEOMETRY ↓	GRADE → DESIGNATION ↓	A4M-B2	A4M-D2	A4M-E2	A6M-F2	A8M-C2	B8M-S2	C3M-A2	D3M-AL2	D42-BH2	D4M-B2	EB	H	L	R	χ	F(MM/REV) FEED RATE ↓
		<b>AD1</b>	DG35-2002N-AD1			●											
	DG35-3003N-AD1			●								3	7,5	35	0,3	0°	0,05 - 0,20
<b>DK1</b>	DG35-8040N-DK1							●				8	8	35	4	0°	0,10 - 0,30







DG35-L/R

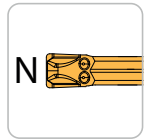
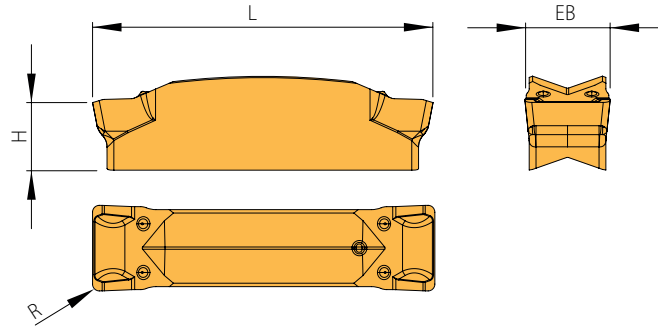


<b>MACHINING MATERIAL</b>	STEEL	P	●	●	●	●	●	○					
	STAINLESS STEEL	M		○	○	○	○	●					
	CAST IRON	K	●				●		●	○			
	NON-FERROUS METAL	N			○				●	●	●	●	
	EXOTIC ALLOY	S		●	○	○			○	○	○		
	HARDENED STEEL	H											

GEOMETRIES	P	M	K	N	S	H
AF1	●	●	○	○	●	
BS1	○	●		○	○	
AN1	●	○	●			
ALU				●		
AD1	●	○	○		○	
DK1	●					
AS1	●	●			○	○

GEOMETRY ↓	GRADE → DESIGNATION ↓	Vc (M/MIN) CUTTING SPEED →										EB	H	L	R	χ	F(MM/REV) FEED RATE ↓		
		A4M-B2	A4M-D2	A4M-E2	A6M-F2	A8M-C2	B8M-S2	C3M-A2	D3M-AL2	D42-BH2	D4M-B2								
<b>AF1</b> 	DG35-3003.6G.L/R-AF1	●	●											3	7,5	35	0,3	6°	0,03 - 0,15
<b>BS1</b> 	DG35-2001.12G.L/R-BS1						●							2	7,5	35	0,1	12°	0,03 - 0,12
	DG35-2002.12G.L/R-BS1			●			●							2	7,5	35	0,2	12°	0,03 - 0,12
	DG35-3002.12.L/R-BS1			●										3	7,5	35	0,2	12°	0,03 - 0,15
	DG35-3003.6G.L/R-BS1			●			●							3	7,5	35	0,3	6°	0,03 - 0,15
<b>AN1</b> 	DG35-2002.6G.L/R-AN1			●										2	7,5	35	0,2	6°	0,07 - 0,15
	DG35-3003.6G.L/R-AN1			●		●								3	7,5	35	0,3	6°	0,08 - 0,18
<b>ALU</b> 	DG35-2000.15.L/R-ALU										●			2	7,5	35	0	15°	0,01 - 0,10
	DG35-2001.15.L/R-ALU										●			2	7,5	35	0,1	15°	0,01 - 0,10
	DG35-2002.20G.R-ALU										●			2	7,5	35	0,2	20°	0,01 - 0,10
	DG35-3002.15.L/R-ALU										●			3	7,5	35	0,2	15°	0,025 - 0,15
	DG35-3002.6G.L/R-ALU										●			3	7,5	35	0,2	6°	0,025 - 0,15

DG40-N



<b>MACHINING MATERIAL</b>	STEEL	P	●	●	●	●	●	○						
	STAINLESS STEEL	M		○	○	○	○	●						
	CAST IRON	K	●				●	●	○					
	NON-FERROUS METAL	N			○			●	●	●	●			
	EXOTIC ALLOY	S		●	○	○		○	○	○				
	HARDENED STEEL	H												

GEOMETRIES	P	M	K	N	S	H
AF1	●	●	○	○	●	
BS1	○	●		○	○	
AN1	●	○	●			
ALU				●		
AD1	●	○	○		○	
DK1	●					
AS1	●	●			○	○

Vc (M/MIN) CUTTING SPEED →	70-180	60-160	50-150	50-150	70-180	40-120	80-200	100-500	800-2500	80-240
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GEOMETRY ↓	GRADE → DESIGNATION ↓	A4M-B2	A4M-D2	A4M-E2	A6M-F2	A8M-C2	B8M-S2	C3M-A2	D3M-AL2	D42-BH2	D4M-B2	EB	H	L	R	χ	F(MM/REV) FEED RATE ↓
		AN1	DG40-10008N-AN1			●								10	8,5	40	0,8





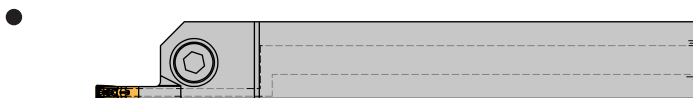
# GROOVING - COPY TURNING MONOBLOCK HOLDERS



<b>HDU</b>	<b>2020</b>	<b>R/L</b>	<b>.12</b>	<b>-A1</b>	<b>-LS1</b>	<b>-DU24.30</b>
TOOL TYPE	SHANK SIZE	ORIENTATION	GROOVE DEPTH	INTERNAL COOLING	COOLING CONETION	INSERT
<b>HD - HOLDER</b>	<b>2020 - 20 x 20 MM</b>	<b>R - RIGHT</b>	<b>.12 - 12 MM</b>	<b>- NO COOLANT</b>	<b>S - FROM SIDE</b>	<b>24 - LENGTH 24 MM</b>
<b>U - UNIVERSAL (GROOVING + COPY TURNING)</b>		<b>L - LEFT</b>		<b>A1 - FROM ABOVE</b>	<b>B - FROM BACK</b>	<b>30 - WIDTH 3 MM</b>
				<b>A2 - FROM ABOVE AND BELOW</b>		

### MONOBLOCK HOLDERS WITHOUT INTERNAL COOLANT

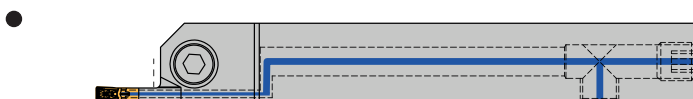
- shank size 16 x 16 to 25 x 25 mm
- depth of groove 12 or 21 mm



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### MONOBLOCK HOLDERS WITH INTERNAL COOLING CONECTION FROM SIDE

- shank size 16 x 16 to 25 x 25 mm
- depth of groove 12 or 21 mm
- coolant conection thread M8x1 or G 1/8"



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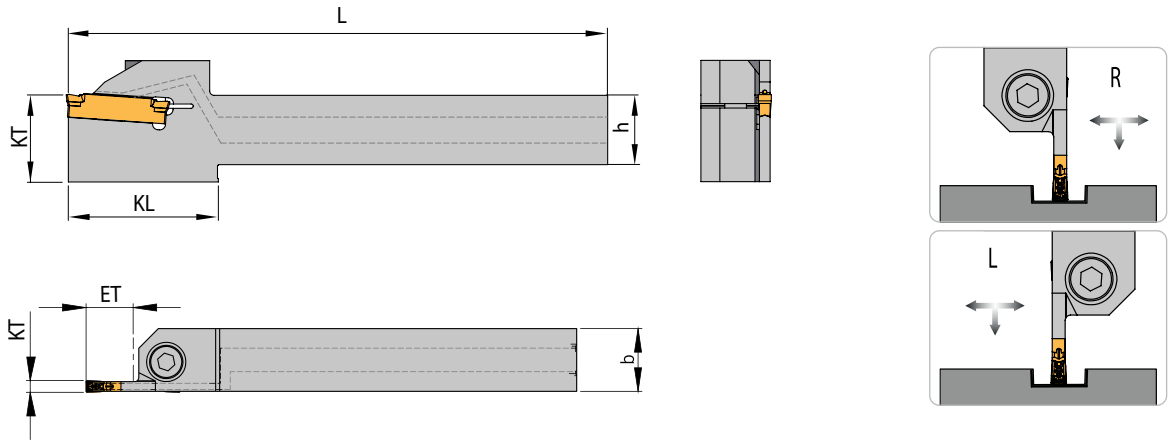
### MONOBLOCK HOLDERS WITH INTERNAL COOLING CONECTION FROM BACK

- shank size 16 x 16 to 25 x 25 mm
- depth of groove 12 or 21 mm
- coolant conection thread M8x1 or G 1/8"



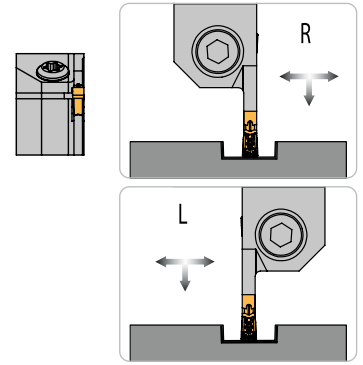
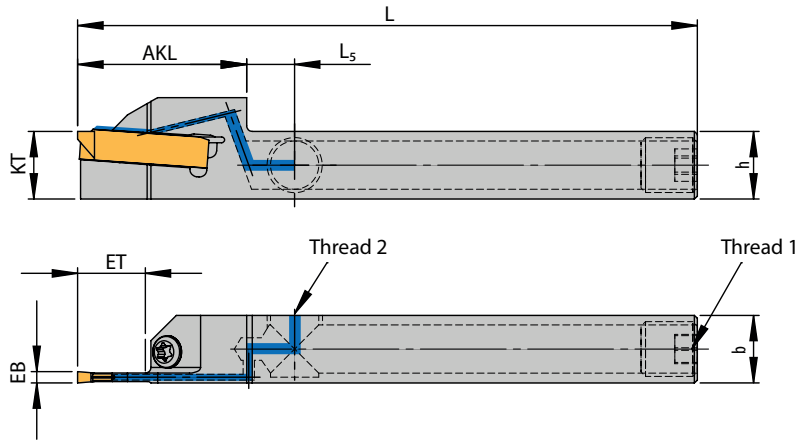
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HDU



DESIGNATION	EB	ET	h	b	L	KL	KT	INSERT
HDU 1616L/R.12-DU24.20	2	12	16	16	125	35	20	SE 24-20...
HDU 1616L/R.21-DU24.20	2	21	16	16	125	44	20	
HDU 2020L/R.12-DU24.20	2	12	20	20	125	-	-	
HDU 2020L/R.21-DU24.20	2	21	20	20	125	-	-	
HDU 1616L/R.12-DU24.30	3	12	16	16	125	35	20	SE 24-30...
HDU 1616L/R.21-DU24.30	3	21	16	16	125	44	20	
HDU 2020L/R.12-DU24.30	3	12	20	20	125	-	-	
HDU 2020L/R.21-DU24.30	3	21	20	20	125	-	-	
HDU 2525L/R.12-DU24.30	3	12	25	25	150	-	-	SE 24-40...
HDU 2525L/R.21-DU24.30	3	21	25	25	150	-	-	
HDU 1616L/R.12-DU24.40	4	12	16	16	125	35	20	
HDU 1616L/R.21-DU24.40	4	21	16	16	125	44	20	
HDU 2020L/R.12-DU24.40	4	12	20	20	125	-	-	SE 24-50...
HDU 2020L/R.21-DU24.40	4	21	20	20	125	-	-	
HDU 2525L/R.12-DU24.40	4	12	25	25	150	-	-	
HDU 2525L/R.21-DU24.40	4	21	25	25	150	-	-	
HDU 2020L/R.12-DU24.50	5	12	20	20	125	-	-	SE 24-60...
HDU 2020L/R.21-DU24.50	5	21	20	20	125	-	-	
HDU 2525L/R.12-DU24.50	5	12	25	25	150	-	-	
HDU 2525L/R.21-DU24.50	5	21	25	25	150	-	-	
HDU 2020L/R.12-DU24.60	6	12	20	20	125	-	-	SE 24-60...
HDU 2020L/R.21-DU24.60	6	21	20	20	125	-	-	
HDU 2525L/R.12-DU24.60	6	12	25	25	150	-	-	
HDU 2525L/R.21-DU24.60	6	21	25	25	150	-	-	

**HDU-A1-ST2**

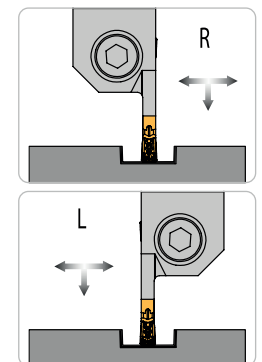
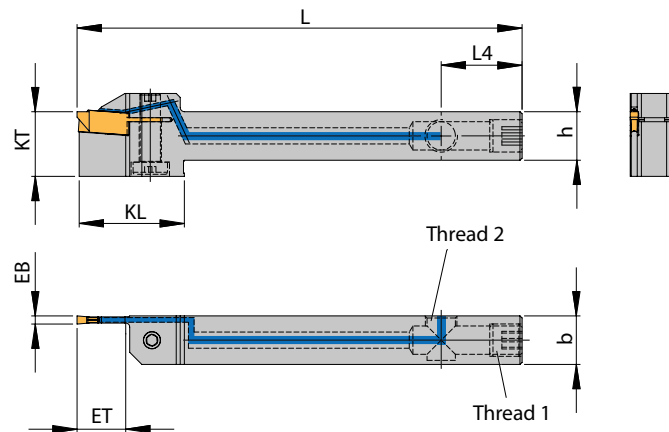


MONOBLOCK HOLDER WITH THROUGH TOOL COOLANT (A1)

ACCESS FROM THE SIDE, THREAD 1: G 1/8", THREAD 2: G 1/8"

DESIGNATION	EB	ET	D <sub>max</sub>	h	b	L	KL	KT	INSERT
HDU 1212R.12-A1-ST2-DU24.02	2	12	12	12	110	8,5	30	12	SE 24-20...
HDU 1616R.12-A1-ST2-DU24.02	2	12	16	16	110	8,5	30	16	
HDU 1212R.12-A1-ST2-DU24.03	3	12	12	12	110	8,5	30	12	SE 24-30...
HDU 1616R.12-A1-ST2-DU24.03	3	12	16	16	110	8,5	30	16	

**HDU-A1-S1U/S2U**

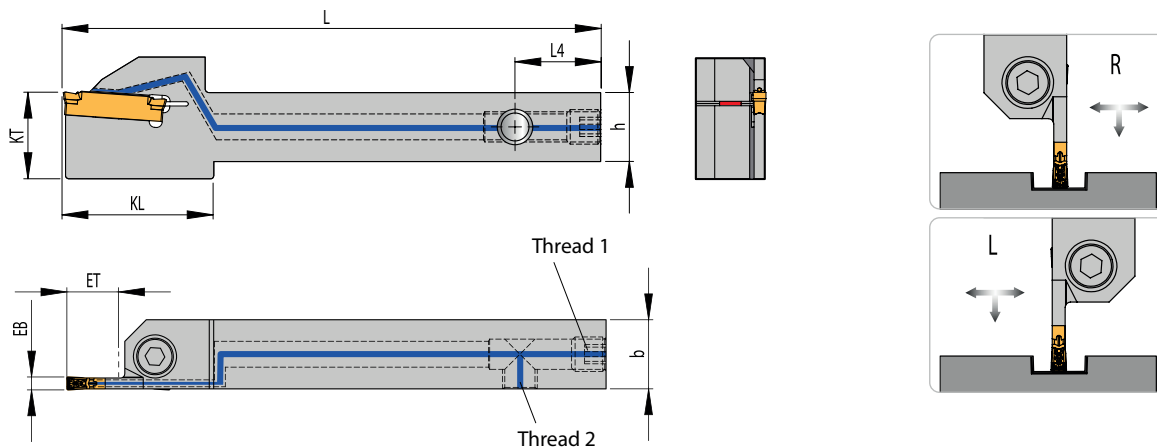


MONOBLOCK HOLDER WITH THROUGH TOOL COOLANT (A1)

ACCESS FROM THE SIDE, S1U: THREAD 1: M8x1, THREAD 2: M8x1, S2U: THREAD 1: M8x1, THREAD 2: G 1/8"

DESIGNATION	EB	ET	D <sub>max</sub>	h	b	L	KL	KT	INSERT
HDU 1212L.12-A1-S1U-DU24.02	2	12	12	12	110	20	26	16	SE 24-20...
HDU 1212L.12-A1-S2U-DU24.02	2	12	12	12	110	20	26	16	
HDU 1212L.12-A1-S1U-DU24.03	3	12	12	12	110	20	26	16	SE 24-30...
HDU 1212L.12-A1-S2U-DU24.03	3	12	12	12	110	20	26	16	

HDU-A1-LS1

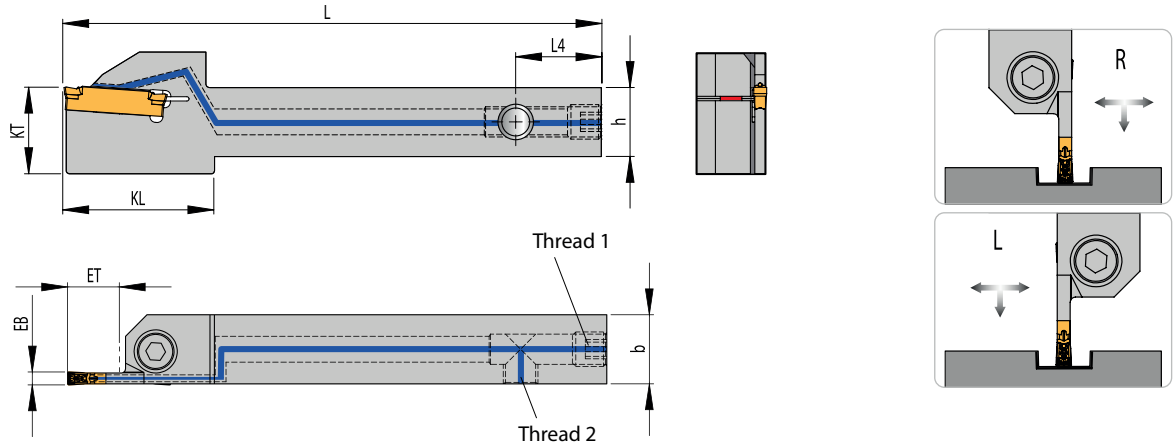


MONOBLOCK HOLDER WITH THROUGH TOOL COOLANT (A1)

ACCESS FROM THE SIDE, THREAD 1: M8x1, THREAD 2: M8x1

DESIGNATION	EB	ET	D <sub>max</sub>	h	b	L	KL	KT	INSERT
HDU 1616L/R.12-A1-LS1-DU24.20	2	12	16	16	125	20	35	20	SE 24-20...
HDU 1616L/R.21-A1-LS1-DU24.20	2	21	16	16	125	20	44	20	
HDU 2020L/R.12-A1-LS1-DU24.20	2	12	20	20	125	20	-	-	
HDU 2020L/R.21-A1-LS1-DU24.20	2	21	20	20	125	20	-	-	
HDU 1616L/R.12-A1-LS1-DU24.30	3	12	16	16	125	20	35	20	SE 24-30...
HDU 1616L/R.21-A1-LS1-DU24.30	3	21	16	16	125	20	44	20	
HDU 2020L/R.12-A1-LS1-DU24.30	3	12	20	20	125	20	-	-	
HDU 2020L/R.21-A1-LS1-DU24.30	3	21	20	20	125	20	-	-	
HDU 2525L/R.12-A1-LS1-DU24.30	3	12	25	25	150	20	-	-	SE 24-40...
HDU 2525L/R.21-A1-LS1-DU24.30	3	21	25	25	150	20	-	-	
HDU 1616L/R.12-A1-LS1-DU24.40	4	12	16	16	125	20	35	20	
HDU 1616L/R.21-A1-LS1-DU24.40	4	21	16	16	125	20	44	20	
HDU 2020L/R.12-A1-LS1-DU24.40	4	12	20	20	125	20	-	-	SE 24-50...
HDU 2020L/R.21-A1-LS1-DU24.40	4	21	20	20	125	20	-	-	
HDU 2525L/R.12-A1-LS1-DU24.40	4	12	25	25	150	20	-	-	
HDU 2525L/R.21-A1-LS1-DU24.40	4	21	25	25	150	20	-	-	
HDU 2020L/R.12-A1-LS1-DU24.50	5	12	20	20	125	20	-	-	SE 24-60...
HDU 2020L/R.21-A1-LS1-DU24.50	5	21	20	20	125	20	-	-	
HDU 2525L/R.12-A1-LS1-DU24.50	5	12	25	25	150	20	-	-	
HDU 2525L/R.21-A1-LS1-DU24.50	5	21	25	25	150	20	-	-	
HDU 2020L/R.12-A1-LS1-DU24.60	6	12	20	20	125	20	-	-	SE 24-60...
HDU 2020L/R.21-A1-LS1-DU24.60	6	21	20	20	125	20	-	-	
HDU 2525L/R.12-A1-LS1-DU24.60	6	12	25	25	150	20	-	-	
HDU 2525L/R.21-A1-LS1-DU24.60	6	21	25	25	150	20	-	-	

HDU-A1-LS2

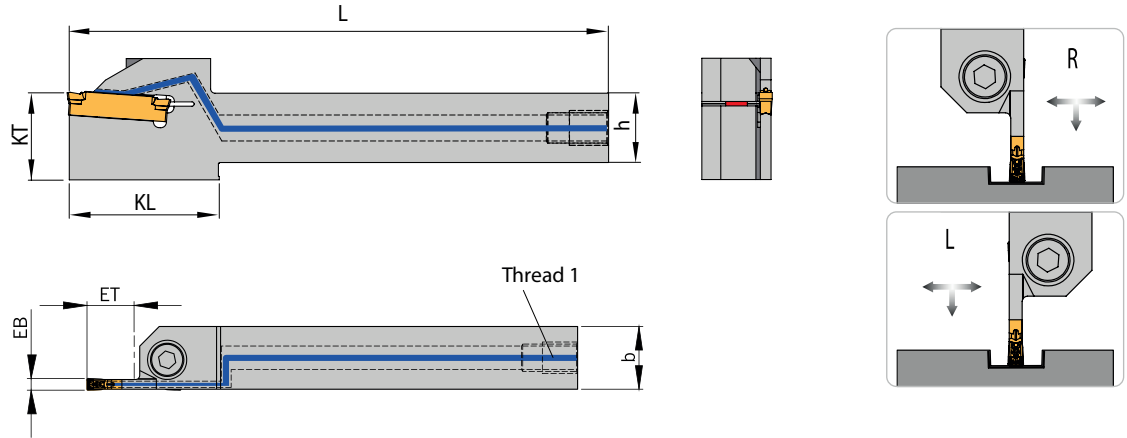


MONOBLOCK HOLDER WITH THROUGH TOOL COOLANT (A1)

ACCESS FROM THE SIDE, THREAD 1: M8x1, THREAD 2: G 1/8"

DESIGNATION	EB	ET	D <sub>max</sub>	h	b	L	KL	KT	INSERT
HDU 1616L/R.12-A1-LS2-DU24.20	2	12	16	16	125	20	35	20	SE 24-20...
HDU 1616L/R.21-A1-LS2-DU24.20	2	21	16	16	125	20	44	20	
HDU 2020L/R.12-A1-LS2-DU24.20	2	12	20	20	125	20	-	-	
HDU 2020L/R.21-A1-LS2-DU24.20	2	21	20	20	125	20	-	-	
HDU 1616L/R.12-A1-LS2-DU24.30	3	12	16	16	125	20	35	20	SE 24-30...
HDU 1616L/R.21-A1-LS2-DU24.30	3	21	16	16	125	20	44	20	
HDU 2020L/R.12-A1-LS2-DU24.30	3	12	20	20	125	20	-	-	
HDU 2020L/R.21-A1-LS2-DU24.30	3	21	20	20	125	20	-	-	
HDU 2525L/R.12-A1-LS2-DU24.30	3	12	25	25	150	20	-	-	SE 24-40...
HDU 2525L/R.21-A1-LS2-DU24.30	3	21	25	25	150	20	-	-	
HDU 1616L/R.12-A1-LS2-DU24.40	4	12	16	16	125	20	35	20	
HDU 1616L/R.21-A1-LS2-DU24.40	4	21	16	16	125	20	44	20	
HDU 2020L/R.12-A1-LS2-DU24.40	4	12	20	20	125	20	-	-	SE 24-50...
HDU 2020L/R.21-A1-LS2-DU24.40	4	21	20	20	125	20	-	-	
HDU 2525L/R.12-A1-LS2-DU24.40	4	12	25	25	150	20	-	-	
HDU 2525L/R.21-A1-LS2-DU24.40	4	21	25	25	150	20	-	-	
HDU 2020L/R.12-A1-LS2-DU24.50	5	12	20	20	125	20	-	-	SE 24-60...
HDU 2020L/R.21-A1-LS2-DU24.50	5	21	20	20	125	20	-	-	
HDU 2525L/R.12-A1-LS2-DU24.50	5	12	25	25	150	20	-	-	
HDU 2525L/R.21-A1-LS2-DU24.50	5	21	25	25	150	20	-	-	
HDU 2020L/R.12-A1-LS2-DU24.60	6	12	20	20	125	20	-	-	SE 24-60...
HDU 2020L/R.21-A1-LS2-DU24.60	6	21	20	20	125	20	-	-	
HDU 2525L/R.12-A1-LS2-DU24.60	6	12	25	25	150	20	-	-	
HDU 2525L/R.21-A1-LS2-DU24.60	6	21	25	25	150	20	-	-	

HDU-A1-B1

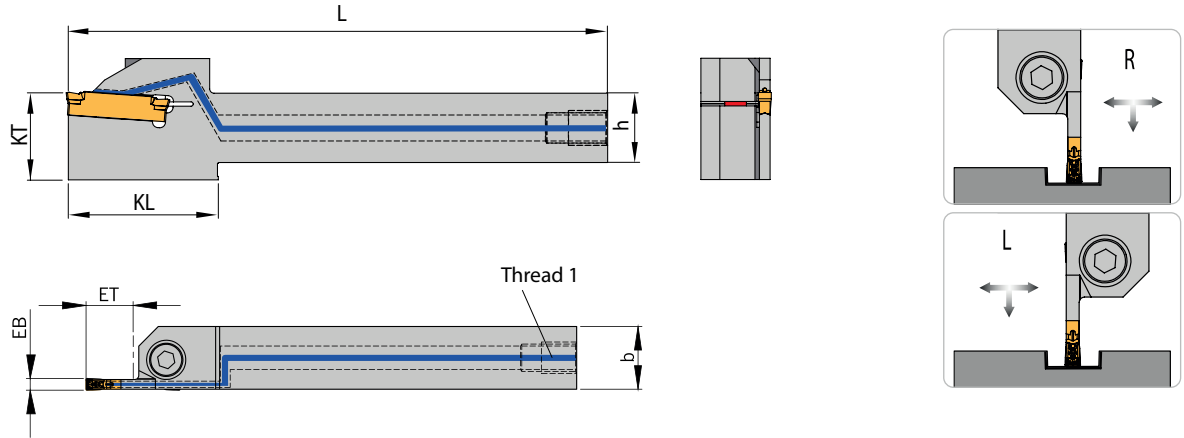


MONOBLOCK HOLDER WITH THROUGH TOOL COOLANT (A1)

ACCESS FROM THE BACK, THREAD 1: M8x1

DESIGNATION	EB	ET	h	b	L	KL	KT	INSERT
HDU 1616L/R.12-A1-B1-DU24.20	2	12	16	16	125	35	20	SE 24-20...
HDU 1616L/R.21-A1-B1-DU24.20	2	21	16	16	125	44	20	
HDU 2020L/R.12-A1-B1-DU24.20	2	12	20	20	125	-	-	
HDU 2020L/R.21-A1-B1-DU24.20	2	21	20	20	125	-	-	
HDU 1616L/R.12-A1-B1-DU24.30	3	12	16	16	125	35	20	SE 24-30...
HDU 1616L/R.21-A1-B1-DU24.30	3	21	16	16	125	44	20	
HDU 2020L/R.12-A1-B1-DU24.30	3	12	20	20	125	-	-	
HDU 2020L/R.21-A1-B1-DU24.30	3	21	20	20	125	-	-	
HDU 2525L/R.12-A1-B1-DU24.30	3	12	25	25	150	-	-	SE 24-40...
HDU 2525L/R.21-A1-B1-DU24.30	3	21	25	25	150	-	-	
HDU 1616L/R.12-A1-B1-DU24.40	4	12	16	16	125	35	20	
HDU 1616L/R.21-A1-B1-DU24.40	4	21	16	16	125	44	20	
HDU 2020L/R.12-A1-B1-DU24.40	4	12	20	20	125	-	-	SE 24-50...
HDU 2020L/R.21-A1-B1-DU24.40	4	21	20	20	125	-	-	
HDU 2525L/R.12-A1-B1-DU24.40	4	12	25	25	150	-	-	
HDU 2525L/R.21-A1-B1-DU24.40	4	21	25	25	150	-	-	
HDU 2020L/R.12-A1-B1-DU24.50	5	12	20	20	125	-	-	SE 24-60...
HDU 2020L/R.21-A1-B1-DU24.50	5	21	20	20	125	-	-	
HDU 2525L/R.12-A1-B1-DU24.50	5	12	25	25	150	-	-	
HDU 2525L/R.21-A1-B1-DU24.50	5	21	25	25	150	-	-	
HDU 2020L/R.12-A1-B1-DU24.60	6	12	20	20	125	-	-	SE 24-60...
HDU 2020L/R.21-A1-B1-DU24.60	6	21	20	20	125	-	-	
HDU 2525L/R.12-A1-B1-DU24.60	6	12	25	25	150	-	-	
HDU 2525L/R.21-A1-B1-DU24.60	6	21	25	25	150	-	-	

HDU-A1-B2

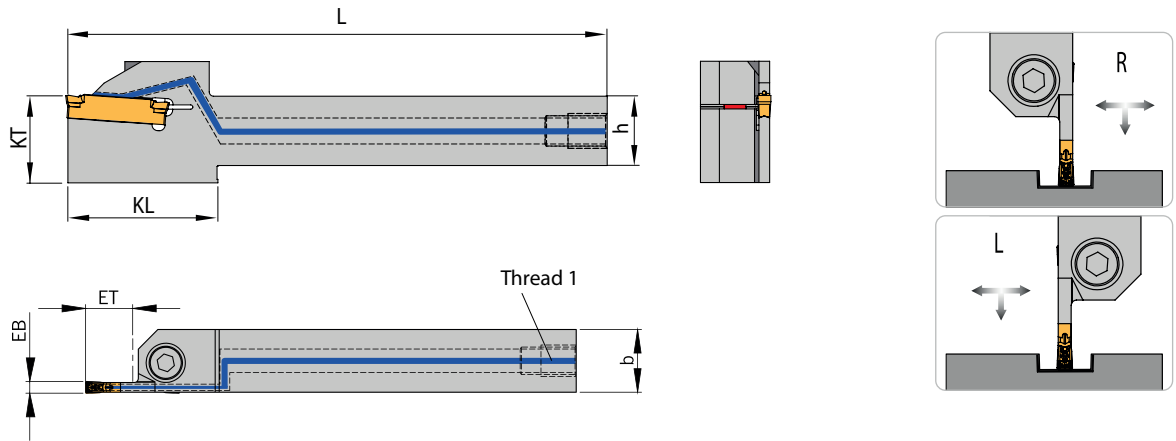


MONOBLOCK HOLDER WITH THROUGH TOOL COOLANT (A1)

ACCESS FROM THE BACK, THREAD 1 : G 1/8"

DESIGNATION	EB	ET	h	b	L	KL	KT	INSERT
HDU 1616L/R.12-A1-B2-DU24.20	2	12	16	16	125	35	20	SE 24-20...
HDU 1616L/R.21-A1-B2-DU24.20	2	21	16	16	125	44	20	
HDU 2020L/R.12-A1-B2-DU24.20	2	12	20	20	125	-	-	
HDU 2020L/R.21-A1-B2-DU24.20	2	21	20	20	125	-	-	
HDU 1616L/R.12-A1-B2-DU24.30	3	12	16	16	125	35	20	SE 24-30...
HDU 1616L/R.21-A1-B2-DU24.30	3	21	16	16	125	44	20	
HDU 2020L/R.12-A1-B2-DU24.30	3	12	20	20	125	-	-	
HDU 2020L/R.21-A1-B2-DU24.30	3	21	20	20	125	-	-	
HDU 2525L/R.12-A1-B2-DU24.30	3	12	25	25	150	-	-	SE 24-40...
HDU 2525L/R.21-A1-B2-DU24.30	3	21	25	25	150	-	-	
HDU 1616L/R.12-A1-B2-DU24.40	4	12	16	16	125	35	20	
HDU 1616L/R.21-A1-B2-DU24.40	4	21	16	16	125	44	20	
HDU 2020L/R.12-A1-B2-DU24.40	4	12	20	20	125	-	-	SE 24-50...
HDU 2020L/R.21-A1-B2-DU24.40	4	21	20	20	125	-	-	
HDU 2525L/R.12-A1-B2-DU24.40	4	12	25	25	150	-	-	
HDU 2525L/R.21-A1-B2-DU24.40	4	21	25	25	150	-	-	
HDU 2020L/R.12-A1-B2-DU24.50	5	12	20	20	125	-	-	SE 24-60...
HDU 2020L/R.21-A1-B2-DU24.50	5	21	20	20	125	-	-	
HDU 2525L/R.12-A1-B2-DU24.50	5	12	25	25	150	-	-	
HDU 2525L/R.21-A1-B2-DU24.50	5	21	25	25	150	-	-	
HDU 2020L/R.12-A1-B2-DU24.60	6	12	20	20	125	-	-	SE 24-60...
HDU 2020L/R.21-A1-B2-DU24.60	6	21	20	20	125	-	-	
HDU 2525L/R.12-A1-B2-DU24.60	6	12	25	25	150	-	-	
HDU 2525L/R.21-A1-B2-DU24.60	6	21	25	25	150	-	-	

HDU-A1-B3



MONOBLOCK HOLDER WITH THROUGH TOOL COOLANT (A1)

ACCESS FROM THE BACK, THREAD 1: G 1/4"

DESIGNATION	EB	ET	h	b	L	KL	KT	INSERT
HDU 1616L/R.12-A1-B3-DU24.20	2	12	16	16	125	35	20	SE 24-20...
HDU 1616L/R.21-A1-B3-DU24.20	2	21	16	16	125	44	20	
HDU 2020L/R.12-A1-B3-DU24.20	2	12	20	20	125	-	-	
HDU 2020L/R.21-A1-B3-DU24.20	2	21	20	20	125	-	-	
HDU 1616L/R.12-A1-B3-DU24.30	3	12	16	16	125	35	20	SE 24-30...
HDU 1616L/R.21-A1-B3-DU24.30	3	21	16	16	125	44	20	
HDU 2020L/R.12-A1-B3-DU24.30	3	12	20	20	125	-	-	
HDU 2020L/R.21-A1-B3-DU24.30	3	21	20	20	125	-	-	
HDU 2525L/R.12-A1-B3-DU24.30	3	12	25	25	150	-	-	SE 24-40...
HDU 2525L/R.21-A1-B3-DU24.30	3	21	25	25	150	-	-	
HDU 1616L/R.12-A1-B3-DU24.40	4	12	16	16	125	35	20	
HDU 1616L/R.21-A1-B3-DU24.40	4	21	16	16	125	44	20	
HDU 2020L/R.12-A1-B3-DU24.40	4	12	20	20	125	-	-	SE 24-50...
HDU 2020L/R.21-A1-B3-DU24.40	4	21	20	20	125	-	-	
HDU 2525L/R.12-A1-B3-DU24.40	4	12	25	25	150	-	-	
HDU 2525L/R.21-A1-B3-DU24.40	4	21	25	25	150	-	-	
HDU 2020L/R.12-A1-B3-DU24.50	5	12	20	20	125	-	-	SE 24-60...
HDU 2020L/R.21-A1-B3-DU24.50	5	21	20	20	125	-	-	
HDU 2525L/R.12-A1-B3-DU24.50	5	12	25	25	150	-	-	
HDU 2525L/R.21-A1-B3-DU24.50	5	21	25	25	150	-	-	
HDU 2020L/R.12-A1-B3-DU24.60	6	12	20	20	125	-	-	SE 24-60...
HDU 2020L/R.21-A1-B3-DU24.60	6	21	20	20	125	-	-	
HDU 2525L/R.12-A1-B3-DU24.60	6	12	25	25	150	-	-	
HDU 2525L/R.21-A1-B3-DU24.60	6	21	25	25	150	-	-	



# GROOVING - COPY TURNING INSERTS



DU24	-60	30	R	N	-AF1	A4M-E2
INSERT LENGTH	INSERT WIDTH	CORNER RADIUS	INSERT TYPE	ORIENTATION	CHIPBREAKER	GRADE
24 - 24 MM	60 - 6 MM	30 - 3 MM	- STREIGHT	N - NEUTRAL		
			R - FULL RADIUS			

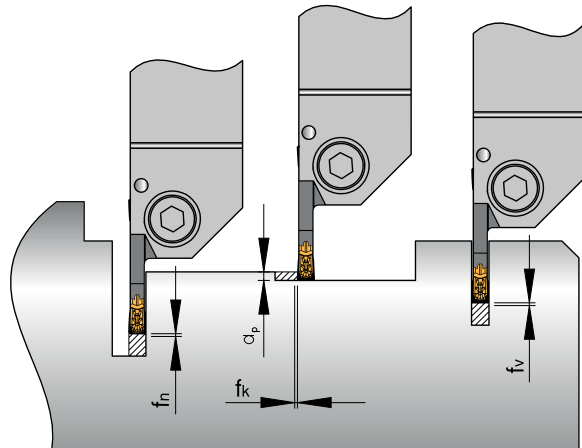
Explanation of recommended feeds and depth of cut:


$f_v$  = feed of cut in parting / grooving operation


$f_n$  = feed of cut in parting / grooving operation - enlarging groove

$f_k$  = feed of cut in copy turning operation

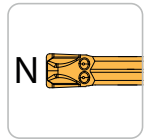
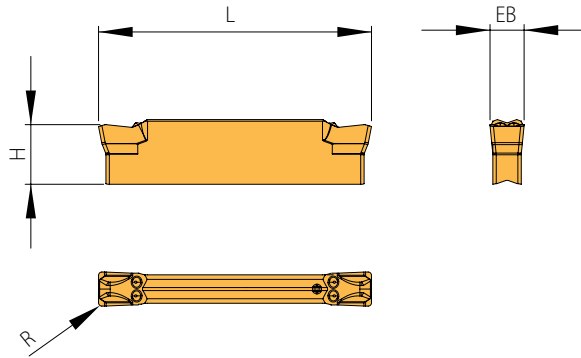
$A_p$  = depth of cut in copy turning operation



	<b>STREIGHT INSERTS</b>	- length 24 mm - width 2 to 6 mm - 4 chibreaker geometries - 5 grades	PAGE 56
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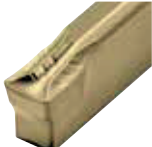

	<b>FULL RADIUS INSERTS</b>	- length 24 mm - width 2 to 6 mm - 3 chibreaker geometries - 3 grades	PAGE 57
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DU24-N

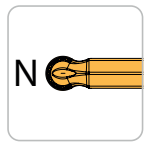
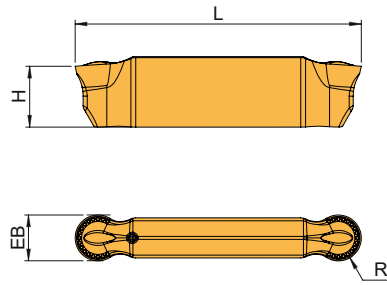


<b>MACHINING MATERIAL</b>	STEEL	P	●	●	●	○		
	STAINLESS STEEL	M		○	○	●		
	CAST IRON	K	●				○	○
	NON-FERROUS METAL	N		○			●	●
	EXOTIC ALLOY	S		○	○		○	○
	HARDENED STEEL	H						

GEOMETRIES	P	M	K	N	S	H
AP1	●	●	○	○	○	
AR2	●	●	○	○	○	
AF1	●	●	○	○	●	
ALU				●		
AB1	○	●	○	○	●	
AV1				●		
AQ1	●	○	●	○	○	




GEOMETRY	GRADE → DESIGNATION	Vc (M/MIN) CUTTING SPEED →						EB	H	L	R	Fv (MM/REV) ↓	Fk (MM/REV) ↓	Ap (MM/REV) ↓
		A3M-C2	A4M-E2	A6M-F2	B8M-S2	D3M-AL2	D4M-C2							
<b>AP1</b> 	DU24-2002N-AP1		●		●			2	5,5	24	0,2	0,04 - 0,12	0,06 - 0,16	0,20 - 0,70
	DU24-3003N-AP1		●		●			3	5,5	24	0,3	0,08 - 0,18	0,08 - 0,24	0,25 - 1,25
	DU24-4004N-AP1		●		●			4	5,5	24	0,4	0,12 - 0,24	0,12 - 0,30	0,40 - 1,80
	DU24-5004N-AP1		●		●			5	7,5	24	0,4	0,12 - 0,30	0,16 - 0,40	0,60 - 2,50
	DU24-6008N-AP1		●		●			6	7,5	24	0,8	0,15 - 0,35	0,20 - 0,45	0,80 - 3,00
<b>AR2</b> 	DU24-2002N-AR2		●		●			2	5,5	24	0,2	0,04 - 0,12	0,06 - 0,16	0,20 - 0,70
	DU24-3002N-AR2		●		●			3	5,5	24	0,2	0,08 - 0,18	0,08 - 0,24	0,25 - 1,25
	DU24-4004N-AR2		●		●			4	5,5	24	0,4	0,12 - 0,24	0,12 - 0,30	0,40 - 1,80
	DU24-5004N-AR2		●		●			5	7,5	24	0,4	0,12 - 0,30	0,16 - 0,40	0,60 - 2,50
	DU24-6006N-AR2		●		●			6	7,5	24	0,6	0,15 - 0,35	0,20 - 0,45	0,80 - 3,00
<b>AF1</b> 	DU24-2002N-AF1	●	●					2	5,5	24	0,2	0,03 - 0,12	0,06 - 0,20	0,02 - 0,70
	DU24-3003N-AF1	●	●	●				3	5,5	24	0,3	0,05 - 0,20	0,08 - 0,30	0,25 - 1,25
	DU24-4004N-AF1		●					4	5,5	24	0,4	0,10 - 0,24	0,12 - 0,40	0,40 - 1,80
	DU24-5005N-AF1		●					5	7,5	24	0,5	0,12 - 0,30	0,16 - 0,50	0,60 - 2,50
<b>ALU</b> 	DU24-2002N-ALU					●		2	5,5	24	0,2	0,02 - 0,15	0,06 - 0,20	0,20 - 1,00
	DU24-3003N-ALU					●		3	5,5	24	0,3	0,03 - 0,20	0,08 - 0,30	0,25 - 1,50

DU24-RN



MACHINING MATERIAL	STEEL	P	●	●	●	○		
	STAINLESS STEEL	M		○	○	●		
	CAST IRON	K	●				○	○
	NON-FERROUS METAL	N		○			●	●
	EXOTIC ALLOY	S		○	○		○	○
	HARDENED STEEL	H						

GEOMETRIES	P	M	K	N	S	H
AP1	●	●	○	○	○	
AR2	●	●	○	○	○	
AF1	●	●	○	○	●	
ALU				●		
AB1	○	●	○	○	●	
AV1				●		
AQ1	●	○	●	○	○	

GEOMETRY	GRADE → DESIGNATION ↓	Vc (M/MIN) CUTTING SPEED →						EB	H	L	R	Fv (MM/REV) ↓	Fk (MM/REV) ↓	Ap (MM/REV) ↓
		A3M-C2	A4M-E2	A6M-F2	B8M-S2	D3M-AL2	D4M-C2							
<b>AB1</b> 	DU24-2010RN-AB1				●			2	5,5	24	1	0,02 - 0,12	0,08 - 0,22	0,24 - 0,48
	DU24-3015RN-AB1				●			3	5,5	24	1,5	0,04 - 0,14	0,08 - 0,28	0,40 - 0,90
	DU24-4020RN-AB1				●			4	5,5	24	2	0,08 - 0,18	0,14 - 0,34	0,60 - 1,20
	DU24-5025RN-AB1				●			5	7,5	24	2,5	0,14 - 0,24	0,18 - 0,38	0,70 - 1,40
	DU24-6030RN-AB1				●			6	7,5	24	3	0,18 - 0,28	0,28 - 0,44	1,00 - 1,80
<b>AV1</b> 	DU24-2010RN-AV1						●	2	5,5	24	1	0,04 - 0,12	0,06 - 0,30	0,20 - 0,90
	DU24-3015RN-AV1						●	3	5,5	24	1,5	0,05 - 0,17	0,08 - 0,40	0,40 - 1,40
	DU24-4020RN-AV1						●	4	5,5	24	2	0,10 - 0,20	0,10 - 0,46	0,60 - 1,80
	DU24-5025RN-AV1						●	5	7,5	24	2,5	0,15 - 0,25	0,20 - 0,50	0,80 - 2,20
	DU24-6030RN-AV1						●	6	7,5	24	3	0,20 - 0,30	0,30 - 0,60	1,00 - 2,80
<b>AQ1</b> 	DU24-2010RN-AQ1		●					2	5,5	24	1	0,03 - 0,12	0,09 - 0,30	0,25 - 0,80
	DU24-3015RN-AQ1		●					3	5,5	24	1,5	0,05 - 0,15	0,09 - 0,40	0,40 - 1,30
	DU24-4020RN-AQ1		●					4	5,5	24	2	0,10 - 0,20	0,15 - 0,45	0,60 - 1,60
	DU24-5025RN-AQ1		●					5	7,5	24	2,5	0,15 - 0,25	0,20 - 0,50	0,70 - 2,00
	DU24-6030RN-AQ1		●					6	7,5	24	3	0,20 - 0,30	0,30 - 0,60	1,00 - 2,30