



System DED



Broaching



Mikromill



Minimill



Circular Milling



Disc Milling



Ultramini



Minicut

Click the button below to view the catalog for the tools shown above

premium carbide cutting tools



www.everede.net

 <p>Ultramini</p>	<p>grooving, boring and profiling starting at \varnothing 0.2 mm</p> <p>5</p>
 <p>Minicut</p>	<p>grooving, boring and profiling starting at \varnothing 7.8 mm</p> <p>99</p>
<p>Stocked in U.S.A.</p>	
 <p>System DED</p>	<p>grooving, parting and turning</p>
 <p>Broaching</p>	<p>broaching keyways on CNC turning & milling machines</p>
 <p>Mikromill</p>	<p>groove milling by circular interpolation starting at \varnothing 1.25 mm</p>
 <p>Minimill</p>	<p>groove milling by circular interpolation with three and six cutting edges starting at \varnothing 10 mm</p>
 <p>Circular Milling</p>	<p>groove milling by circular interpolation starting at \varnothing 34 mm</p>
 <p>Disc-Milling</p>	<p>groove milling and slotting cutter starting at width 3 mm</p>



Ultramini



Grooving, boring and profiling
starting at \varnothing 0.2 mm



ULTRAMINI

Grooving, boring and profiling starting at Ø 0.2 mm

Summary



Machining example Ultramini ... 15



General instructions ... 16

Toolholders



Type 645 ... 18



Type 645.G ... 19



Type 676 ... 20



Type 676.G ... 21



Type 681 ... 22

new

Summary

ULTRAMINI

Grooving, boring and profiling
starting at \varnothing 0.2 mm



Toolholders



Type 687 ... 24



Type 660, 670, 680 ... 25



Type K 645 / K 676 ... 26



Type UM ... 28



Type UHCM ... 29



Type UM.18 / UM.28 ... 30



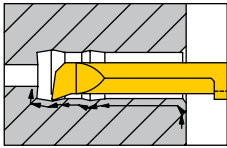
ULTRAMINI

Grooving, boring and profiling starting at \varnothing 0.2 mm

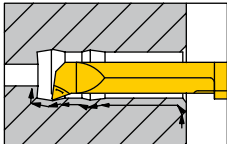
Summary

new

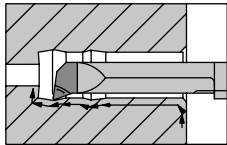
INSERTS - Profiling and copying



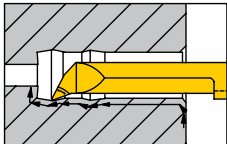
Type 050 ... 32
profiling and copying
bore \varnothing from 0.2 mm



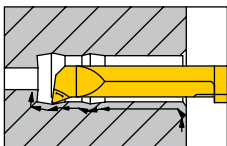
Type 050 ... 33
profiling and copying
bore \varnothing from 2.0 mm



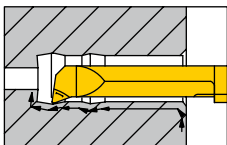
Typ Hardline 050 ... 35
ab \varnothing 2.0 mm



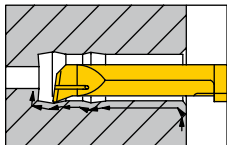
Type 050.20 ... 37
profiling and copying
with frontside angle 20°
bore \varnothing from 2.0 mm



Type 053 ... 38
profiling and copying
with corner radius 0.03 mm
bore \varnothing from 2.8 mm



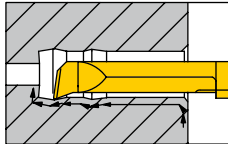
Type 055 ... 39
profiling and copying
with corner radius 0.05 mm
bore \varnothing from 2.0 mm



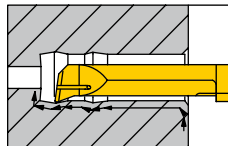
Type 050 B ... 41
profiling and copying with
internal coolant channel
bore \varnothing from 6.0 mm



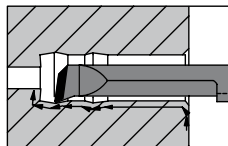
INSERTS - Profiling and copying



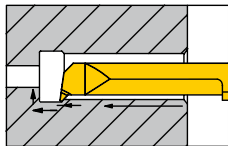
Type 050 C . . . 42
 profiling and copying
 with chipbreaker for
 better chipcontrol
 bore Ø from 2.0 mm



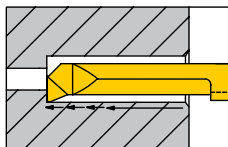
Type 050 CB . . . 44
 profiling and copying
 with internal coolant over middle bore
 and chipbreaker bore Ø from 6.0 mm



Type 050 CBN . . . 45
 profiling and copying
 bore Ø from 2.8 mm

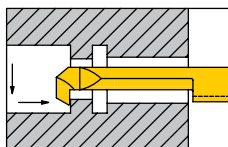


Type 047 . . . 46
 boring and profiling
 with 47° geometry
 bore Ø from 4.0 mm



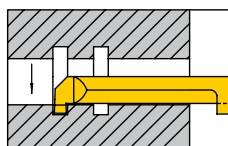
Type 090 . . . 47
 boring and profiling
 with 90° geometry
 bore Ø from 2.8 mm

INSERTS - Backboring



Type 080 . . . 48
 backboring
 bore Ø from 3.0 mm

INSERTS - Grooving internal

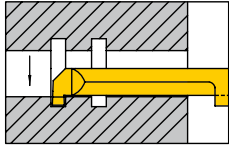
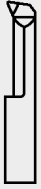


Type 002 . . . 49
 grooving
 bore Ø from 2.0 mm
 depth of groove
 up to 0.4 mm

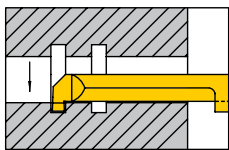
ULTRAMINI

Grooving, boring and profiling starting at $\varnothing 0.2$ mm

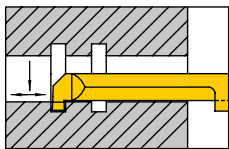
Summary



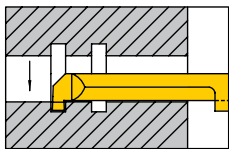
Type 003 ... 50
grooving
bore \varnothing from 3.0 mm
depth of groove up to 0.6 mm



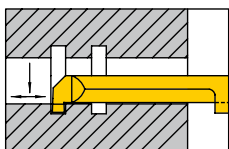
Type 004 ... 51
grooving internal
bore \varnothing from 4.0 mm
depth of groove up to 0.8 mm



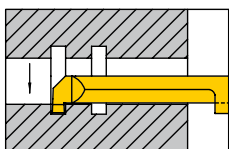
Type 004 M ... 52
grooving internal
with corner radius
bore \varnothing from 4.0 mm
depth of groove up to 0.8 mm



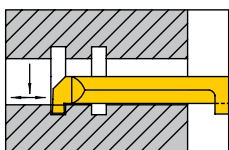
Type 005 ... 53
grooving internal
bore \varnothing from 5.0 mm
depth of groove up to 1.0 mm
overhang length (L1) up to 7xD



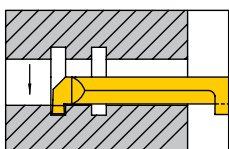
Type 005 M ... 55
grooving internal
with corner radius
bore \varnothing from 5.0 mm
depth of groove up to 1.0 mm



Type 006 ... 57
grooving internal
bore \varnothing from 6.0 mm
depth of groove up to 1.8 mm.
overhang length (L1) up to 7xD



Type 006 M ... 59
grooving internal
with corner radius
bore \varnothing from 6.0 mm
depth of groove up to 1.8 mm

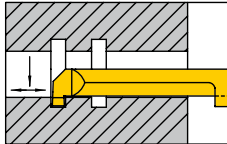


Type 007 ... 60
grooving internal
bore \varnothing from 6.8 mm
depth of groove up to 2.5 mm.
overhang length (L1) up to 7xD

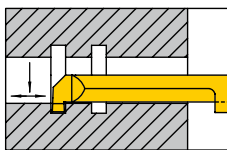
ULTRAMINI

Grooving, boring and profiling
starting at \varnothing 0.2 mm

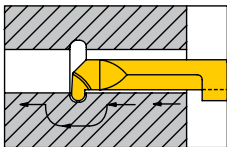
Summary



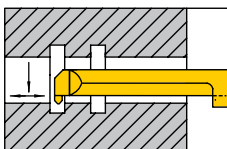
Type 007 M . . . 62
grooving internal
with corner radius
bore \varnothing from 6.8 mm
depth of groove up to
2.5 mm



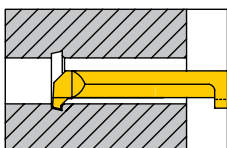
Type 008 M . . . 63
grooving internal
with corner radius
bore \varnothing from 7.8 mm
depth of groove up to 3.0 mm



Type full radius . . . 64
grooving internal
copying
bore \varnothing from 4.0 mm
full radius 0.5-1.0 mm

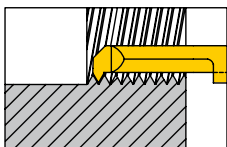


Type 060 . . . 66
boring/profiling and
chamfering
bore \varnothing from 5.0 mm

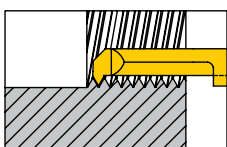


Type 070 . . . 67
pregrooving and
chamfering
bore \varnothing from 4.0 mm

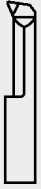
INSERTS - Threading internal



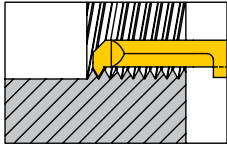
Type metric ISO-standard thread . . . 68
partial profile internal 60°
bore \varnothing from 2.4 mm
pitch P = 0.5-1.5 mm



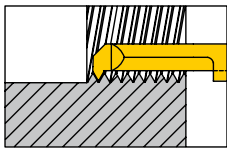
Type metric ISO-fine thread . . . 69
partial profile internal 60°
bore \varnothing from 3.2 mm
pitch P = 0.5-1.0 mm



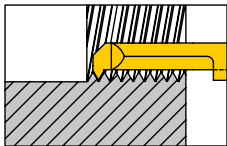
Summary



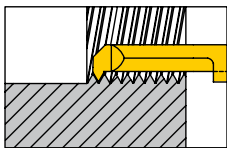
Type ... 70
metric ISO-standard thread
 full profile internal 60°
 bore Ø from 4.8 mm
 pitch P = 0.8-1.5 mm



Type ... 71
metric ISO-fine thread
 full profile internal 60°
 bore Ø from 4.0 mm
 pitch P = 0.5-1.0 mm

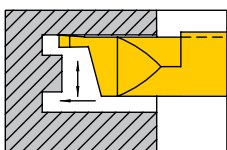


Type ... 72
metric ISO-whitworth thread
 partial profile internal 55°
 bore Ø from 4.8 mm

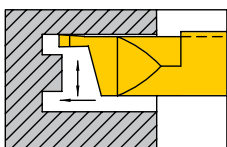


Type ... 73
trapezoidal thread
 partial profile internal 30°
 bore Ø from 7.0 mm
 pitch P = 2.0-3.0 mm

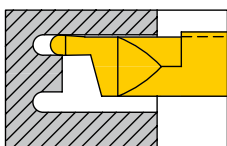
INSERTS - Face grooving



Type 510 M ... 74
 face grooving internal
 with corner radius
 bore Ø from 5.0 mm
 depth of groove up to
 4.0 mm



Type 610 ... 75
 face grooving internal
 bore Ø from 6.0 mm

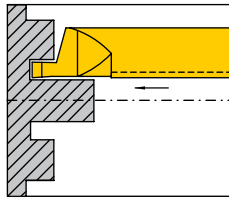


Type 610 M ... 76
 face grooving internal
 with corner radius
 bore Ø from 6.0 mm

Type 610 ... 77
 face grooving internal
 full radius
 bore Ø from 6.0 mm

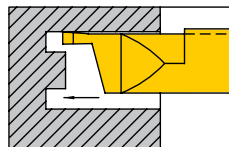


Summary



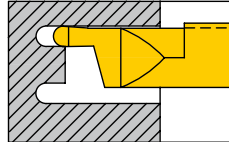
Type 620 ... 78
face grooving internal
in pivots
bore Ø from 6.0 mm

Type 620 M ... 79
face grooving internal
in pivots
with corner radius
bore Ø from 6.0 mm

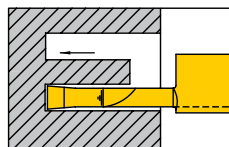


Type 010 ... 80
face grooving internal
bore Ø from 8.0 mm

Type 010 M ... 82
face grooving internal
with corner radius
bore Ø from 8.0 mm

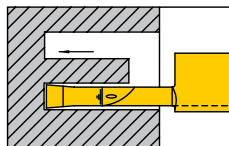


Type 010 ... 84
face grooving internal
full radius
bore Ø from 6.0 mm

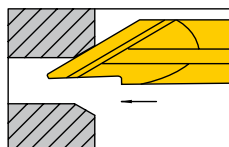


Type 015 ... 85
face grooving
bore Ø from 8.0 mm

Type 015 M ... 86
face grooving
with corner radius
bore Ø from 8.0 mm



Type 016/020 ... 87
face grooving
with double internal
cooling channel
bore Ø from 16.0 mm



Type 520 ... 89
chamfering internal bore
bore Ø from 1.0 mm



ULTRAMINI

Grooving, boring and profiling
starting at Ø 0.2 mm

Summary

SETS



Set 1 ... 90
boring/profiling, copying
and grooving right



Set 2 ... 90
grooving right



Set 3 ... 91
boring/profiling,
copying right



Set 6 ... 91
right face grooving



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ULTRAMINI

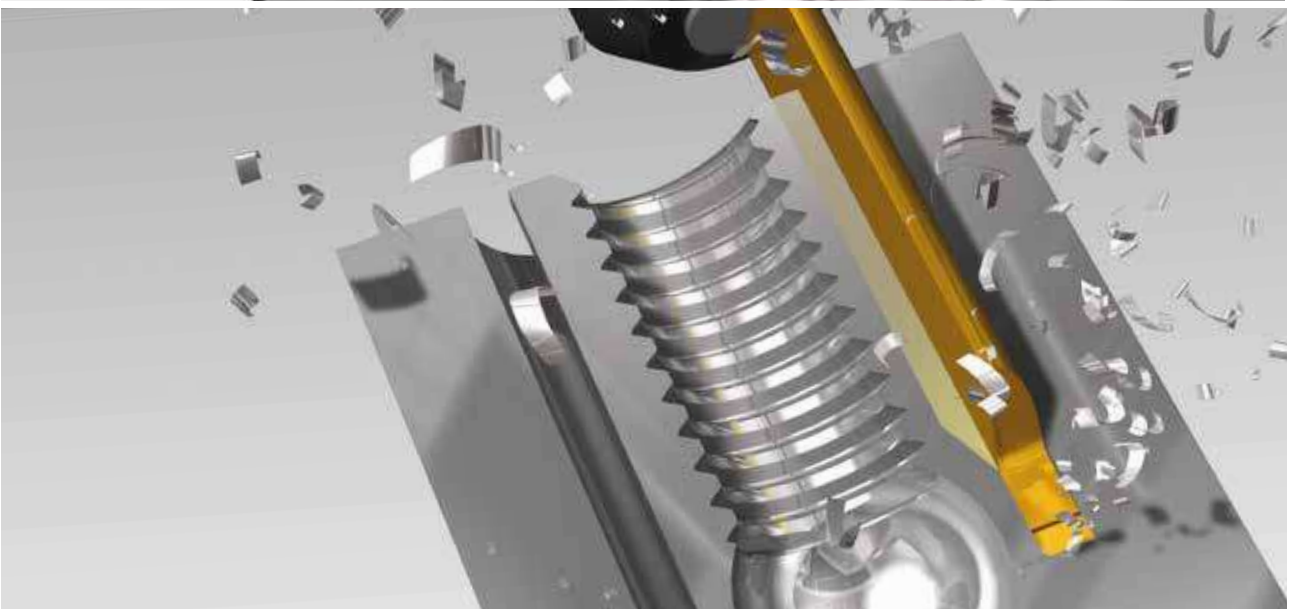
Grooving, boring and profiling
starting at \varnothing 0.2 mm

Machining example



Only 2 toolholders for over 1000 different inserts.
The superior system in the world of minature machining.

 Dümmel®





ULTRAMINI

Grooving, boring and profiling starting at \varnothing 0.2 mm

General instruction

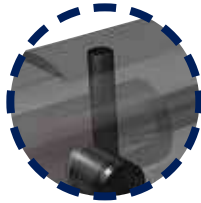


Over 1000 different inserts are available on stock

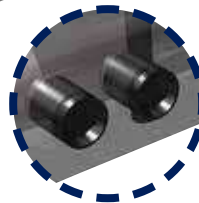
Standard Holders - Repeatable to .02 mm
G Holders - Repeatable to .01 mm ***BEST IN CLASS***

TOOLHOLDERS

Coolant Through



Stop pin for high repeating accuracy (+/- .02mm)



Double clamp holder for high clamping security

- Quick and easy changing of inserts
- Maximum repeating accuracy of the length and diameter setting
- Easy and correct compliance with peak heights



Type 645
for inserts \varnothing 4 mm + \varnothing 5 mm

Type 676
for inserts \varnothing 6 mm + \varnothing 7 mm

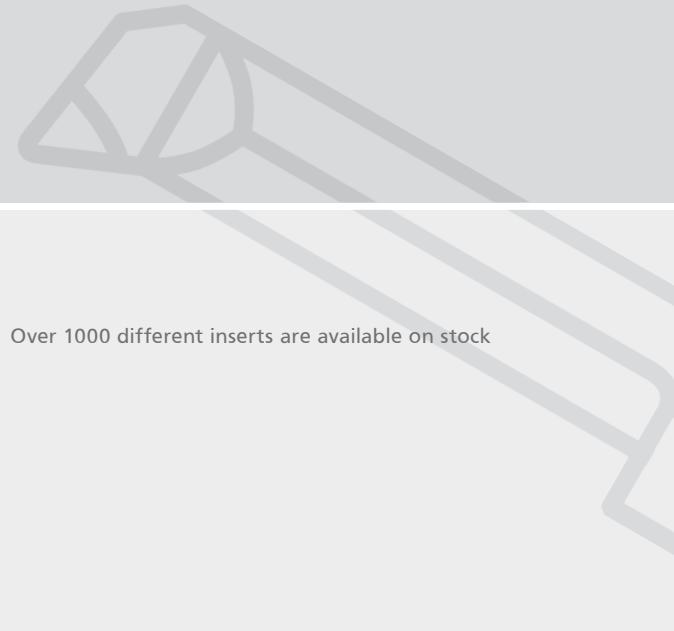
Type 681
for inserts \varnothing 20.0 mm + \varnothing 7.8 mm

ULTRAMINI

Grooving, boring and profiling
starting at \varnothing 0.2 mm



General instruction



Over 1000 different inserts are available on stock



- Quick and easy changing of inserts
- Maximum repeating accuracy of the length and diameter setting
- Easy and correct compliance with peak heights



Type 687

for inserts \varnothing 8 mm + \varnothing 7 mm



Type 660, 670, 680

for inserts \varnothing 6 mm, \varnothing 7 mm
+ \varnothing 8 mm



Type K

special for insert
type 520 and type B



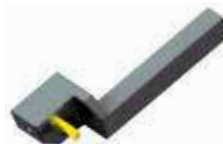
Type UM

from \varnothing 10.0 mm



Type UHCM

from \varnothing 12.0 mm



Type UM.18 / UM.28

from \varnothing 10.0 mm



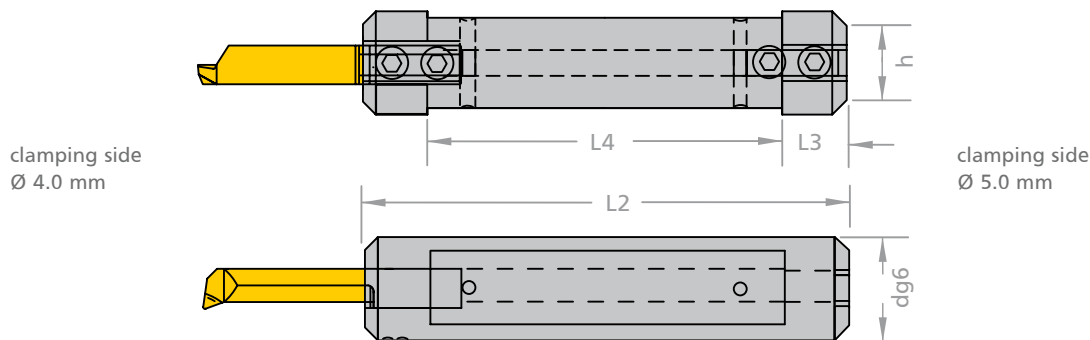
ULTRAMINI

Type 645

Grooving, boring and profiling starting at Ø 0.2 mm

Toolholder

Starting at Ø 12.0 mm for insert D min. Ø 0.2 mm - 5.0 mm



Toolholder for right and left inserts usable
 All inserts with shaft diameter 4-7 mm can be clamped with only two toolholders
 Dimensions in mm



part number	Ø d g6	L2	L3	L4	h	for D min.	U.S.A. Stock				
							●	○			
							spare parts Ø toolholder	screw	key		
645.0012-D	12	75	10	55	10.3	0.2 - 5	○		12	111.640	111.645
645.0016-D	16	75	10	55	14	0.2 - 5	○		16	111.645	111.645
645.0018-D	18	90	10	70	16	0.2 - 5	○		18	111.618	111.645
INCH 645.001905-D	19.05	90	10	70	17.2	0.2 - 5	○		1905	110.61905	111.645
645.0020-D	20	90	10	70	18	0.2 - 5	○		20	111.650	111.645
645.0022-D	22	90	10	70	20	0.2 - 5	○		22	111.622	111.645
645.0025-D	25	95	10	75	23	0.2 - 5	○		25	111.625	111.645
INCH 645.00254-D	25.4	95	10	75	23.4	0.2 - 5	○		254	111.6254	111.645
645.0028-D	28	95	10	75	26	0.2 - 5	○		28	111.628	111.645

U.S.A. Stock

- = In Stock
- = Express Delivery

Type 645.G

ULTRAMINI

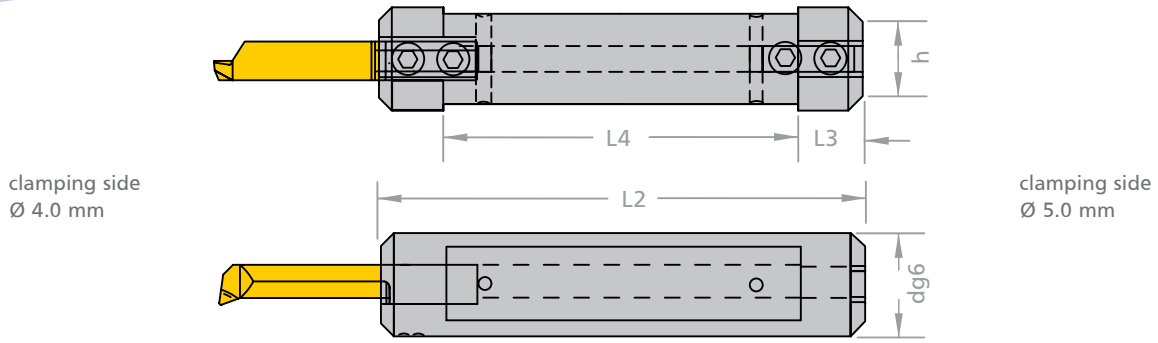
Toolholder improved version with modified clamping screw

Starting at Ø 12.0 mm for insert
D min. Ø 0.2 mm - 5.0 mm

Grooving, boring and profiling starting at Ø 0.2 mm



G Holders
BEST IN CLASS
.01 mm Repeatability



Toolholder for right and left inserts usable
All inserts with shaft diameter 4-7 mm can be clamped with only two toolholders
Dimensions in mm



part number	Ø d g6	L2	L3	L4	h	for D min.	U.S.A. Stock	spare parts Ø toolholder	screw	key
645.G012-D	12	75	10	55	10.3	0.2 - 5	●	G012	G012	111.645
645.G016-D	16	75	10	55	14	0.2 - 5	●	G016	G016	111.645
645.G018-D	18	90	10	70	16	0.2 - 5	○	G018	G018	111.645
645.G01905-D	19.05	90	10	70	17.2	0.2 - 5	●	G020	G020	111.645
645.G020-D	20	90	10	70	18	0.2 - 5	●	G020	G020	111.645
645.G022-D	22	90	10	70	20	0.2 - 5	○	G022	G022	111.645
645.G025-D	25	95	10	75	23	0.2 - 5	○	G025	G025	111.645
645.G0254-D	25.4	95	10	75	23.4	0.2 - 5	●	G0254	G0254	111.645
645.G028-D	28	95	10	75	26	0.2 - 5	○	G028	G028	111.645

INCH

INCH

U.S.A. Stock

- = In Stock
- = Express Delivery



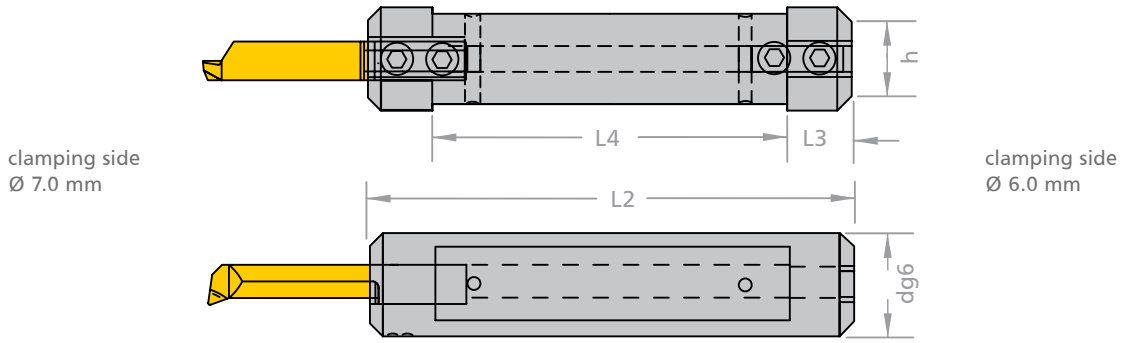
ULTRAMINI

Type 676

Grooving, boring and profiling starting at Ø 0.2 mm

Toolholder

Starting at Ø 16.0 mm for insert D min. Ø 6.0 mm



Toolholder for right and left inserts usable

Dimensions in mm



part number	Ø d g6	L2	L3	L4	h	for D min.	U.S.A. Stock			
							spare parts Ø toolholder	screw	key	
676.0016-D	16	75	10	55	14	6.0	●	16	110.645	111.645
676.0018-D	18	90	10	70	16	6.0	○	18	110.618	111.645
INCH 676.001905-D	19.05	90	10	70	17.2	6.0	○	1905	110.61905	111.645
676.0020-D	20	90	10	70	18	6.0	○	20	110.650	111.645
676.0022-D	22	90	10	70	20	6.0	○	22	110.622	111.645
676.0025-D	25	95	10	75	23	6.0	○	25	110.625	111.645
INCH 676.00254-D	25.4	95	10	75	23.4	6.0	○	254	110.6254	111.645
676.0028-D	28	95	10	75	26	6.0	○	28	110.628	111.645

U.S.A. Stock

- = In Stock
- = Express Delivery

Type 676.G

ULTRAMINI

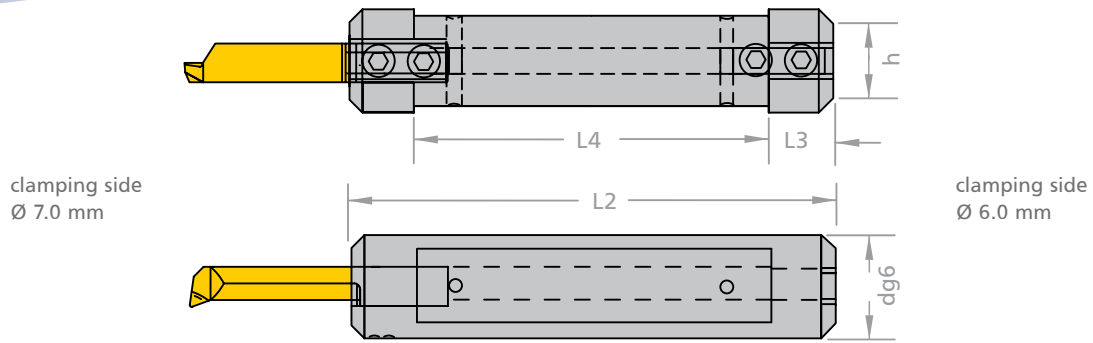
Improved version with modified clamping screw

Starting at Ø 16.0 mm for insert D min. Ø 6.0 mm

Grooving, boring and profiling starting at Ø 0.2 mm



G Holders
*****BEST IN CLASS*****
.01 mm Repeatability



Toolholder for right and left inserts usable
 Dimensions in mm



part number	Ø d g6	L2	L3	L4	h	for D min.	U.S.A. Stock			
							●	○		
							spare parts Ø toolholder	screw	key	
676.G016-D	16	75	10	55	14	6.0	●	G016	G016	111.645
676.G018-D	18	90	10	70	16	6.0	○	G018	G018	111.645
INCH 676.G01905-D	19.05	90	10	70	17.2	6.0	●	G020	G020	111.645
676.G020-D	20	90	10	70	18	6.0	●	G020	G020	111.645
676.G022-D	22	90	10	70	20	6.0	○	G022	G022	111.645
676.G025-D	25	95	10	75	23	6.0	○	G025	G025	111.645
676.G0254-D	25.4	95	10	75	23.4	6.0	●	G0254	G0254	111.645
INCH 676.G028-D	28	95	10	75	26	6.0	○	G028	G028	111.645

U.S.A. Stock

- = In Stock
- = Express Delivery



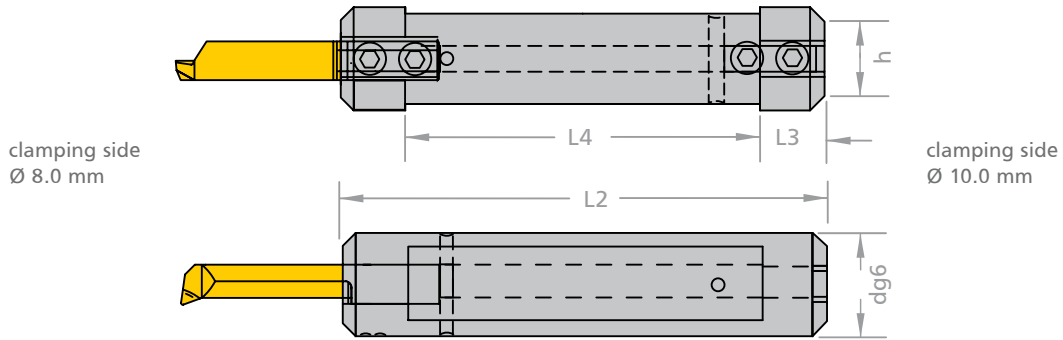
ULTRAMINI

Type 681

Grooving, boring and profiling starting at Ø 0.2 mm

Toolholder

Starting at Ø 20.0 mm for insert starting at D min. Ø 7.8 mm



Toolholder for right and left inserts usable
Dimensions in mm

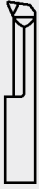


part number	Ø d g6	L2	L3	L4	h	U.S.A. Stock		spare parts Ø toolholder	screw	key
						for D min.				
new 681.0020-D	20.0	100.0	10.0	80.0	18.0	7.8	○	20.0	110.681-20	111.681

U.S.A. Stock

- = In Stock
- = Express Delivery





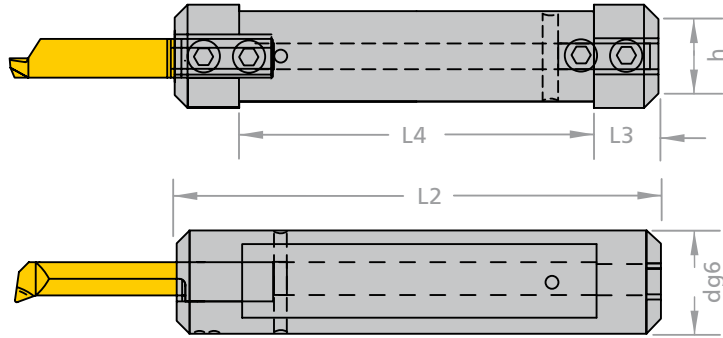
ULTRAMINI

Type 687

Grooving, boring and profiling starting at Ø 0.2 mm

Toolholder

Starting at Ø 16.0 mm for insert starting at D min. Ø 6.8 mm



clamping side Ø 8.0 mm

clamping side Ø 7.0 mm

Toolholder for right and left inserts usable

Dimensions in mm



part number	Ø d g6	L2	L3	L4	h	for D min.	U.S.A. Stock			
							●	○		
							spare parts Ø toolholder	screw	key	
687.0016-D	16	75	10	55	14	6.8	●	16	110.687-16	111.687
687.0020-D	20	90	10	70	18	6.8	●	20	110.687-20	111.687

U.S.A. Stock

- = In Stock
- = Express Delivery

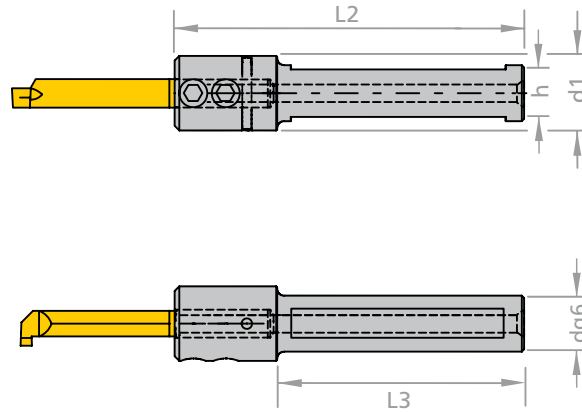
Type 660, 670, 680

ULTRAMINI

Toolholder

Ø 12.0 mm
for inserts D min. Ø 6.0 mm,
Ø 7.0 mm, Ø 8.0 mm

Grooving, boring and profiling
starting at Ø 0.2 mm



Toolholder for right and left
inserts usable
Dimensions in mm



part number	Ø d g6	d1	L2	L3	h	for D min.	U.S.A. Stock			spare parts Ø toolholder	screw	key
							●	○				
660.0012	12	16	75	53	10.2	6.0	○			012	G016	111.645
670.0012	12	16	75	53	10.2	6.8	○			012	G016	111.645
680.0012	12	16	75	53	10.2	7.8	○			012	G016	111.645

U.S.A. Stock

- = In Stock
- = Express Delivery



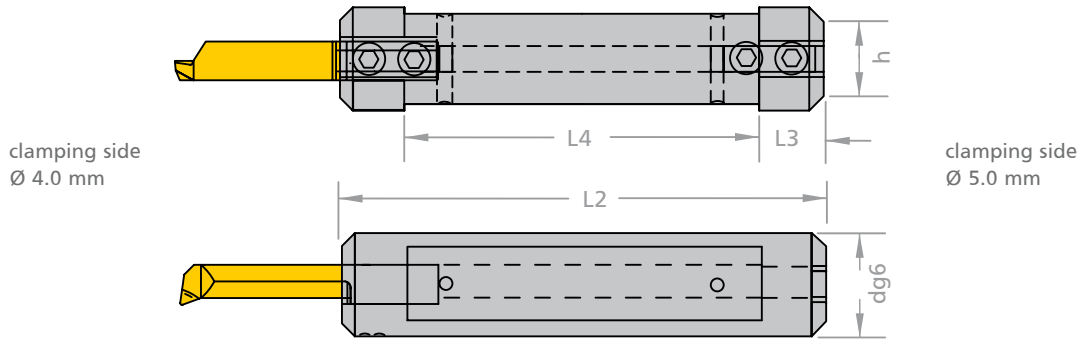
ULTRAMINI

Type K 645

Grooving, boring and profiling starting at $\varnothing 0.2$ mm

Toolholder perfect for type 520 and high pressure applications with central cooling bore

$\varnothing 12.0$ mm / 16.0 mm / 20.0 mm for insert
D min. $\varnothing 0.2$ mm - 5.0 mm



Toolholder for right and left inserts usable

Dimensions in mm



part number	$\varnothing d$ g6	L2	L3	L4	h	for D min.	U.S.A. Stock				
							●	○			
645.K012-D	12	75	10	55	10.3	0.2 - 5	○		12	110.640	111.645
645.K016-D	16	75	10	55	14	0.2 - 5	○		16	110.645	111.645
645.K020-D	20	90	10	70	18	0.2 - 5	○		20	110.650	111.645

U.S.A. Stock

- = In Stock
- = Express Delivery

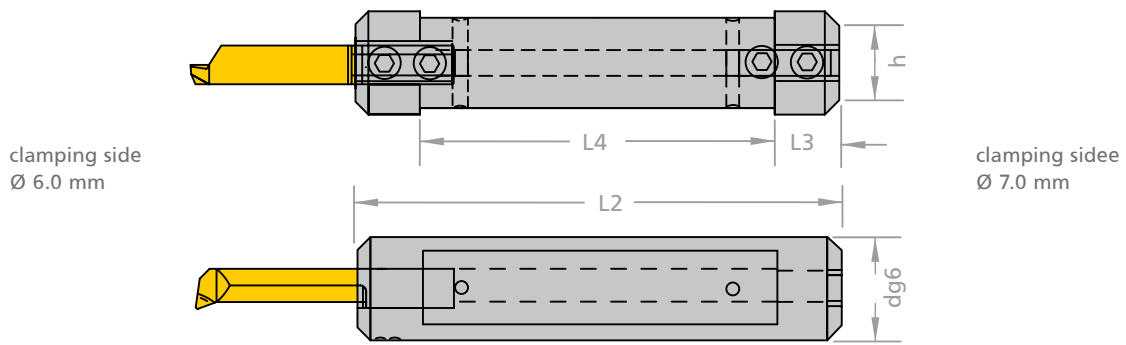
Type K 676

ULTRAMINI

Toolholder perfect for type 520 and high pressure applications with central cooling bore

Ø 16.0 mm / 20.0 mm for insert
D min. Ø 6.0 mm - 6.8 mm

Grooving, boring and profiling starting at Ø 0.2 mm



Toolholder for right and left inserts usable

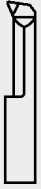
Dimensions in mm



part number	Ø d g6	L2	L3	L4	h	for D min.	U.S.A. Stock		spare parts Ø toolholder	screw	key
							●	○			
676.K016-D	16	75	10	55	14	6.0 + 6.8	●		16	110.645	111.645
676.K020-D	20	90	10	70	18	6.0 + 6.8	○		20	110.650	111.645

U.S.A. Stock

- = In Stock
- = Express Delivery



ULTRAMINI

Type UM

Grooving, boring and profiling starting at \varnothing 0.2 mm

Toolholder

Starting at 10.0 mm for insert
D min. \varnothing 0.2 mm - 7.0 mm



Toolholder for right and left inserts

Dimensions in mm



part number	U.S.A. Stock						spare parts	
	\varnothing d	H	B	H1	L	L1		
UM.1010.4	4	10	10	20	100	75	○	UM12
UM.1010.5	5	10	10	20	100	75	○	UM12
UM.1212.4	4	12	12	22	100	75	○	UM12
UM.1212.5	5	12	12	22	100	75	○	UM12
UM.1212.6	6	12	12	22	100	75	○	UM16
UM.1616.4	4	16	16	25	125	100	○	UM12
UM.1616.5	5	16	16	25	125	100	○	UM12
UM.1616.6	6	16	16	25	125	100	○	UM16
UM.1616.7	7	16	16	25	125	100	○	UM16

U.S.A. Stock

- = In Stock
- = Express Delivery

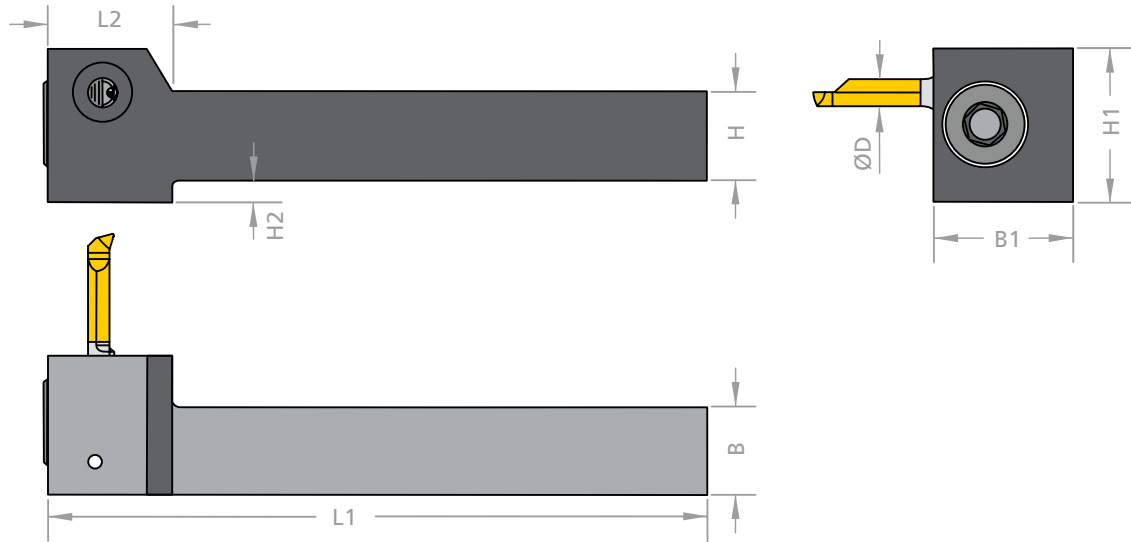
Type UHCM

ULTRAMINI

Toolholder

Starting at 12.0 mm
for insert
D min. Ø 0.2 mm - 7.0 mm

Grooving, boring and profiling
starting at Ø 0.2 mm



Toolholder for right and left inserts
Left hand version shown
Dimensions in mm



part number	U.S.A. Stock									spare parts
	Ø D	H	B	L1	L2	B1	H1	H2		
R/L.UHCM.1212.4	4	12	12	90	17	20	18	-	○	UM12
R/L.UHCM.1212.5	5	12	12	90	17	20	18	-	○	UM12
R/L.UHCM.1212.6	6	12	12	90	17	20	21	3	○	UM16
R/L.UHCM.1212.7	7	12	12	90	17	20	21	3	○	UM16
R/L.UHCM.1616.4	4	16	16	130	17	20	22	-	○	UM12
R/L.UHCM.1616.5	5	16	16	130	17	20	22	-	○	UM12
R/L.UHCM.1616.6	6	16	16	130	17	20	22	-	○	UM16
R/L.UHCM.1616.7	7	16	16	130	17	20	22	-	○	UM16

U.S.A. Stock

- = In Stock
- = Express Delivery

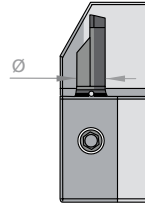
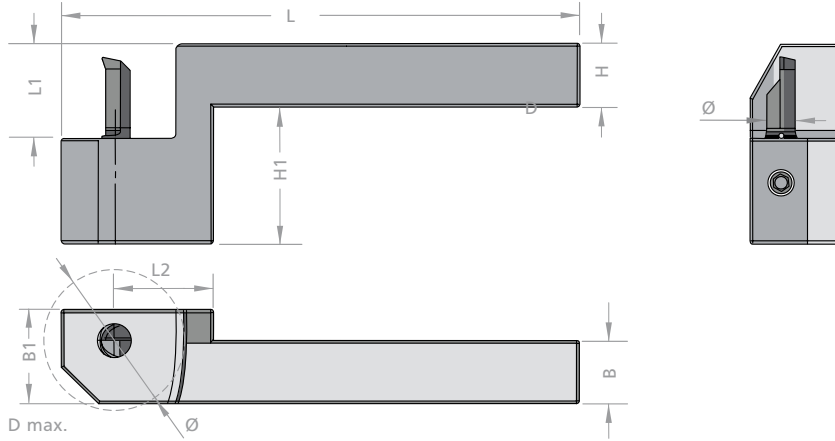
ULTRAMINI

Type UM.18 / UM.28

Grooving, boring and profiling starting at Ø 0.2 mm

Toolholder

starting at 10.0 mm for insert
D min. Ø 0.2 mm - 7.0 mm



Toolholder for right and left inserts

Dimensions in mm



part number	Ø D	H	B	L	L1	L2	B1	H1	Ø D max.	U.S.A. Stock	spare parts	
											screw	key
R/L.UM.18.1010.4	4	10	10	99	18	19	16	38	26	○		
R/L.UM.18.1010.5	5	10	10	99	18	19	16	38	26	○	110.650	111.645
R/L.UM.18.1010.6	6	10	10	99	18	19	16	38	26	○		
R/L.UM.18.1010.7	7	10	10	99	18	19	16	38	26	○		
R/L.UM.28.1010.4	4	10	10	99	28	19	16	48	26	○		
R/L.UM.28.1010.5	5	10	10	99	28	19	16	48	26	○	110.650	111.645
R/L.UM.28.1010.6	6	10	10	99	28	19	16	48	26	○		
R/L.UM.28.1010.7	7	10	10	99	28	19	16	48	26	○		
R/L.UM.18.1212.4	4	12	12	99	18	19	18	38	26	○		
R/L.UM.18.1212.5	5	12	12	99	18	19	18	38	26	○	110.650	111.645
R/L.UM.18.1212.6	6	12	12	99	18	19	18	38	26	○		
R/L.UM.18.1212.7	7	12	12	99	18	19	18	38	26	○		
R/L.UM.28.1212.4	4	12	12	99	28	19	18	48	26	○		
R/L.UM.28.1212.5	5	12	12	99	28	19	18	48	26	○	110.650	111.645
R/L.UM.28.1212.6	6	12	12	99	28	19	18	48	26	○		
R/L.UM.28.1212.7	7	12	12	99	28	19	18	48	26	○		

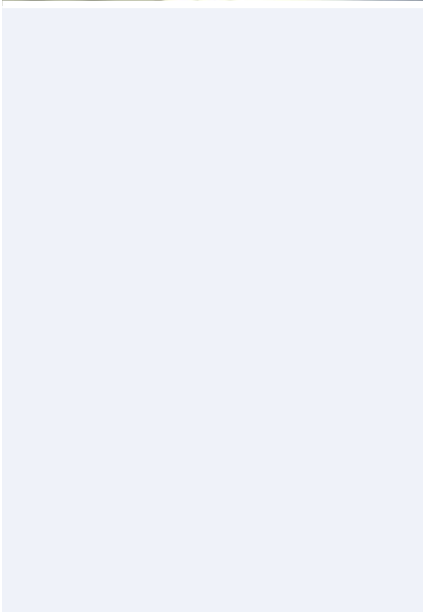
U.S.A. Stock

- = In Stock
- = Express Delivery

Impressions

ULTRAMINI

Grooving, boring and profiling
starting at \varnothing 0.2 mm



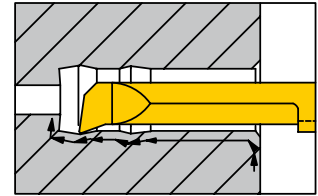
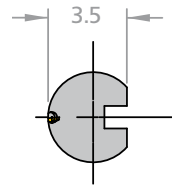
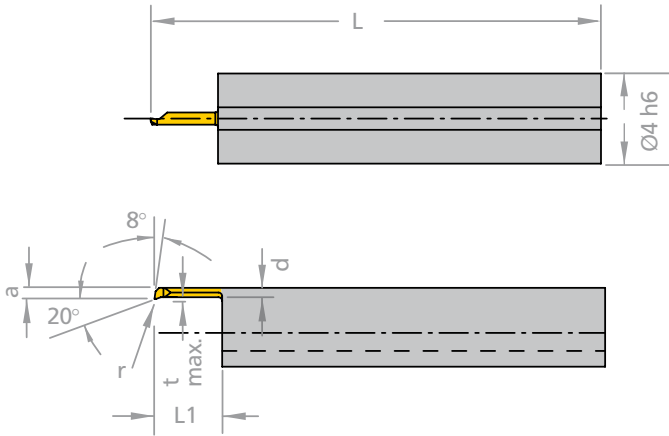
ULTRAMINI

Type 050

Grooving, boring and profiling starting at Ø 0.2 mm

Profiling and copying

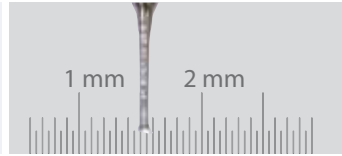
Bore Ø from 0.2 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	r	d	a	L	L1	t max.	D min.	U.S.A. Stock			suitable toolholder type
								K10F	CN45F	AL41F	
R/L 050.02-1	0.02	0.12	0.15	20	1.0	0.02	0.2	—	—	—	645.xxx / xxx.4
R/L 050.05-2	0.04	0.32	0.4	20	2.0	0.06	0.5	○	◐	○	
R/L 050.06-2	0.04	0.4	0.5	20	2.0	0.08	0.6	○	○	—	
R/L 050.06-3	0.04	0.4	0.5	20	3.0	0.08	0.6	○	◐	—	
R/L 050.08-4	0.04	0.6	0.7	20	4.0	0.08	0.8	○	○	○	
R/L 050.1-5	0.05	0.75	0.9	20	4.5	0.1	1.0	◐	◐	◐	
R/L 050.1-7	0.05	0.75	0.9	22	6.5	0.1	1.0	○	◐	○	
R/L 050.1-8	0.05	0.75	0.9	22	8.0	0.1	1.0	○	—	○	
R/L 050.15-5	0.05	1.15	1.3	19	5.0	0.1	1.5	◐	●	◐	
R/L 050.15-10	0.05	1.15	1.3	24	10.0	0.1	1.5	◐	●	◐	
R/L 050.15-12	0.05	1.15	1.3	26	12.0	0.1	1.5	○	○	○	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: right hand version
CN45F: R050.02-1/CN45F

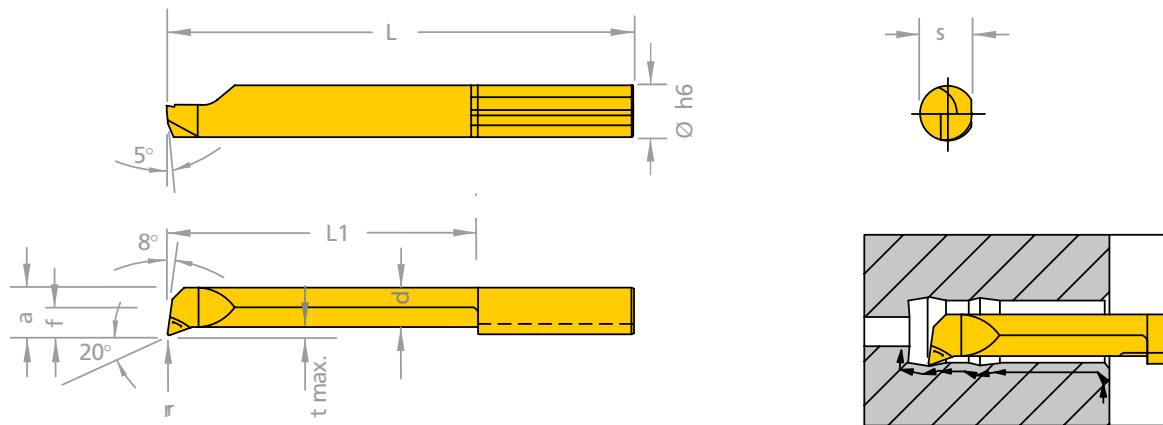
Type 050

ULTRAMINI

Profiling and copying

Bore \varnothing from 2.0 mm
overhang length (L1) up to 8x D

Grooving, boring and profiling
starting at \varnothing 0.2 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



part number											U.S.A. Stock				suitable toolholder type (page 18-28)
	r	s	f	d	a	L	L1	t max.	D min.	\varnothing h6	K10F	CN45F	AL41F	XC2A-NH	
R/L 050.2-5	0.05	3.5	-	1.5	1.7	19	5	0.1	2.0	4.0	○	●	◐	○	
R/L 050.2-10	0.05	3.5	-	1.5	1.7	24	10	0.1	2.0	4.0	○	●	◐	○	
R/L 050.2-15	0.05	3.5	-	1.5	1.7	29	15	0.1	2.0	4.0	○	●	◐	◑	
R/L 050.25-5	0.05	3.5	0.2	2.0	2.2	19	5	0.15	2.5	4.0	○	○	○	—	
R/L 050.25-10	0.05	3.5	0.2	2.0	2.2	24	10	0.15	2.5	4.0	○	○	○	—	
R/L 050.25-16	0.05	3.5	0.2	2.0	2.2	30	16	0.15	2.5	4.0	○	○	○	—	
R/L 050.3-10	0.1	3.5	0.6	2.3	2.6	24	10	0.2	2.8	4.0	◑	●	◐	◑	
R/L 050.3-16	0.1	3.5	0.6	2.3	2.6	30	16	0.2	2.8	4.0	○	●	◐	◑	
R/L 050.3-20	0.1	3.5	0.6	2.3	2.6	34	20	0.2	2.8	4.0	○	●	◐	◑	
R/L 050.35-10	0.1	3.5	1.1	2.8	3.1	24	10	0.25	3.5	4.0	○	○	○	—	
R/L 050.35-16	0.1	3.5	1.1	2.8	3.1	30	16	0.25	3.5	4.0	○	○	○	—	
R/L 050.35-20	0.1	3.5	1.1	2.8	3.1	34	20	0.25	3.5	4.0	○	○	○	—	
R/L 050.35-24	0.1	3.5	1.1	2.8	3.1	38	24	0.25	3.5	4.0	—	○	○	—	

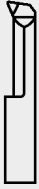
645.xxx / xxx.4

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: right hand version and grade
CN45F: R050.2-5/CN45F



ULTRAMINI

Type 050

Grooving, boring and profiling starting at Ø 0.2 mm

Profiling and copying

Bore Ø from 2.0 mm overhang length (L1) up to 8x D



part number	r	s	f	d	a	L	L1	t max.	D min.	Ø h6	U.S.A. Stock				suitable toolholder type
											K10F	CN45F	AL41F	XC2A-NH	
R/L 050.4-10	0.1	3.5	1.5	3.0	3.5	24	10	0.3	4.0	4.0	○	●	◐	◑	645.xxx / xxx.4
R/L 050.4-16	0.1	3.5	1.5	3.0	3.5	30	16	0.3	4.0	4.0	○	●	◐	◑	
R/L 050.4-20	0.1	3.5	1.5	3.0	3.5	34	20	0.3	4.0	4.0	○	●	◐	◑	
R/L 050.4-24	0.1	3.5	1.5	3.0	3.5	38	24	0.3	4.0	4.0	—	◐	◑	○	
R/L 050.4-28	0.1	3.5	1.5	3.0	3.5	42	28	0.3	4.0	4.0	○	●	◐	○	
R/L 050.5-10	0.15	4.4	1.9	3.8	4.4	25	10	0.5	5.0	5.0	○	●	◐	◑	645.xxx / xxx.5
R/L 050.5-15	0.15	4.4	1.9	3.8	4.4	30	15	0.5	5.0	5.0	○	●	◐	◑	
R/L 050.5-20	0.15	4.4	1.9	3.8	4.4	35	20	0.5	5.0	5.0	○	●	◐	◑	
R/L 050.5-25	0.15	4.4	1.9	3.8	4.4	40	25	0.5	5.0	5.0	◐	●	◑	○	
R/L 050.5-30	0.15	4.4	1.9	3.8	4.4	45	30	0.5	5.0	5.0	◑	●	○	○	
R/L 050.5-35	0.15	4.4	1.9	3.8	4.4	50	35	0.5	5.0	5.0	○	●	◐	○	
R/L 050.5-40	0.15	4.4	1.9	3.8	4.4	55	40	0.5	5.0	5.0	—	○	○	—	
R/L 050.6-15	0.15	5.3	2.3	4.5	5.3	30	15	0.5	6.0	6.0	—	●	◐	◑	676.xxx
R/L 050.6-22	0.15	5.3	2.3	4.5	5.3	37	22	0.5	6.0	6.0	○	●	◐	◑	
R/L 050.6-25	0.15	5.3	2.3	4.5	5.3	40	25	0.5	6.0	6.0	○	●	◐	◑	
R/L 050.6-30	0.15	5.3	2.3	4.5	5.3	45	30	0.5	6.0	6.0	○	●	◐	◑	
R/L 050.6-35	0.15	5.3	2.3	4.5	5.3	50	35	0.5	6.0	6.0	—	◐	◑	○	
R/L 050.6-42	0.15	5.3	2.3	4.5	5.3	57	42	0.5	6.0	6.0	—	◐	◑	○	
R/L 050.7-20	0.15	6.3	2.8	5.5	6.3	35	20	0.6	6.8	7.0	○	●	◐	◑	670 / xxx.7
R/L 050.7-25	0.15	6.3	2.8	5.5	6.3	40	25	0.6	6.8	7.0	○	●	◐	◑	
R/L 050.7-30	0.15	6.3	2.8	5.5	6.3	45	30	0.6	6.8	7.0	○	●	◐	◑	
R/L 050.7-35	0.15	6.3	2.8	5.5	6.3	50	35	0.6	6.8	7.0	—	●	◐	◑	
R/L 050.7-40	0.15	6.3	2.8	5.5	6.3	55	40	0.6	6.8	7.0	—	●	◐	○	
R/L 050.7-45	0.15	6.3	2.8	5.5	6.3	60	45	0.6	6.8	7.0	—	●	◐	○	
R/L 050.7-50	0.15	6.3	2.8	5.5	6.3	65	50	0.6	6.8	7.0	—	●	◐	◑	
R/L 050.8-50	0.2	7.3	3.3	6.5	7.3	70	50	0.7	7.8	8.0	—	—	○	—	687
R/L 050.8-60	0.2	7.3	3.3	6.5	7.3	80	60	0.7	7.8	8.0	—	—	○	—	
new R/L 050.10-35	0.2	9.3	4.2	7.5	9.2	80	35	1.0	9.8	10.0	—	—	○	—	681

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
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- ◑ = Right Hand in Stock

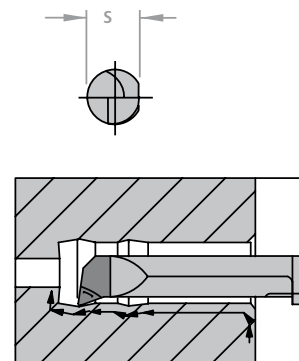
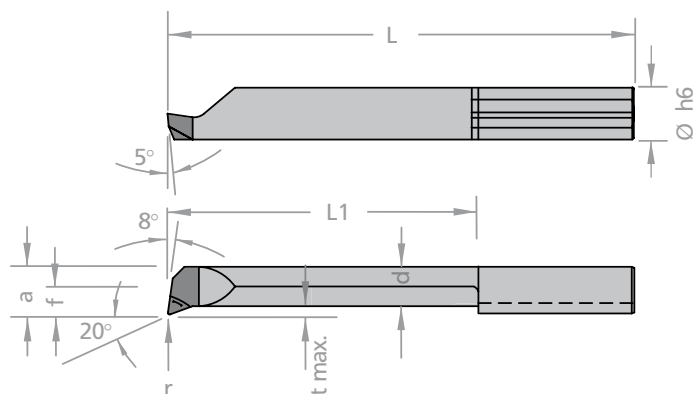
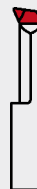
Ultramini Hardline Typ 050

ULTRAMINI

Type 050
profiling and copying

Bore Ø from 2.0 mm
overhang length (L1) up to 7x D
hard machining up to 66 HRC

Grooving, boring and profiling
starting at Ø 0.2 mm



Right hand version shown
State right (R) or left (L) version

Dimensions in mm



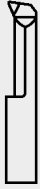
Bestellnummer part number	U.S.A. Stock											suitable toolholder type	
	r	s	f	d	a	L	L1	t max.	D min.	Ø h6	XC2A-NH		
new R/L 050.2-5	0.05	3.5	-	1.5	1.7	19.0	5.0	0.1	2.0	4.0	●		
new R/L 050.2-10	0.05	3.5	-	1.5	1.7	24.0	10.0	0.1	2.0	4.0	●		
new R/L 050.2-15	0.05	3.5	-	1.5	1.7	29.0	15.0	0.1	2.0	4.0	●		
new R/L 050.3-10	0.1	3.5	0.6	2.3	2.6	24.0	10.0	0.2	2.8	4.0	●		
new R/L 050.3-16	0.1	3.5	0.6	2.3	2.6	30.0	16.0	0.2	2.8	4.0	●		
new R/L 050.3-20	0.1	3.5	0.6	2.3	2.6	34.0	20.0	0.2	2.8	4.0	●	645.xxx	xxx.4
new R/L 050.4-10	0.1	3.5	1.5	3.0	3.5	24.0	10.0	0.3	4.0	4.0	●		
new R/L 050.4-16	0.1	3.5	1.5	3.0	3.5	30.0	16.0	0.3	4.0	4.0	●		
new R/L 050.4-20	0.1	3.5	1.5	3.0	3.5	34.0	20.0	0.3	4.0	4.0	●		
new R/L 050.4-24	0.1	3.5	1.5	3.0	3.5	38.0	24.0	0.3	4.0	4.0	●		
new R/L 050.4-28	0.1	3.5	1.5	3.0	3.5	42.0	28.0	0.3	4.0	4.0	●		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades main catalogue page 96 see
«grades summary»

Order-example:
right hand version and grade
R050.2-5/XC2A-NH



ULTRAMINI

Grooving, boring and profiling starting at Ø 0.2 mm

Ultramini Hardline Typ 050

Type 050 profiling and copying

Bore Ø from 2.0 mm overhang length (L1) up to 7x D hard machining up to 66 HRC



Bestellnummer
part number

r s f d a L L1 t max. D min. Ø h6 U.S.A. Stock XC2A-NH

suitable toolholder
type

new
new
new
new
new
new

R/L 050.5-10	0.15	4.4	1.9	3.8	4.4	25.0	10.0	0.5	5.0	5.0	●
R/L 050.5-15	0.15	4.4	1.9	3.8	4.4	30.0	15.0	0.5	5.0	5.0	●
R/L 050.5-20	0.15	4.4	1.9	3.8	4.4	35.0	20.0	0.5	5.0	5.0	●
R/L 050.5-25	0.15	4.4	1.9	3.8	4.4	40.0	25.0	0.5	5.0	5.0	●
R/L 050.5-30	0.15	4.4	1.9	3.8	4.4	45.0	30.0	0.5	5.0	5.0	●
R/L 050.5-35	0.15	4.4	1.9	3.8	4.4	50.0	35.0	0.5	5.0	5.0	●

645.xxx

xxx.5

new
new
new
new
new
new

R/L 050.6-15	0.15	5.3	2.3	4.5	5.3	30.0	15.0	0.5	6.0	6.0	●
R/L 050.6-22	0.15	5.3	2.3	4.5	5.3	37.0	22.0	0.5	6.0	6.0	●
R/L 050.6-25	0.15	5.3	2.3	4.5	5.3	40.0	25.0	0.5	6.0	6.0	●
R/L 050.6-30	0.15	5.3	2.3	4.5	5.3	45.0	30.0	0.5	6.0	6.0	●
R/L 050.6-35	0.15	5.3	2.3	4.5	5.3	50.0	35.0	0.5	6.0	6.0	●
R/L 050.6-42	0.15	5.3	2.3	4.5	5.3	57.0	42.0	0.5	6.0	6.0	●

660 / xxx.6

676.xxx

new
new
new
new
new
new
new

R/L 050.7-20	0.15	6.3	2.8	5.5	6.3	35.0	20.0	0.6	6.8	7.0	●
R/L 050.7-25	0.15	6.3	2.8	5.5	6.3	40.0	25.0	0.6	6.8	7.0	●
R/L 050.7-30	0.15	6.3	2.8	5.5	6.3	45.0	30.0	0.6	6.8	7.0	●
R/L 050.7-35	0.15	6.3	2.8	5.5	6.3	50.0	35.0	0.6	6.8	7.0	●
R/L 050.7-40	0.15	6.3	2.8	5.5	6.3	55.0	40.0	0.6	6.8	7.0	●
R/L 050.7-45	0.15	6.3	2.8	5.5	6.3	60.0	45.0	0.6	6.8	7.0	●
R/L 050.7-50	0.15	6.3	2.8	5.5	6.3	65.0	50.0	0.6	6.8	7.0	●

687

670 /
xxx.7

U.S.A. Stock

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- ◑ = Right Hand in Stock

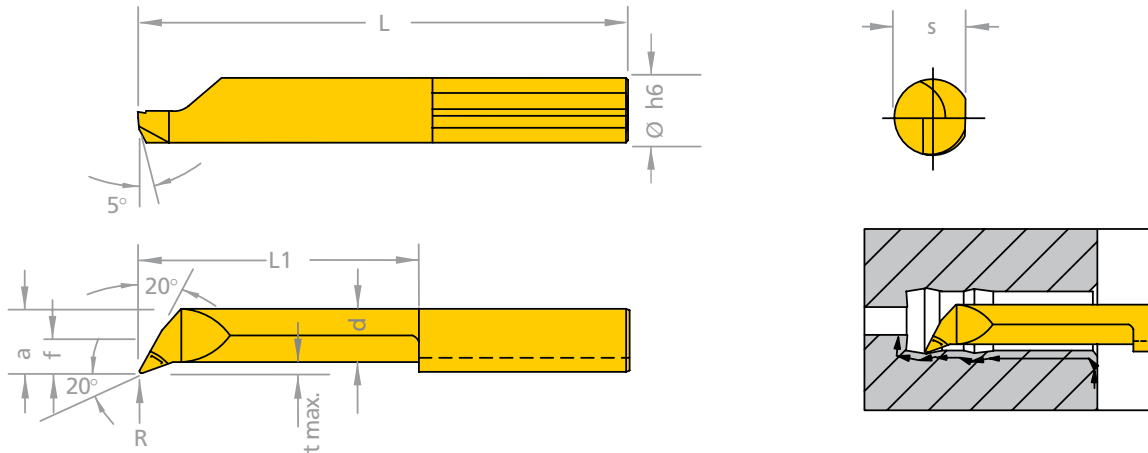
Type 050.20

ULTRAMINI

Profiling and copying
with frontside angle 20°

Bore Ø from 2.0 mm

Grooving, boring and profiling
starting at Ø 0.2 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



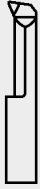
part number	U.S.A. Stock										suitable toolholder type		
	R	s	f	d	a	L	L1	t max.	D min.	Ø h6		AL41F	
R/L 050.20.2-5	0.05	3.5	-	1.5	1.7	19	5	0.1	2.0	4.0	○		
R/L 050.20.2-10	0.05	3.5	-	1.5	1.7	24	10	0.1	2.0	4.0	○		
R/L 050.20.2-15	0.05	3.5	-	1.5	1.7	29	15	0.1	2.0	4.0	○		
R/L 050.20.3-10	0.1	3.5	0.6	2.3	2.6	24	10	0.2	2.8	4.0	○	645.xxx	xxx.4
R/L 050.20.3-16	0.1	3.5	0.6	2.3	2.6	30	16	0.2	2.8	4.0	○		
R/L 050.20.3-20	0.1	3.5	0.6	2.3	2.6	34	20	0.2	2.8	4.0	○		
R/L 050.20.4-10	0.15	3.5	1.5	3.0	3.5	24	10	0.3	4.0	4.0	○	645.xxx	xxx.4
R/L 050.20.4-16	0.15	3.5	1.5	3.0	3.5	30	16	0.3	4.0	4.0	○		
R/L 050.20.4-20	0.15	3.5	1.5	3.0	3.5	34	20	0.3	4.0	4.0	○		
R/L 050.20.4-24	0.15	3.5	1.5	3.0	3.5	38	24	0.3	4.0	4.0	○		
R/L 050.20.4-28	0.15	3.5	1.5	3.0	3.5	42	28	0.3	4.0	4.0	○		
R/L 050.20.5-10	0.15	4.4	1.9	3.8	4.4	25	10	0.5	5.0	5.0	○	645.xxx	xxx.5
R/L 050.20.5-20	0.15	4.4	1.9	3.8	4.4	35	20	0.5	5.0	5.0	○		
R/L 050.20.5-35	0.15	4.4	1.9	3.8	4.4	50	35	0.5	5.0	5.0	○		

U.S.A. Stock

- = Both Right & Left Hand in Stock
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- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: righthand version and grade
AL41F: R050.20.2-5/AL41F



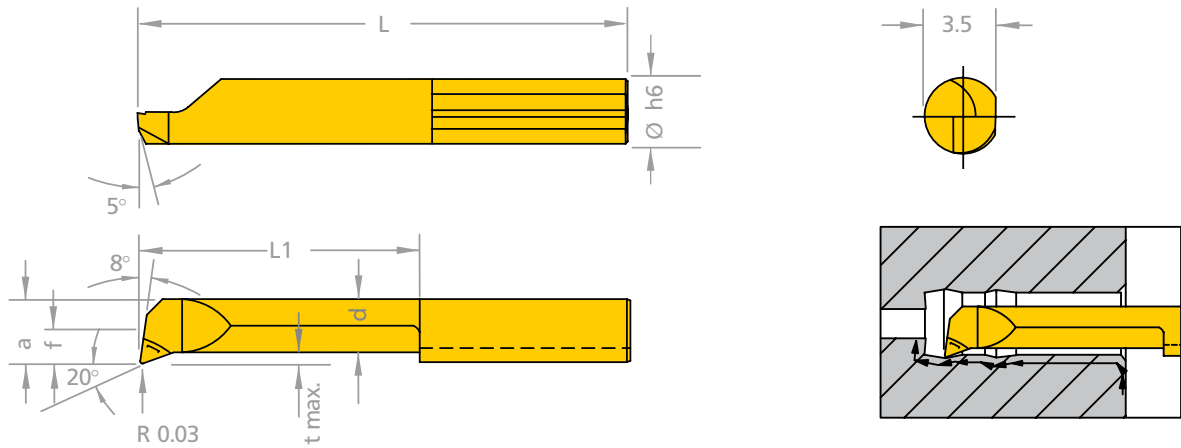
ULTRAMINI

Type 053

Grooving, boring and profiling starting at \varnothing 0.2 mm

Profiling and copying with corner-radius 0.03 mm

Bore \varnothing from 2.8 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock									suitable toolholder type
	f	d	a	L	L1	t max.	D min.	\varnothing h6	AL41F	
new R/L 053.3-10	0.6	2.3	2.6	24	10	0.2	2.8	4.0	●	645.xxx / xxx.4
new R/L 053.3-16	0.6	2.3	2.6	30	16	0.2	2.8	4.0	●	
new R/L 053.3-20	0.6	2.3	2.6	34	20	0.2	2.8	4.0	○	
new R/L 053.4-10	1.5	3.0	3.5	24	10	0.3	4.0	4.0	●	
new R/L 053.4-16	1.5	3.0	3.5	30	16	0.3	4.0	4.0	●	
new R/L 053.4-20	1.5	3.0	3.5	34	20	0.3	4.0	4.0	○	
new R/L 053.4-24	1.5	3.0	3.5	38	24	0.3	4.0	4.0	●	
new R/L 053.4-28	1.5	3.0	3.5	42	28	0.3	4.0	4.0	○	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: right hand version and grade
AL41F: R053.03-10/AL41F

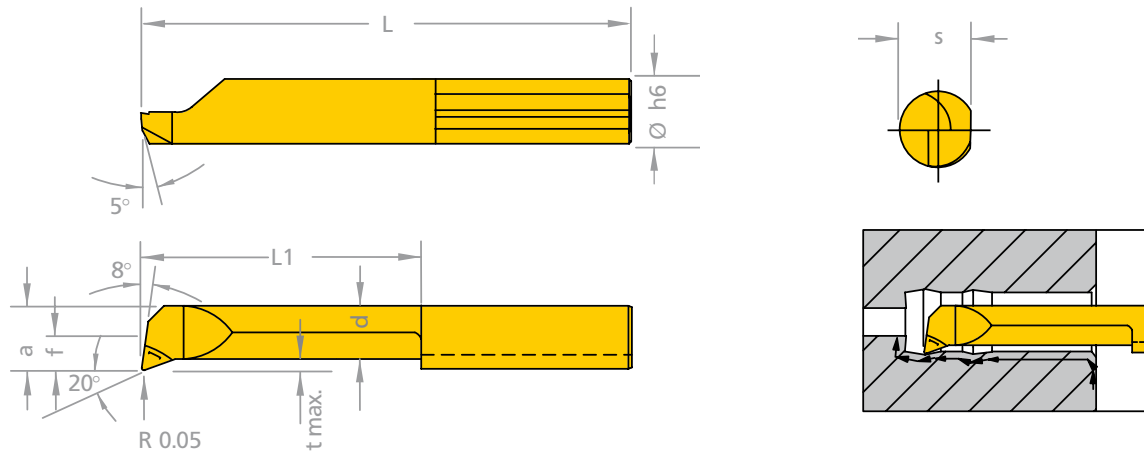
Type 055

ULTRAMINI

Profiling and copying
with corner-radius 0.05 mm

Bore \varnothing from 2.0 mm

Grooving, boring and profiling
starting at \varnothing 0.2 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



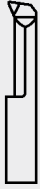
part number	U.S.A. Stock										suitable toolholder type
	s	f	d	a	L	L1	t max.	D min.	\varnothing h6	AL41F	
R/L 055.2-5	3.5	-	1.5	1.7	19	5	0.1	2.0	4.0	●	645.xxx / xxx.4
R/L 055.2-10	3.5	-	1.5	1.7	24	10	0.1	2.0	4.0	●	
R/L 055.2-15	3.5	-	1.5	1.7	29	15	0.1	2.0	4.0	●	
R/L 055.3-10	3.5	0.6	2.3	2.6	24	10	0.2	2.8	4.0	●	
R/L 055.3-16	3.5	0.6	2.3	2.6	30	16	0.2	2.8	4.0	●	
R/L 055.3-20	3.5	0.6	2.3	2.6	34	20	0.2	2.8	4.0	●	
R/L 055.4-10	3.5	1.5	3.0	3.5	24	10	0.3	4.0	4.0	●	
R/L 055.4-16	3.5	1.5	3.0	3.5	30	16	0.3	4.0	4.0	●	
R/L 055.4-20	3.5	1.5	3.0	3.5	34	20	0.3	4.0	4.0	●	
R/L 055.4-24	3.5	1.5	3.0	3.5	38	24	0.3	4.0	4.0	●	
R/L 055.4-28	3.5	1.5	3.0	3.5	42	28	0.3	4.0	4.0	●	

U.S.A. Stock

- = Both Right & Left Hand in Stock
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- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: right hand version and grade
AL41F: R055.2-5/AL41F



ULTRAMINI

Grooving, boring and profiling starting at Ø 0.2 mm

Type 055

Profiling and copying with corner-radius 0.05 mm

Bore Ø from 2.0 mm



part number	s	f	d	a	L	L1	t max.	D min.	Ø h6	U.S.A. Stock		suitable toolholder type	
										AL41F			
R/L 055.5-10	4.4	1.9	3.8	4.4	25	10	0.5	5.0	5.0	●		645.xxx	xxx.5
R/L 055.5-15	4.4	1.9	3.8	4.4	30	15	0.5	5.0	5.0	●			
R/L 055.5-20	4.4	1.9	3.8	4.4	35	20	0.5	5.0	5.0	●			
R/L 055.5-25	4.4	1.9	3.8	4.4	40	25	0.5	5.0	5.0	●			
R/L 055.5-30	4.4	1.9	3.8	4.4	45	30	0.5	5.0	5.0	●			
R/L 055.5-35	4.4	1.9	3.8	4.4	50	35	0.5	5.0	5.0	●			
R/L 055.6-15	5.3	2.3	4.5	5.3	30	15	0.5	6.0	6.0	●		676.xxx / xxx.6	660
R/L 055.6-22	5.3	2.3	4.5	5.3	37	22	0.5	6.0	6.0	●			
R/L 055.6-25	5.3	2.3	4.5	5.3	40	25	0.5	6.0	6.0	●			
R/L 055.6-30	5.3	2.3	4.5	5.3	45	30	0.5	6.0	6.0	●			
R/L 055.6-35	5.3	2.3	4.5	5.3	50	35	0.5	6.0	6.0	○			
R/L 055.6-42	5.3	2.3	4.5	5.3	57	42	0.5	6.0	6.0	●			

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

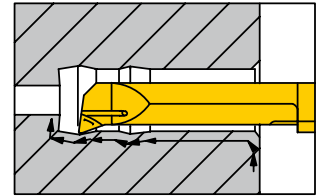
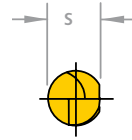
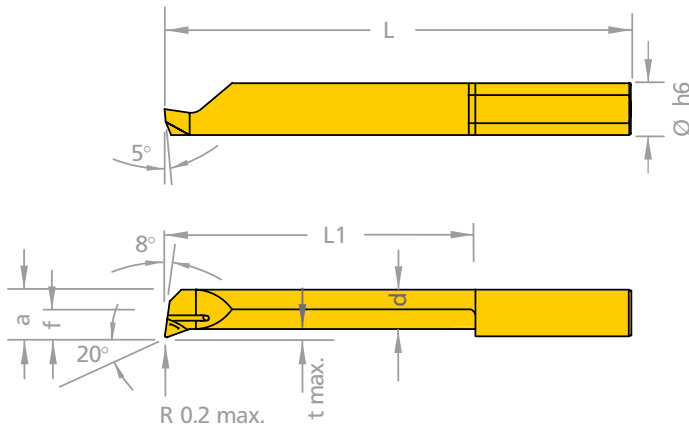
Type 050 B

ULTRAMINI

Boring/profiling copying
with internal cooling channel

Bore \varnothing from 6.0 mm
overhang length (L1)
up to 7x D

Grooving, boring and profiling
starting at \varnothing 0.2 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock										suitable toolholder type
	s	f	d	a	L	L1	t max.	D min.	\varnothing h6	AL41F	
R/L 050.6-35B	5.3	2.3	4.5	5.3	50	35	0.5	6.0	6.0	○	660 / xxx.6
R/L 050.6-42B	5.3	2.3	4.5	5.3	57	42	0.5	6.0	6.0	○	
R/L 050.7-35B	6.3	2.8	5.5	6.3	50	35	0.6	6.8	7.0	○	676.xxx 687 / 670 / xxx.7
R/L 050.7-40B	6.3	2.8	5.5	6.3	55	40	0.6	6.8	7.0	○	
R/L 050.7-45B	6.3	2.8	5.5	6.3	60	45	0.6	6.8	7.0	○	
R/L 050.7-50B	6.3	2.8	5.5	6.3	65	50	0.6	6.8	7.0	○	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: right hand version and grade
AL41F: R050.6-35B/AL41F

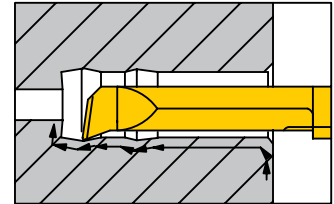
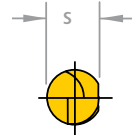
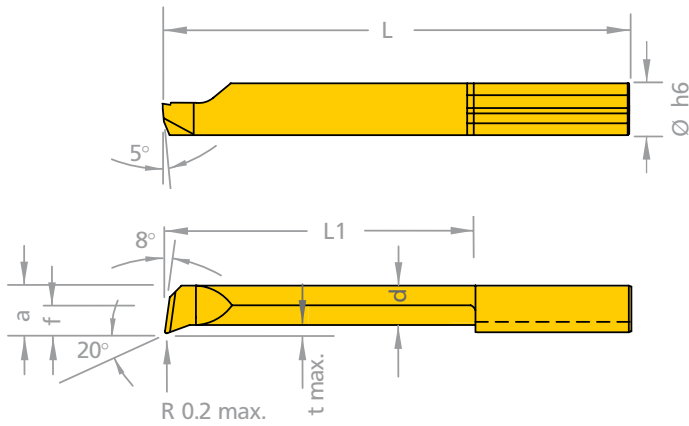
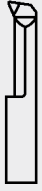
ULTRAMINI

Type 050 C

Grooving, boring and profiling starting at Ø 0.2 mm

Profiling and copying with chipbreaker for better chipcontrol

Bore Ø from 4.0 mm overhang length (L1) up to 7x D



Right hand version shown

State right (R) or left (L) version

Dimensions in mm

part number	U.S.A. Stock										suitable toolholder type
	s	f	d	a	L	L1	t max.	D min.	Ø h6	AL41F	
new R/L 050.2-10C	3.5	-	1.5	1.7	24.0	10.0	0.1	2.0	4.0	○	645.xxx
new R/L 050.3-10C	3.5	0.6	2.3	2.6	24.0	10.0	0.2	2.8	4.0	○	
new R/L 050.3-16C	3.5	0.6	2.3	2.6	30.0	16.0	0.2	2.8	4.0	○	
R/L 050.4-10C	3.5	1.5	3.0	3.5	24	10	0.3	4.0	4.0	●	
R/L 050.4-16C	3.5	1.5	3.0	3.5	30	16	0.3	4.0	4.0	●	
R/L 050.4-20C	3.5	1.5	3.0	3.5	34	20	0.3	4.0	4.0	●	
R/L 050.4-24C	3.5	1.5	3.0	3.5	38	24	0.3	4.0	4.0	●	
R/L 050.4-28C	3.5	1.5	3.0	3.5	42	28	0.3	4.0	4.0	●	
R/L 050.5-10C	4.4	1.9	3.8	4.4	25	10	0.5	5.0	5.0	●	
R/L 050.5-15C	4.4	1.9	3.8	4.4	30	15	0.5	5.0	5.0	●	
R/L 050.5-20C	4.4	1.9	3.8	4.4	35	20	0.5	5.0	5.0	●	
R/L 050.5-25C	4.4	1.9	3.8	4.4	40	25	0.5	5.0	5.0	●	
R/L 050.5-30C	4.4	1.9	3.8	4.4	45	30	0.5	5.0	5.0	●	
R/L 050.5-35C	4.4	1.9	3.8	4.4	50	35	0.5	5.0	5.0	●	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: right hand version and gradeAL41F: R050.4-10C/AL41F

Type 050 C

ULTRAMINI

Profiling and copying with chipbreaker for better chipcontrol

Bore Ø from 4.0 mm overhang length (L1) up to 7x D

Grooving, boring and profiling starting at Ø 0.2 mm



part number	s	f	d	a	L	L1	t max.	D min.	Ø h6	U.S.A. Stock		suitable toolholder type
										AL41F		
R/L 050.6-15C	5.3	2.3	4.5	5.3	30	15	0.5	6.0	6.0	●		660 / xxx.6
R/L 050.6-22C	5.3	2.3	4.5	5.3	37	22	0.5	6.0	6.0	●		
R/L 050.6-25C	5.3	2.3	4.5	5.3	40	25	0.5	6.0	6.0	●		
R/L 050.6-30C	5.3	2.3	4.5	5.3	45	30	0.5	6.0	6.0	●		
R/L 050.6-35C	5.3	2.3	4.5	5.3	50	35	0.5	6.0	6.0	●		
R/L 050.6-42C	5.3	2.3	4.5	5.3	57	42	0.5	6.0	6.0	●		
R/L 050.7-20C	6.3	2.8	5.5	6.3	35	20	0.6	6.8	7.0	●	676.xxx	687 / 670 / xxx.7
R/L 050.7-25C	6.3	2.8	5.5	6.3	40	25	0.6	6.8	7.0	●		
R/L 050.7-30C	6.3	2.8	5.5	6.3	45	30	0.6	6.8	7.0	●		
R/L 050.7-35C	6.3	2.8	5.5	6.3	50	35	0.6	6.8	7.0	●		
R/L 050.7-40C	6.3	2.8	5.5	6.3	55	40	0.6	6.8	7.0	●		
R/L 050.7-45C	6.3	2.8	5.5	6.3	60	45	0.6	6.8	7.0	●		
R/L 050.7-50C	6.3	2.8	5.5	6.3	65	50	0.6	6.8	7.0	●		



U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

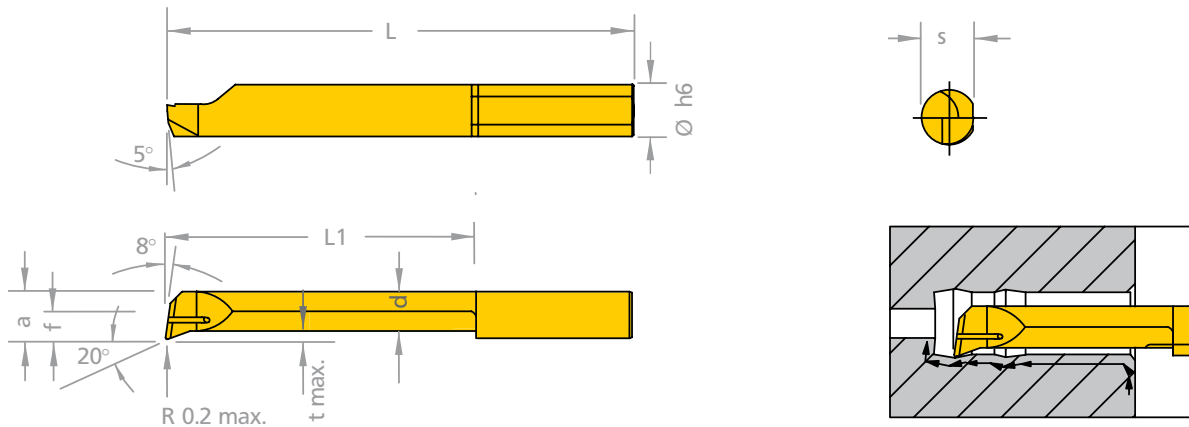
ULTRAMINI

Type 050 CB

Grooving, boring and profiling starting at Ø 0.2 mm

Profiling and copying with through coolant over middle bore and chip breaker

Bore Ø from 6.0 mm overhang length (L1) up to 7x D



Right hand version shown
State right (R) or left (L) version
Dimensions in mm



part number	U.S.A. Stock										suitable toolholder type
	s	f	d	a	L	L1	t max.	D min.	Ø h6	AL41F	
R/L 050.6-35CB	5.3	2.3	4.5	5.3	50	35	0.5	6.0	6.0	○	660 / xxx.6
R/L 050.6-42CB	5.3	2.3	4.5	5.3	57	42	0.5	6.0	6.0	○	
R/L 050.7-35CB	6.3	2.8	5.5	6.3	50	35	0.6	6.8	7.0	○	676.xxx 687 / 670 / xxx.7
R/L 050.7-40CB	6.3	2.8	5.5	6.3	55	40	0.6	6.8	7.0	○	
R/L 050.7-45CB	6.3	2.8	5.5	6.3	60	45	0.6	6.8	7.0	○	
R/L 050.7-50CB	6.3	2.8	5.5	6.3	65	50	0.6	6.8	7.0	○	

U.S.A. Stock

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- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: right hand version and grade
AL41F: R050.6-35CB/AL41F

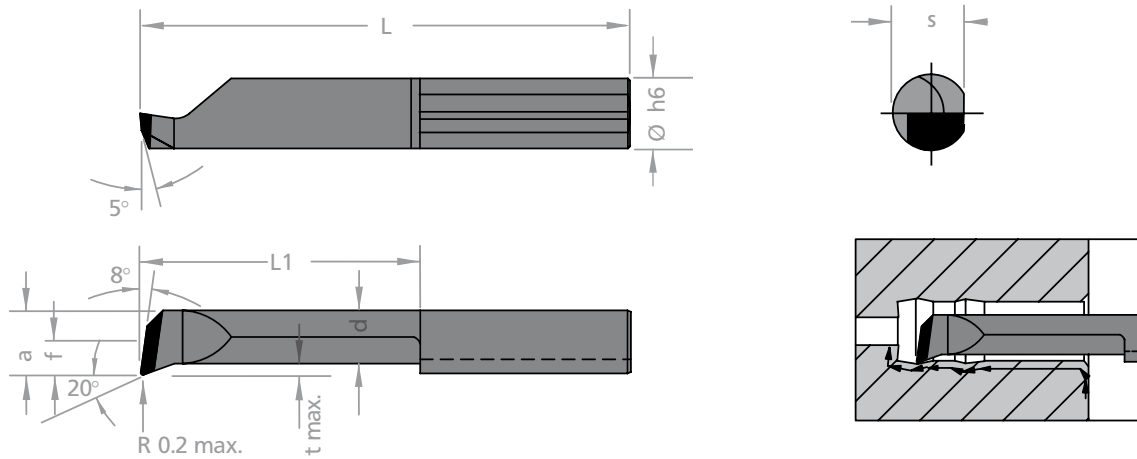
Type 050 CBN

ULTRAMINI

Profiling and copying
for hard machining

Bore \varnothing from 2.8 mm

Grooving, boring and profiling
starting at \varnothing 0.2 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock										suitable toolholder type	
	s	f	d	a	L	L1	t max.	D min.	\varnothing h6	CBN		
R 050.3-10/CBN	3.5	0.6	2.3	2.6	25.5	10	0.2	2.8	4.0	○	645.xxx	xxx.4
R 050.4-10/CBN	3.5	1.5	3.0	3.5	25.5	10	0.3	4.0	4.0	○		xxx.5
R 050.5-15/CBN	4.3	1.9	3.8	4.4	31.5	15	0.5	5.0	5.0	○		676.xxx
R 050.6-15/CBN	5.3	2.3	4.5	5.3	31.5	15	0.5	6.0	6.0	○	687 / 670 / xxx.7	
R 050.7-20/CBN	6.3	2.8	5.5	6.3	36.5	20	0.6	6.8	7.0	○		

U.S.A. Stock

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- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: right hand version and grade
R050.3-10/CBN

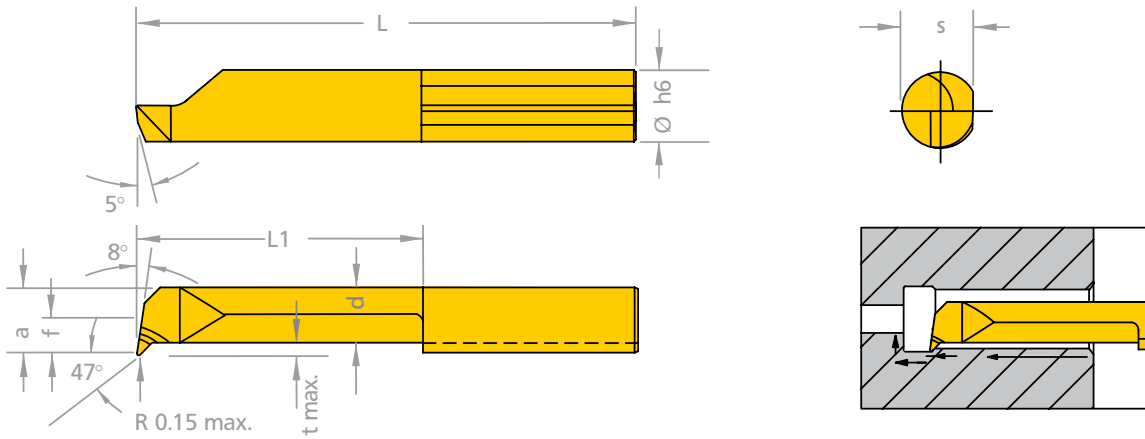
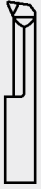
ULTRAMINI

Type 047

Grooving, boring and profiling starting at Ø 0.2 mm

Profiling and copying with 47° geometry

Bore Ø from 4.0 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



Version T with extended t max.

part number											U.S.A. Stock		suitable toolholder type
	s	f	d	a	L	L1	t max.	D min.	Ø h6	AL41F			
R/L 047.T2-10	3.5	-	1.2	1.7	24	10	0.4	2.0	4.0		○	645.xxx	xxx.4
R/L 047.T3-15	3.5	0.6	1.9	2.6	29	15	0.6	2.8	4.0		○		
R/L 047.T4-10	3.5	1.5	2.8	3.5	24	10	0.6	4.0	4.0		○		
R/L 047.4-20	3.5	1.5	3.0	3.5	34	20	0.3	4.0	4.0		○		
R/L 047.T4-20	3.5	1.5	2.8	3.5	34	20	0.6	4.0	4.0		○		
R/L 047.T5-15	4.4	1.9	3.5	4.4	30	15	0.8	5.0	5.0		○	xxx.5	
R/L 047.5-25	4.4	1.9	3.8	4.4	40	25	0.5	5.0	5.0		○		
R/L 047.T5-25	4.4	1.9	3.5	4.4	40	25	0.8	5.0	5.0		○		
R/L 047.T6-22	5.3	2.3	3.4	5.3	37	22	1.8	6.0	6.0		◐	676.xxx	660 / xxx.6
R/L 047.6-30	5.3	2.3	4.5	5.3	45	30	0.5	6.0	6.0		○		
R/L 047.T6-30	5.3	2.3	3.4	5.3	45	30	1.8	6.0	6.0		◑		

U.S.A. Stock

- ◑ = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: right hand version and grade
CN45F: R047.T2-10/CN45F

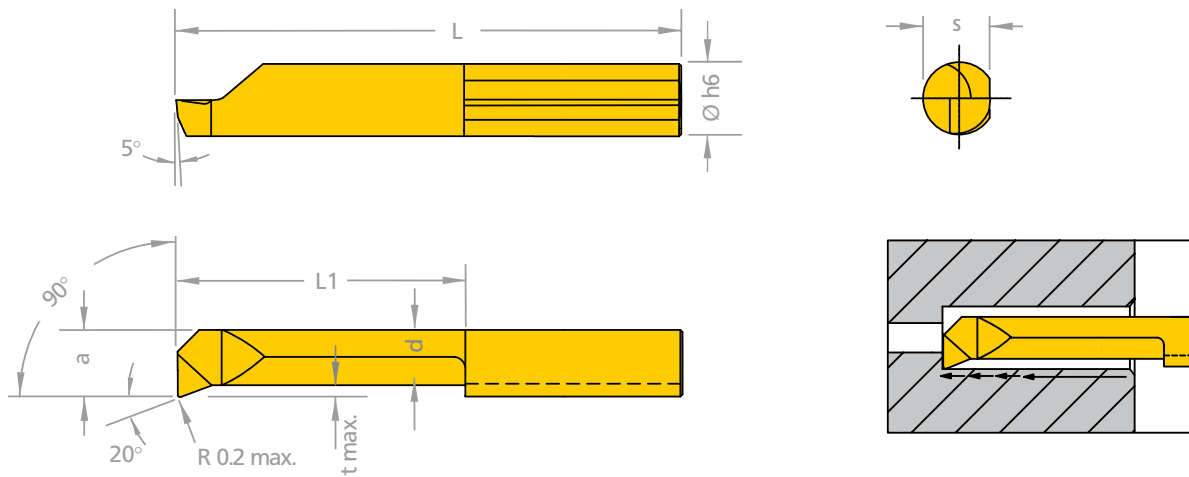
Type 090

ULTRAMINI

Profiling and copying
with geometry 90°

Bore Ø from 2.8 mm

Grooving, boring and profiling
starting at Ø 0.2 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock										suitable toolholder type	
	s	f	d	a	L	L1	t max.	D min.	Ø h6	CN45F		
R/L 090.3-10	3.5	0.6	2.3	2.6	24	10	0.2	2.8	4.0	●	645.xxx	xxx.4
R/L 090.3-16	3.5	0.6	2.3	2.6	30	16	0.2	2.8	4.0	●		
R/L 090.4-10	3.5	1.5	3.0	3.5	24	10	0.3	4.0	4.0	●	645.xxx	xxx.5
R/L 090.4-16	3.5	1.5	3.0	3.5	30	16	0.3	4.0	4.0	●		
R/L 090.5-10	4.4	1.9	3.8	4.4	25	10	0.5	5.0	5.0	●	645.xxx	xxx.5
R/L 090.5-15	4.4	1.9	3.8	4.4	30	15	0.5	5.0	5.0	●		
R/L 090.5-20	4.4	1.9	3.8	4.4	35	20	0.5	5.0	5.0	●		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: right hand version and grade
CN45F: R090.3-10/CN45F

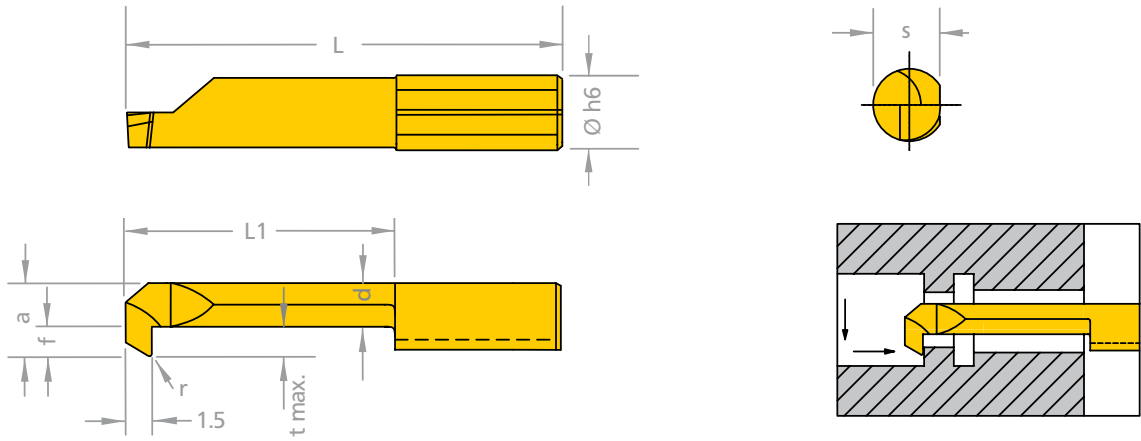
ULTRAMINI

Type 080

Grooving, boring and profiling starting at Ø 0.2 mm

Backboring

Bore Ø from 3.0 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



part number											U.S.A. Stock		suitable toolholder type	
	r	s	f	d	a	L	L1	t max.	D min.	Ø h6	CN45F			
R/L 080.0003-15	0.1	3.5	0.6	1.9	2.6	29	15	0.5	3.0	4.0	●	645.xxx	xxx.4	
R/L 080.0003-20	0.1	3.5	0.6	1.9	2.6	34	20	0.5	3.0	4.0	○			
R/L 080.0004-15	0.15	3.5	1.5	2.4	3.5	29	15	0.8	4.0	4.0	●	645.xxx	xxx.5	
R/L 080.0004-25	0.15	3.5	1.5	2.4	3.5	39	25	0.8	4.0	4.0	○			
R/L 080.0005-20	0.2	4.4	1.9	3.3	4.4	35	20	1.0	5.0	5.0	●	676.xxx	660 / xxx.6	
R/L 080.0005-30	0.2	4.4	1.9	3.3	4.4	45	30	1.0	5.0	5.0	○			
R/L 080.0006-20	0.2	5.3	2.3	3.4	5.3	35	20	1.8	6.0	6.0	●	676.xxx	687 / 670 / xxx.7	
R/L 080.0006-30	0.2	5.3	2.3	3.4	5.3	45	30	1.8	6.0	6.0	○			
R/L 080.0007-20	0.2	6.3	2.8	3.7	6.3	35	20	2.5	7.0	7.0	●			
R/L 080.0007-30	0.2	6.3	2.8	3.7	6.3	45	30	2.5	7.0	7.0	○			

U.S.A. Stock

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- = Express Delivery
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- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: right hand version and grade
CN45F: R080.0003-15/CN45F

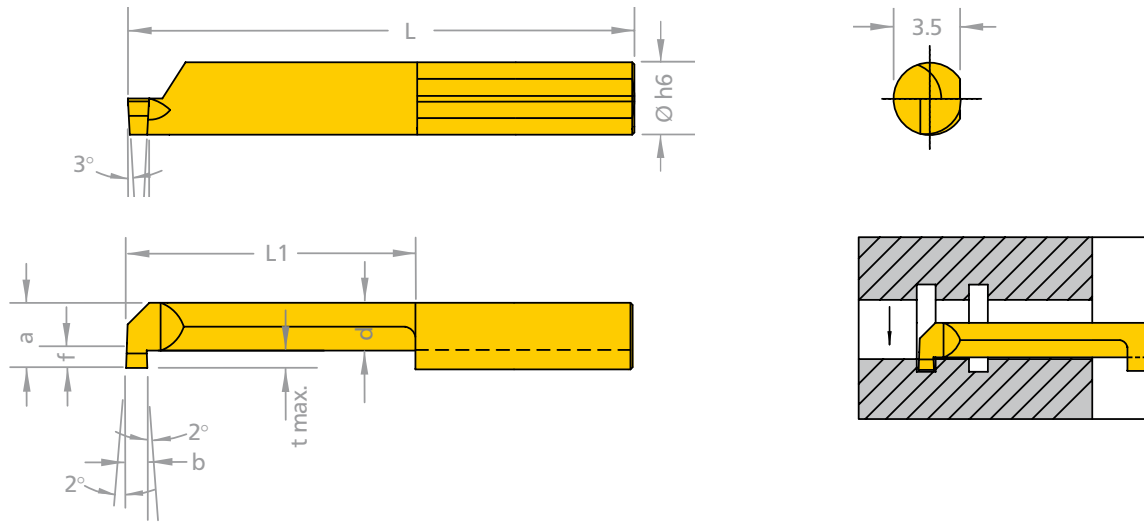
Type 002

ULTRAMINI

Grooving

Bore \varnothing from 2.0 mm
depth of groove up to 0.4 mm

Grooving, boring and profiling
starting at \varnothing 0.2 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock								AL41F	suitable toolholder type
	b +0.05	d	a	L	L1	t max.	D min.	Ø h6		
R/L 002.0050-5	0.5	1.2	1.8	19	5	0.4	2.0	4.0	●	645.xxx / xxx.4
R/L 002.0050-10	0.5	1.2	1.8	24	10	0.4	2.0	4.0	●	
R/L 002.0050-15	0.5	1.2	1.8	29	15	0.4	2.0	4.0	●	

U.S.A. Stock

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- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: right hand version and grade
AL41F: R002.0050-5/AL41F



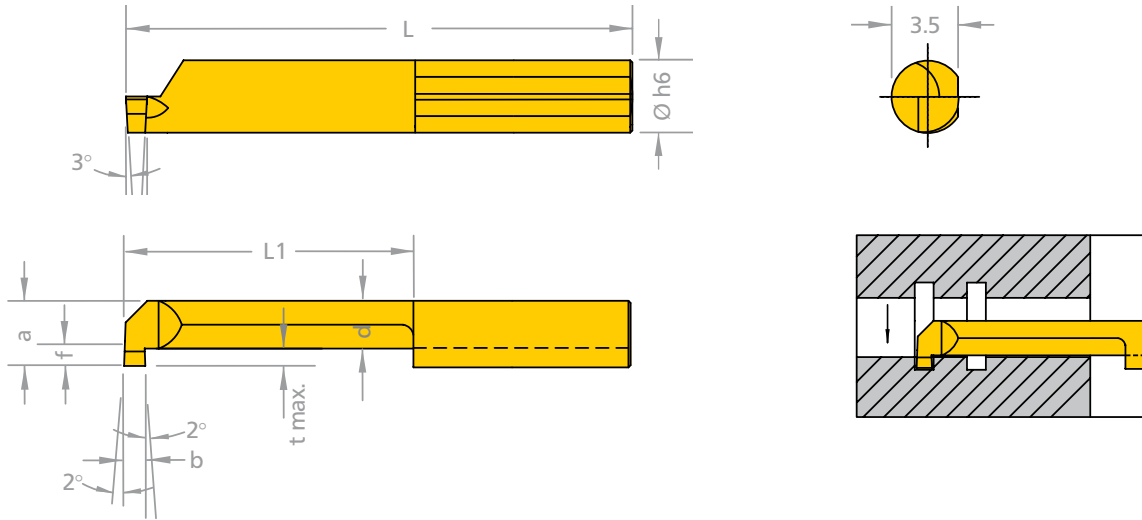
ULTRAMINI

Type 003

Grooving, boring and profiling starting at \varnothing 0.2 mm

Grooving

Bore \varnothing from 3.0 mm depth of groove up to 0.6 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock									suitable toolholder type	
	b +0.05	f	d	a	L	L1	t max.	D min.	\varnothing h6		AL41F
R/L 003.0070-5	0.7	0.7	1.9	2.7	19	5	0.6	3.0	4.0	●	645.xxx / xxx.4
R/L 003.0070-10	0.7	0.7	1.9	2.7	24	10	0.6	3.0	4.0	●	
R/L 003.0070-16	0.7	0.7	1.9	2.7	30	16	0.6	3.0	4.0	●	

U.S.A. Stock

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- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: right hand version and grade
AL41F: R003.0070-5/AL41F

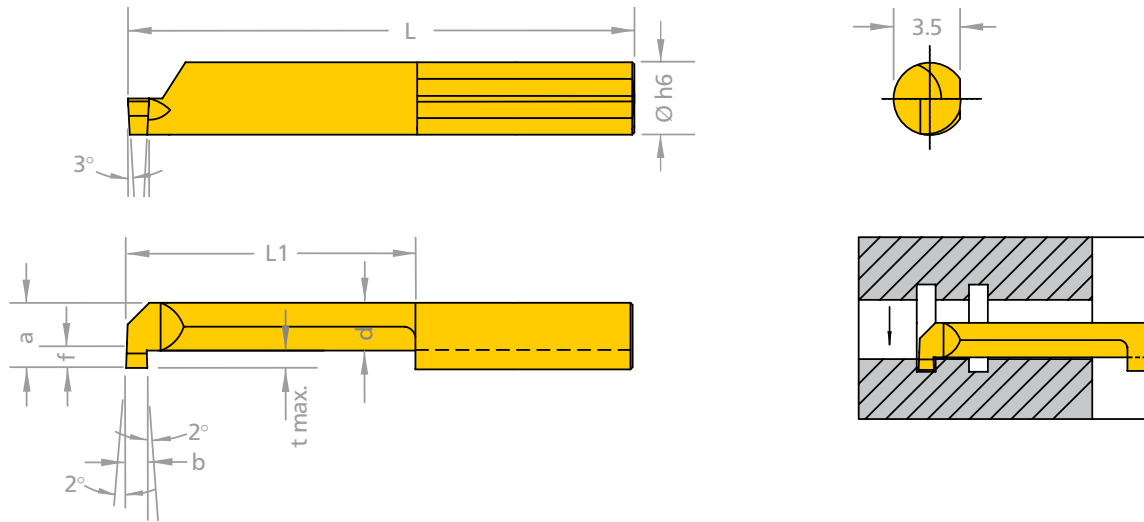
Type 004

ULTRAMINI

Grooving

Bore \varnothing from 4.0 mm
depth of groove up to 0.8 mm

Grooving, boring and profiling
starting at \varnothing 0.2 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



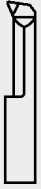
part number	U.S.A. Stock									suitable toolholder type	
	b +0.05	f	d	a	L	L1	t max.	D min.	\varnothing h6		CN45F
R/L 004.0100-10	1.0	1.5	2.4	3.5	24	10	0.8	4.0	4.0	●	645.xxx / xxx.4
R/L 004.0100-16	1.0	1.5	2.4	3.5	30	16	0.8	4.0	4.0	●	
R/L 004.0100-20	1.0	1.5	2.4	3.5	34	20	0.8	4.0	4.0	●	

U.S.A. Stock

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- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: right hand version and grade
CN45F: R004.0100-10/CN45F



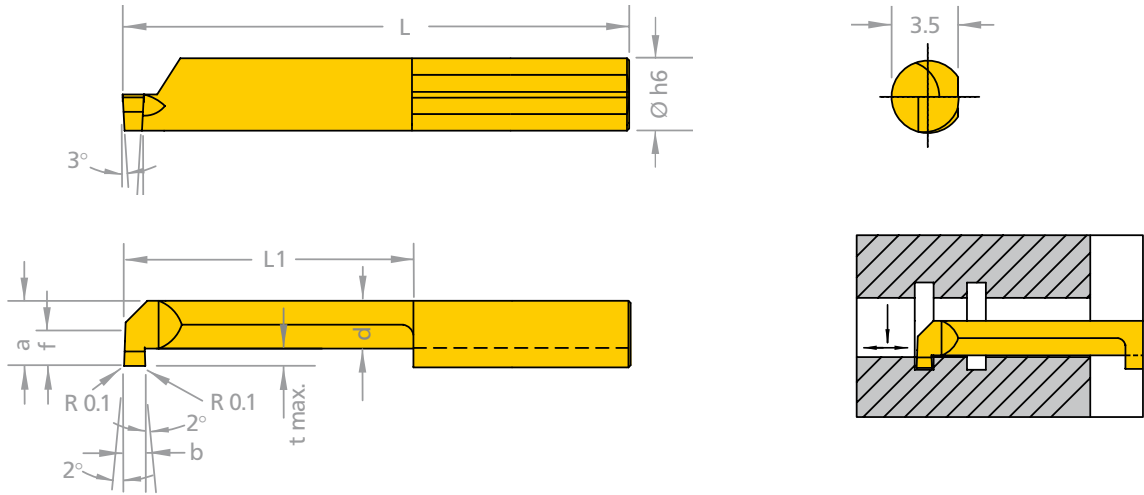
ULTRAMINI

Grooving, boring and profiling starting at \varnothing 0.2 mm

Type 004 M

Grooving with corner-radius

Bore \varnothing from 4.0 mm
depth of groove up to 0.8 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock									suitable toolholder type	
	b +0.05	f	d	a	L	L1	t max.	D min.	\varnothing h6		AL41F
R/L 004M0100-10	1.0	1.5	2.4	3.5	24	10	0.8	4.0	4.0	○	645.xxx / xxx.4
R/L 004M0100-16	1.0	1.5	2.4	3.5	30	16	0.8	4.0	4.0	○	
R/L 004M0100-20	1.0	1.5	2.4	3.5	34	20	0.8	4.0	4.0	○	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: right hand version and grade
AL41F: R004M0100-10/AL41F

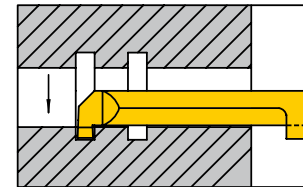
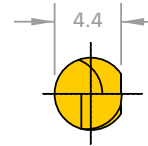
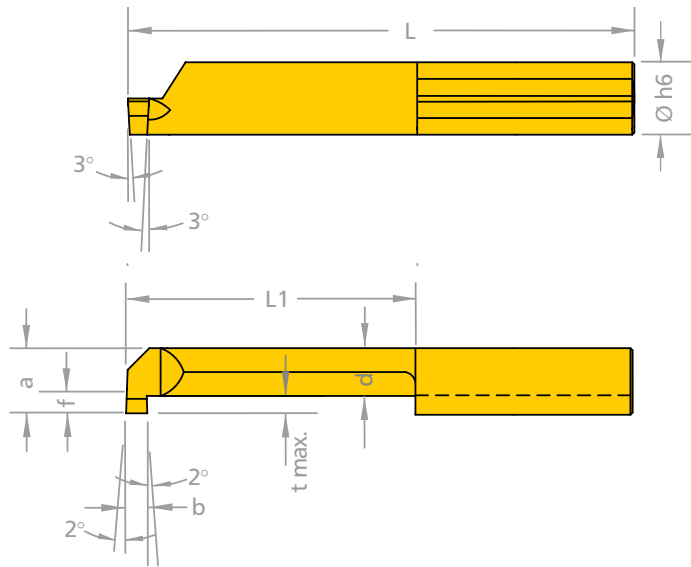
Type 005

ULTRAMINI

Grooving

Bore Ø from 5.0 mm
depth of groove up to 1.0 mm
overhang length (L1) up to 7x D

Grooving, boring and profiling
starting at Ø 0.2 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock									suitable toolholder type	
	b +0.05	f	d	a	L	L1	t max.	D min.	Ø h6		CN45F
R/L 005.0100-10	1.0	1.9	3.3	4.4	25	10	1.0	5.0	5.0	●	645.xxx / xxx.5
R/L 005.0100-15	1.0	1.9	3.3	4.4	30	15	1.0	5.0	5.0	●	
R/L 005.0100-20	1.0	1.9	3.3	4.4	35	20	1.0	5.0	5.0	●	
R/L 005.0100-25	1.0	1.9	3.3	4.4	40	25	1.0	5.0	5.0	●	
R/L 005.0100-30	1.0	1.9	3.3	4.4	45	30	1.0	5.0	5.0	●	
R/L 005.0100-35	1.0	1.9	3.3	4.4	50	35	1.0	5.0	5.0	●	
R/L 005.0150-10	1.5	1.9	3.3	4.4	25	10	1.0	5.0	5.0	●	
R/L 005.0150-15	1.5	1.9	3.3	4.4	30	15	1.0	5.0	5.0	●	
R/L 005.0150-20	1.5	1.9	3.3	4.4	35	20	1.0	5.0	5.0	●	
R/L 005.0150-25	1.5	1.9	3.3	4.4	40	25	1.0	5.0	5.0	●	
R/L 005.0150-30	1.5	1.9	3.3	4.4	45	30	1.0	5.0	5.0	●	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: right hand version and grade
CN45F: R005.0100-10/CN45F



ULTRAMINI

Grooving, boring and profiling starting at Ø 0.2 mm

Type 005

Grooving

Bore Ø from 5.0 mm
depth of groove up to 1.0 mm
overhang length (L1) up to 7x D



part number	b +0.05	f	d	a	L	L1	t max.	D min.	Ø h6	U.S.A. Stock		suitable toolholder type
										K10F	CN45F	
R/L 005.0200-10	2.0	1.9	3.3	4.4	25	10	1.0	5.0	5.0	○	●	645.xxx / xxx.5
R/L 005.0200-15	2.0	1.9	3.3	4.4	30	15	1.0	5.0	5.0	○	●	
R/L 005.0200-20	2.0	1.9	3.3	4.4	35	20	1.0	5.0	5.0	○	●	
R/L 005.0200-25	2.0	1.9	3.3	4.4	40	25	1.0	5.0	5.0	○	○	
R/L 005.0200-30	2.0	1.9	3.3	4.4	45	30	1.0	5.0	5.0	○	●	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

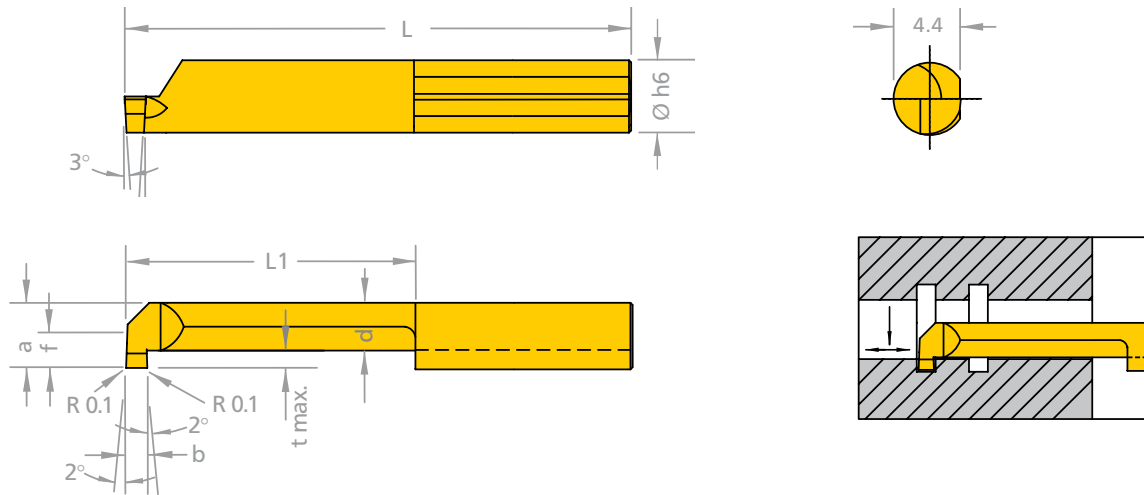
Type 005 M

ULTRAMINI

Grooving with corner-radius

Bore \varnothing from 5.0 mm
depth of groove up to 1.0 mm

Grooving, boring and profiling
starting at \varnothing 0.2 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock									suitable toolholder type	
	b +0.05	f	d	a	L	L1	t max.	D min.	$\varnothing h6$		AL41F
R/L 005M0100-10	1.0	1.9	3.3	4.4	25	10	1.0	5.0	5.0	○	645.xxx / xxx.5
R/L 005M0100-15	1.0	1.9	3.3	4.4	30	15	1.0	5.0	5.0	○	
R/L 005M0100-20	1.0	1.9	3.3	4.4	35	20	1.0	5.0	5.0	○	
R/L 005M0100-25	1.0	1.9	3.3	4.4	40	25	1.0	5.0	5.0	○	
R/L 005M0100-30	1.0	1.9	3.3	4.4	45	30	1.0	5.0	5.0	○	
R/L 005M0150-10	1.5	1.9	3.3	4.4	25	10	1.0	5.0	5.0	○	
R/L 005M0150-15	1.5	1.9	3.3	4.4	30	15	1.0	5.0	5.0	○	
R/L 005M0150-20	1.5	1.9	3.3	4.4	35	20	1.0	5.0	5.0	○	
R/L 005M0150-25	1.5	1.9	3.3	4.4	40	25	1.0	5.0	5.0	○	
R/L 005M0150-30	1.5	1.9	3.3	4.4	45	30	1.0	5.0	5.0	○	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: right hand version and grade
AL41F: R005M0100-10/AL41F



ULTRAMINI

Grooving, boring and profiling starting at Ø 0.2 mm

Type 005 M

Grooving with corner-radius

Bore Ø from 5.0 mm
depth of groove up to 1.0 mm



part number	b +0.05	f	d	a	L	L1	t max.	D min.	Ø h6	U.S.A. Stock		suitable toolholder type
										AL41F		
R/L 005M0200-10	2.0	1.9	3.3	4.4	25	10	1.0	5.0	5.0	<input type="radio"/>		645.xxx / xxx.5
R/L 005M0200-15	2.0	1.9	3.3	4.4	30	15	1.0	5.0	5.0	<input type="radio"/>		
R/L 005M0200-20	2.0	1.9	3.3	4.4	35	20	1.0	5.0	5.0	<input type="radio"/>		
R/L 005M0200-25	2.0	1.9	3.3	4.4	40	25	1.0	5.0	5.0	<input type="radio"/>		
R/L 005M0200-30	2.0	1.9	3.3	4.4	45	30	1.0	5.0	5.0	<input type="radio"/>		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

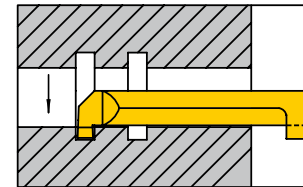
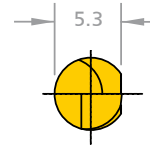
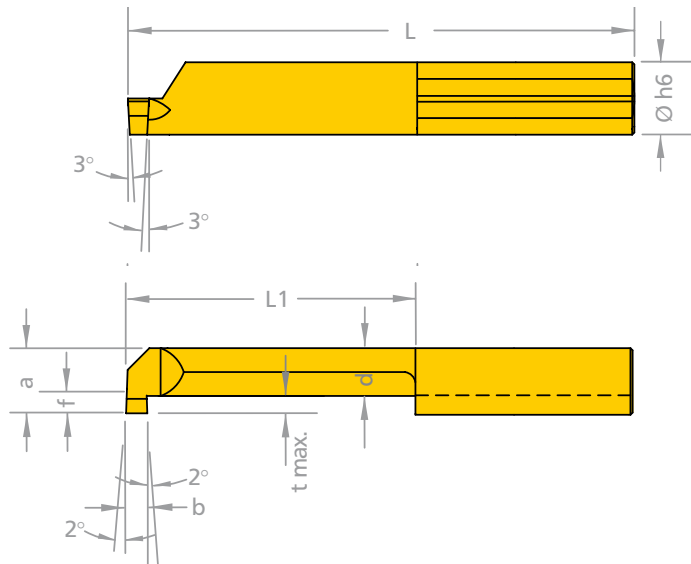
Type 006

ULTRAMINI

Grooving

Bore \varnothing from 6.0 mm
depth of groove up to 1.8 mm
overhang length (L1) up to 7x D

Grooving, boring and profiling
starting at \varnothing 0.2 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



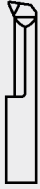
part number										U.S.A. Stock		suitable toolholder type	
	b +0.05	f	d	a	L	L1	t max.	D min.	\varnothing h6	K10F	CN45F		
R/L 006.0100-10	1.0	2.3	3.4	5.3	25	10	1.8	6.0	6.0	○	●	676.xxx / xxx.6	660
R/L 006.0100-15	1.0	2.3	3.4	5.3	30	15	1.8	6.0	6.0	○	●		
R/L 006.0100-22	1.0	2.3	3.4	5.3	37	22	1.8	6.0	6.0	○	●		
R/L 006.0100-25	1.0	2.3	3.4	5.3	40	25	1.8	6.0	6.0	○	●		
R/L 006.0100-30	1.0	2.3	3.4	5.3	45	30	1.8	6.0	6.0	○	●		
R/L 006.0100-35	1.0	2.3	3.4	5.3	50	35	1.8	6.0	6.0	—	○		
R/L 006.0100-42	1.0	2.3	3.4	5.3	57	42	1.8	6.0	6.0	—	○		
R/L 006.0150-10	1.5	2.3	3.4	5.3	25	10	1.8	6.0	6.0	●	●	676.xxx / xxx.6	660
R/L 006.0150-15	1.5	2.3	3.4	5.3	30	15	1.8	6.0	6.0	○	●		
R/L 006.0150-22	1.5	2.3	3.4	5.3	37	22	1.8	6.0	6.0	○	●		
R/L 006.0150-25	1.5	2.3	3.4	5.3	40	25	1.8	6.0	6.0	○	●		
R/L 006.0150-30	1.5	2.3	3.4	5.3	45	30	1.8	6.0	6.0	○	●		
R/L 006.0150-35	1.5	2.3	3.4	5.3	50	35	1.8	6.0	6.0	○	●		
R/L 006.0150-42	1.5	2.3	3.4	5.3	57	42	1.8	6.0	6.0	—	○		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: right hand version and grade
CN45F: R006.0100-10/CN45F



ULTRAMINI

Type 006

Grooving, boring and profiling starting at Ø 0.2 mm

Grooving

Bore Ø from 6.0 mm
depth of groove up to 1.8 mm
overhang length (L1) up to 7x D



part number	b +0.05	f	d	a	L	L1	t max.	D min.	Ø h6	U.S.A. Stock			suitable toolholder type	
										K10F	CN45F	AL41F		
R/L 006.0200-10	2.0	2.3	3.4	5.3	25	10	1.8	6.0	6.0	○	●	—	676.xxx / xxx.6	660
R/L 006.0200-15	2.0	2.3	3.4	5.3	30	15	1.8	6.0	6.0	○	●	—		
R/L 006.0200-22	2.0	2.3	3.4	5.3	37	22	1.8	6.0	6.0	○	●	○		
R/L 006.0200-25	2.0	2.3	3.4	5.3	40	25	1.8	6.0	6.0	○	●	○		
R/L 006.0200-30	2.0	2.3	3.4	5.3	45	30	1.8	6.0	6.0	○	●	—		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

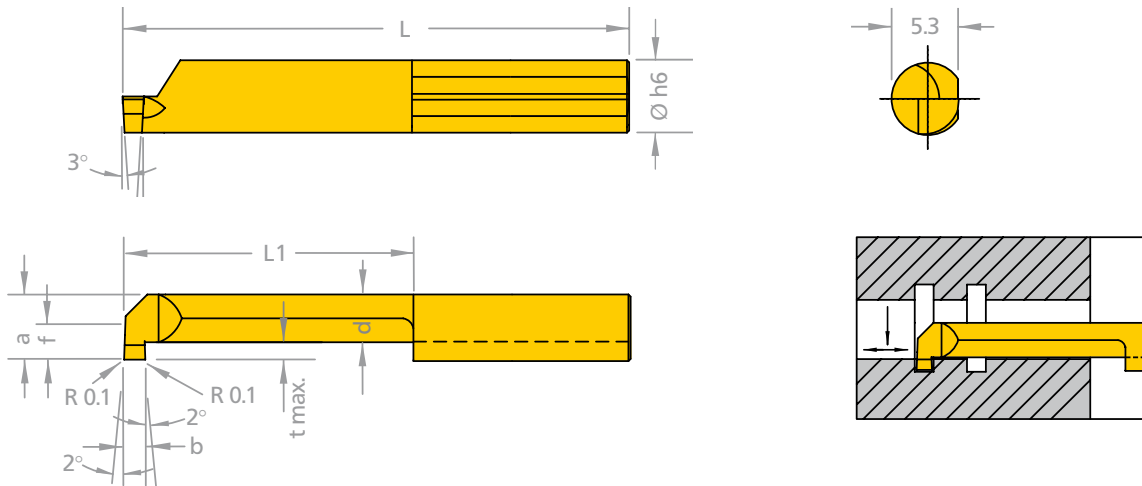
Type 006 M

ULTRAMINI

Grooving with corner-radius

Bore Ø from 6.0 mm
depth of groove up to 1.8 mm

Grooving, boring and profiling
starting at Ø 0.2 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock									AL41F	suitable toolholder type	
	b +0.05	f	d	a	L	L1	t max.	D min.	Ø h6			
R/L 006M0100-10	1.0	2.3	3.4	5.3	25	10	1.8	6.0	6.0	○	676.xxx / xxx.6	660
R/L 006M0100-15	1.0	2.3	3.4	5.3	30	15	1.8	6.0	6.0	○		
R/L 006M0100-22	1.0	2.3	3.4	5.3	37	22	1.8	6.0	6.0	○		
R/L 006M0100-25	1.0	2.3	3.4	5.3	40	25	1.8	6.0	6.0	○		
R/L 006M0100-30	1.0	2.3	3.4	5.3	45	30	1.8	6.0	6.0	○		
R/L 006M0150-10	1.5	2.3	3.4	5.3	25	10	1.8	6.0	6.0	○		
R/L 006M0150-15	1.5	2.3	3.4	5.3	30	15	1.8	6.0	6.0	○		
R/L 006M0150-22	1.5	2.3	3.4	5.3	37	22	1.8	6.0	6.0	○		
R/L 006M0150-25	1.5	2.3	3.4	5.3	40	25	1.8	6.0	6.0	○		
R/L 006M0150-30	1.5	2.3	3.4	5.3	45	30	1.8	6.0	6.0	○		
R/L 006M0200-10	2.0	2.3	3.4	5.3	25	10	1.8	6.0	6.0	○		
R/L 006M0200-15	2.0	2.3	3.4	5.3	30	15	1.8	6.0	6.0	○		
R/L 006M0200-22	2.0	2.3	3.4	5.3	37	22	1.8	6.0	6.0	○		
R/L 006M0200-25	2.0	2.3	3.4	5.3	40	25	1.8	6.0	6.0	○		
R/L 006M0200-30	2.0	2.3	3.4	5.3	45	30	1.8	6.0	6.0	○		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see «grades summary»

Order-example: right hand version and grade
AL41F: R006M0100-10/AL41F

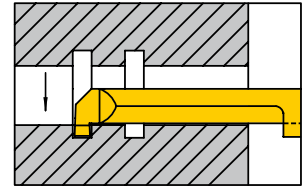
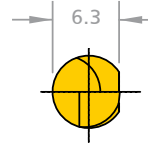
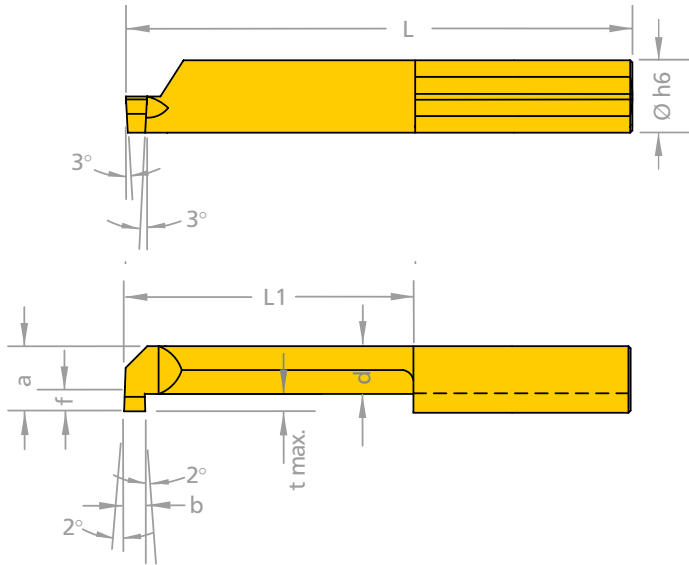
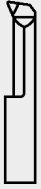
ULTRAMINI

Type 007

Grooving, boring and profiling starting at Ø 0.2 mm

Grooving

Bore Ø from 6.8 mm
depth of groove up to 2.5 mm
overhang length (L1) up to 7x D



Right hand version shown

State right (R) or left (L) version

Dimensions in mm

part number	s	f	d	a	L	L1	t max.	D min.	Ø h6	U.S.A. Stock		suitable toolholder type
										CN45F		
R/L 007.0100-10	1.0	2.8	3.7	6.3	25	10	2.5	6.8	7.0	●		
R/L 007.0100-15	1.0	2.8	3.7	6.3	30	15	2.5	6.8	7.0	●		
R/L 007.0100-22	1.0	2.8	3.7	6.3	37	22	2.5	6.8	7.0	●		
R/L 007.0100-25	1.0	2.8	3.7	6.3	40	25	2.5	6.8	7.0	●		
R/L 007.0100-30	1.0	2.8	3.7	6.3	45	30	2.5	6.8	7.0	●	676.xxx / 687	670 / xxx.7
R/L 007.0100-35	1.0	2.8	3.7	6.3	50	35	2.5	7.0	7.0	○		
R/L 007.0100-40	1.0	2.8	3.7	6.3	55	40	2.5	7.0	7.0	○		
R/L 007.0100-45	1.0	2.8	3.7	6.3	60	45	2.5	7.0	7.0	○		
R/L 007.0100-50	1.0	2.8	3.7	6.3	65	50	2.5	7.0	7.0	●		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version and grade
CN45F: R007.0100-10/CN45F

Type 007

ULTRAMINI

Grooving

Bore Ø from 6.8 mm
depth of groove up to 2.5 mm
overhang length (L1) up to 7x D

Grooving, boring and profiling
starting at Ø 0.2 mm



part number											U.S.A. Stock	suitable toolholder type
	s	f	d	a	L	L1	t max.	D min.	Ø h6	CN45F		
R/L 007.0150-10	1.5	2.8	3.7	6.3	25	10	2.5	6.8	7.0	●	676.xxx / 687	670 / xxx.7
R/L 007.0150-15	1.5	2.8	3.7	6.3	30	15	2.5	6.8	7.0	●		
R/L 007.0150-22	1.5	2.8	3.7	6.3	37	22	2.5	6.8	7.0	●		
R/L 007.0150-25	1.5	2.8	3.7	6.3	40	25	2.5	6.8	7.0	●		
R/L 007.0150-30	1.5	2.8	3.7	6.3	45	30	2.5	6.8	7.0	●		
R/L 007.0150-35	1.5	2.8	3.7	6.3	50	35	2.5	7.0	7.0	○		
R/L 007.0150-40	1.5	2.8	3.7	6.3	55	40	2.5	7.0	7.0	●		
R/L 007.0200-10	2.0	2.8	3.7	6.3	25	10	2.5	6.8	7.0	●		
R/L 007.0200-15	2.0	2.8	3.7	6.3	30	15	2.5	6.8	7.0	●		
R/L 007.0200-22	2.0	2.8	3.7	6.3	37	22	2.5	6.8	7.0	●		
R/L 007.0200-25	2.0	2.8	3.7	6.3	40	25	2.5	6.8	7.0	●		
R/L 007.0200-30	2.0	2.8	3.7	6.3	45	30	2.5	6.8	7.0	●		
R/L 007.0200-35	2.0	2.8	3.7	6.3	50	35	2.5	7.0	7.0	●		



U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

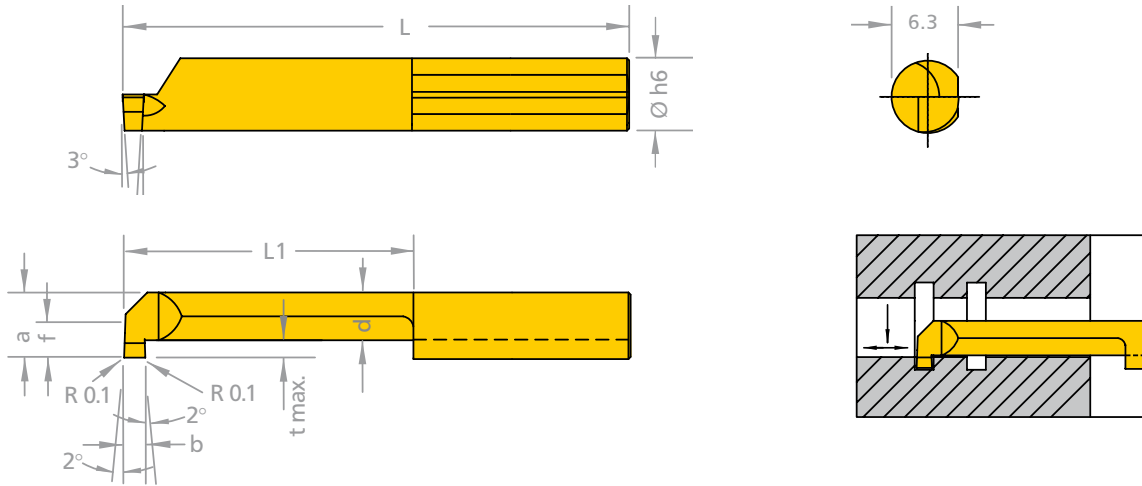
ULTRAMINI

Type 007 M

Grooving, boring and profiling starting at \varnothing 0.2 mm

Grooving with corner-radius

Bore \varnothing from 6.8 mm
depth of groove up to 2.5 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock									AL41F	suitable toolholder type	
	b +0.05	f	d	a	L	L1	t max.	D min.	Ø h6		676.xxx / 687	670 / xxx.7
R/L 007M0100-10	1.0	2.8	3.7	6.3	25	10	2.5	6.8	7.0	○		
R/L 007M0100-15	1.0	2.8	3.7	6.3	30	15	2.5	6.8	7.0	○		
R/L 007M0100-22	1.0	2.8	3.7	6.3	37	22	2.5	6.8	7.0	○		
R/L 007M0100-25	1.0	2.8	3.7	6.3	40	25	2.5	6.8	7.0	○		
R/L 007M0100-30	1.0	2.8	3.7	6.3	45	30	2.5	6.8	7.0	○		
R/L 007M0150-10	1.5	2.8	3.7	6.3	25	10	2.5	6.8	7.0	○		
R/L 007M0150-15	1.5	2.8	3.7	6.3	30	15	2.5	6.8	7.0	○		
R/L 007M0150-22	1.5	2.8	3.7	6.3	37	22	2.5	6.8	7.0	○	676.xxx / 687	670 / xxx.7
R/L 007M0150-25	1.5	2.8	3.7	6.3	40	25	2.5	6.8	7.0	○		
R/L 007M0150-30	1.5	2.8	3.7	6.3	45	30	2.5	6.8	7.0	○		
R/L 007M0200-10	2.0	2.8	3.7	6.3	25	10	2.5	6.8	7.0	○		
R/L 007M0200-15	2.0	2.8	3.7	6.3	30	15	2.5	6.8	7.0	○		
R/L 007M0200-22	2.0	2.8	3.7	6.3	37	22	2.5	6.8	7.0	○		
R/L 007M0200-25	2.0	2.8	3.7	6.3	40	25	2.5	6.8	7.0	○		
R/L 007M0200-30	2.0	2.8	3.7	6.3	45	30	2.5	6.8	7.0	○		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version and grade
AL41F: R007M0100-10/AL41F

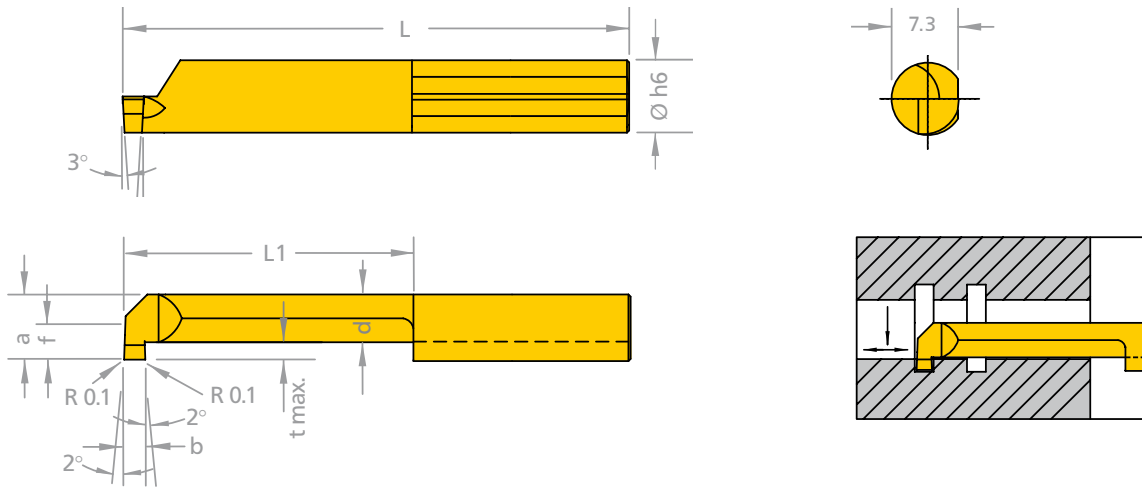
Type 008 M

ULTRAMINI

Grooving with corner-radius

Bore \varnothing from 7.8 mm
depth of groove up to 3.0 mm

Grooving, boring and profiling
starting at \varnothing 0.2 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock									suitable toolholder type		
	b +0.05	f	d	a	L	L1	t max.	D min.	$\varnothing h6$	AL41F		
R/L 008M0100-30	1.0	3.3	4.2	7.3	50	30	3.0	7.8	8.0	○		
R/L 008M0100-40	1.0	3.3	4.2	7.3	60	40	3.0	7.8	8.0	○		
R/L 008M0200-30	2.0	3.3	4.2	7.3	50	30	3.0	7.8	8.0	○	687	680
R/L 008M0200-40	2.0	3.3	4.2	7.3	60	40	3.0	7.8	8.0	○		
R/L 008M0250-30	2.5	3.3	4.2	7.3	50	30	3.0	7.8	8.0	○		
R/L 008M0250-40	2.5	3.3	4.2	7.3	60	40	3.0	7.8	8.0	○		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version
and grade
AL41F: R008M0100-30/AL41F

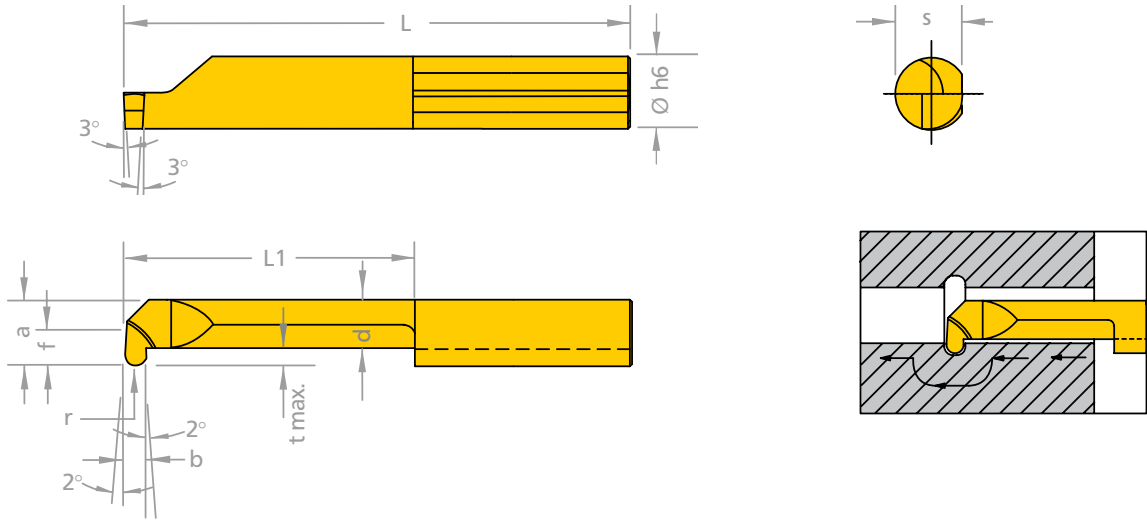
ULTRAMINI

Type Full Radius

Grooving, boring and profiling starting at Ø 0.2 mm

Type full radius grooving and copying

Bore Ø from 4.0 mm full radius 0.5-1.0 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	s	b +0.05	r	f	d	a	L	L1	t max.	D min.	Ø h6	CN45F	suitable toolholder type	
													U.S.A. Stock	
R/L 004-0.50-16	3.5	1.0	0.5	1.5	2.4	3.5	30	16	0.8	4.0	4.0	●		xxx.4
R/L 005-0.50-20	4.4	1.0	0.5	1.9	3.3	4.4	35	20	1.0	5.0	5.0	●	645.xxx	xxx.5
R/L 005-0.75-20	4.4	1.5	0.75	1.9	3.3	4.4	35	20	1.0	5.0	5.0	●		xxx.5
R/L 005-1.00-20	4.4	2.0	1.0	1.9	3.3	4.4	35	20	1.0	5.0	5.0	●		xxx.5
R/L 006-0.50-25	5.3	1.0	0.5	2.3	3.4	5.3	40	25	1.8	6.0	6.0	●	676.xxx	660 / xxx.6
R/L 006-0.75-25	5.3	1.5	0.75	2.3	3.4	5.3	40	25	1.8	6.0	6.0	●		660 / xxx.6
R/L 006-1.00-25	5.3	2.0	1.0	2.3	3.4	5.3	40	25	1.8	6.0	6.0	●		660 / xxx.6
R/L 007-0.50-30	6.3	1.0	0.5	2.8	3.7	6.3	45	30	2.5	6.8	7.0	●	687 / 670 / xxx.7	687 / 670 / xxx.7
R/L 007-0.75-30	6.3	1.5	0.75	2.8	3.7	6.3	45	30	2.5	6.8	7.0	●		687 / 670 / xxx.7
R/L 007-1.00-30	6.3	2.0	1.0	2.8	3.7	6.3	45	30	2.5	6.8	7.0	●		687 / 670 / xxx.7

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version and grade
CN45F: R004-0.50-16/CN45F

Impressions

ULTRAMINI

Grooving, boring and profiling
starting at \varnothing 0.2 mm



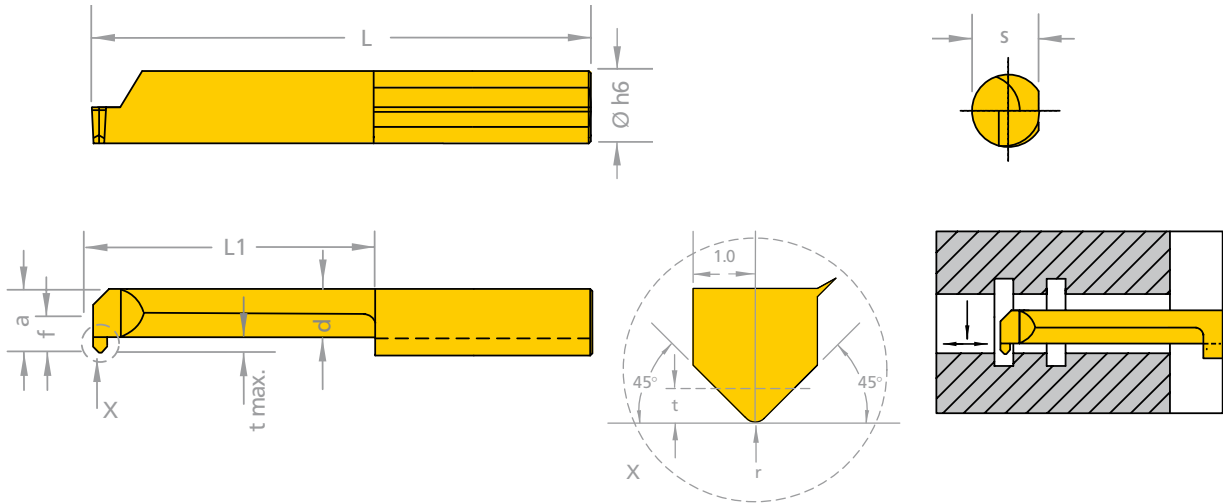
ULTRAMINI

type 060

Grooving, boring and profiling starting at Ø 0.2 mm

Profiling and chamfering

Bore Ø from 5.0 mm



View X enlarged
Right hand version shown
State right (R) or left (L) version
Dimensions in mm



part number	U.S.A. Stock										suitable toolholder type	
	s	r	f	d	a	L	L1	t max.	Ø h6	D min.		CN45F
R/L 060.5-15	4.4	0.2	1.9	3.3	4.4	30	15	0.7	5.0	5.0	●	645.xxx / xxx.5
R/L 060.5-20	4.4	0.2	1.9	3.3	4.4	35	20	0.7	5.0	5.0	●	
R/L 060.6-20	5.3	0.2	2.3	3.4	5.3	35	20	0.7	6.0	6.0	○	676.xxx
R/L 060.6-25	5.3	0.2	2.3	3.4	5.3	40	25	0.7	6.0	6.0	○	
R/L 060.7-20	6.3	0.2	2.8	3.8	6.3	35	20	0.7	6.8	7.0	●	687
R/L 060.7-40	6.3	0.2	2.8	3.8	6.3	55	40	0.7	6.8	7.0	○	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version and grade
CN45F: R060.5-15/CN45F

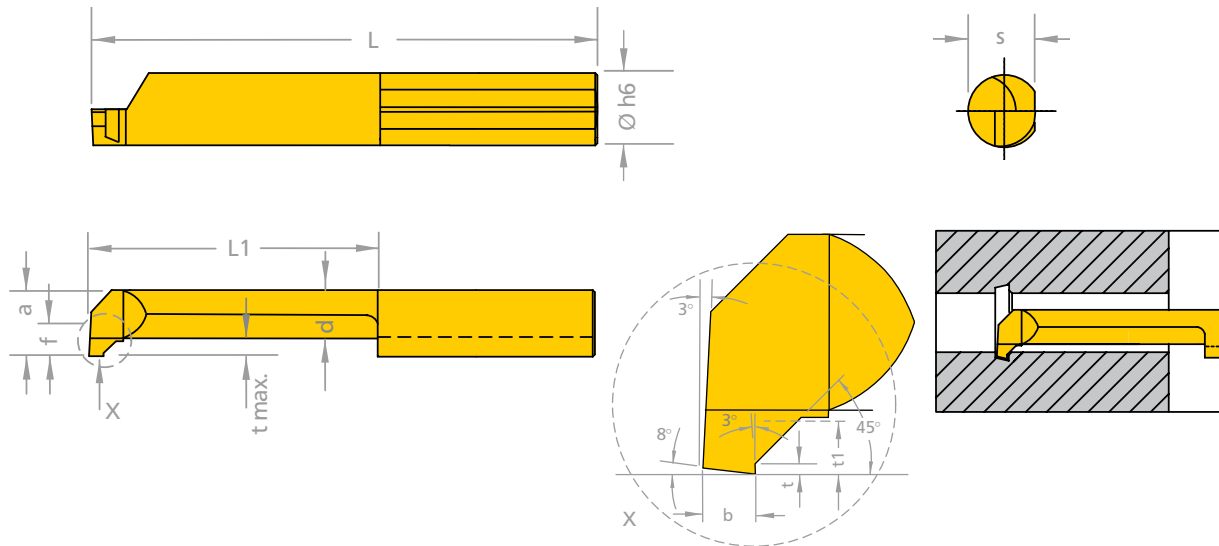
type 070

ULTRAMINI

Pregrooving and chamfering

Bore Ø from 4.0 mm

Grooving, boring and profiling starting at Ø 0.2 mm



View X enlarged
Right hand version shown
State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock											suitable toolholder type	
	s	b	f	d	a	L	L1	t	t max.	D min.	Ø h6		CN45F
R/L 070.4-10	3.5	1.0	1.5	2.4	3.5	25	10	0.2	0.8	4.0	4.0	○	xxx.4
R/L 070.4-16	3.5	1.0	1.5	2.4	3.5	30	16	0.2	0.8	4.0	4.0	○	
R/L 070.5-15	4.4	1.0	1.9	3.3	4.4	30	15	0.2	1.0	5.0	5.0	◐	645.xxx xxx.5
R/L 070.5-20	4.4	1.0	1.9	3.3	4.4	35	20	0.2	1.0	5.0	5.0	◑	
R/L 070.5-30	4.4	1.0	1.9	3.3	4.4	45	30	0.2	1.0	5.0	5.0	○	
R/L 070.6-30	5.3	1.0	2.3	4.2	5.3	45	30	0.2	1.0	6.0	6.0	○	676.xxx 660 / xxx.6
R/L 070.6-42	5.3	1.0	2.3	4.2	5.3	57	42	0.2	1.0	6.0	6.0	○	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version and grade
CN45F: R070.4-10/CN45F

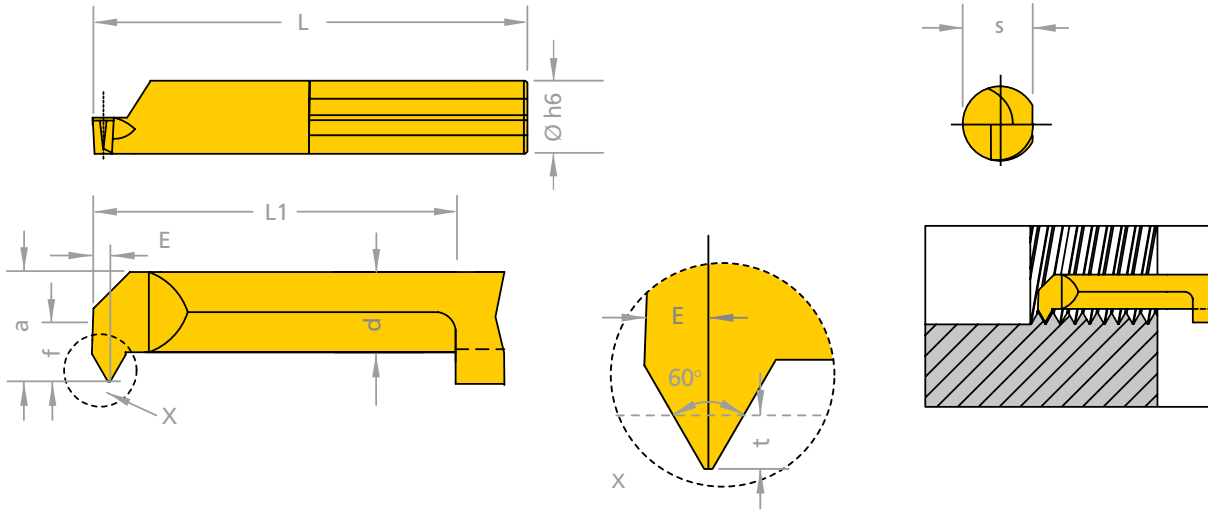
ULTRAMINI

Type Metric ISO-Standard Thread

Grooving, boring and profiling starting at Ø 0.2 mm

Metric ISO-standard thread partial profile internal 60°

Bore Ø from 2.4 mm pitch P = 0.5-1.5 mm



View X enlarged
Right hand version shown
state right (R) or left (L) version

Dimensions in mm



part number	pitch P	t	s	E	f	d	a	L	L1	D min.	Ø h6	U.S.A. Stock		suitable toolholder type	
												CN45F	AL41F		
R/L 003.0105-8	0.5	0.27	3.5	0.33	0.3	1.8	2.3	22	8	2.4	4.0	—	●	645.xxx	xxx.4
R/L 004.0408-15	0.8	0.43	3.5	0.45	1.75	2.4	3.5	30	15	4.0	4.0	—	○		xxx.5
R/L 005.0510-15	1.0	0.55	4.4	0.55	1.9	3.3	4.4	30	15	4.8	5.0	●	○	676.xxx	660 / xxx.6
R/L 005.0510-20	1.0	0.55	4.4	0.55	1.9	3.3	4.4	35	20	4.8	5.0	●	○		
R/L 006.0612-15	1.25	0.68	5.3	0.65	2.3	3.4	5.3	30	15	6.0	6.0	●	○		
R/L 006.0612-22	1.25	0.68	5.3	0.65	2.3	3.4	5.3	37	22	6.0	6.0	●	—		
R/L 006.0815-15	1.5	0.81	5.3	0.75	2.3	3.4	5.3	30	15	6.0	6.0	●	○	687 / 670 / xxx.7	
R/L 006.0815-22	1.5	0.81	5.3	0.75	2.3	3.4	5.3	37	22	6.0	6.0	●	—		
R/L 007.0815-15	1.5	0.81	6.3	0.75	2.7	3.8	6.3	30	15	7.0	7.0	●	○		
R/L 007.0815-25	1.5	0.81	6.3	0.75	2.7	3.8	6.3	40	25	7.0	7.0	●	○		

U.S.A. Stock

- = Both Right & Left Hand in Stock
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- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version and grade
CN45F: R003.0105-8/CN45F

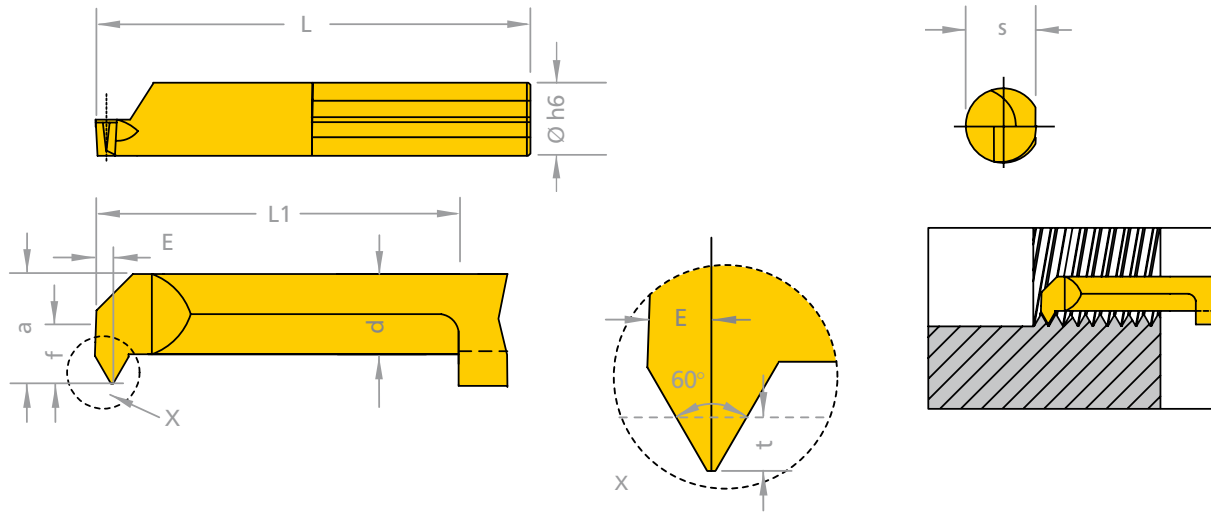
Type Metric ISO-Fine Thread

ULTRAMINI

Metric ISO-fine thread
partial profile internal 60°

Bore Ø from 3.2 mm
pitch P = 0.5-1.0 mm

Grooving, boring and profiling
starting at Ø 0.2 mm



View X enlarged
Right hand version shown
state right (R) or left (L) version

Dimensions in mm



part number	pitch P	t	s	E	f	d	a	L	L1	D min.	Ø h6	U.S.A. Stock		suitable toolholder type
												CN45F	AL41F	
R/L 004.0105-10	0.5	0.27	3.5	0.44	1.0	2.3	3.0	24	10	3.2	4.0	—	●	xxx.4
R/L 004.0205-15	0.5	0.27	3.5	0.35	1.5	2.4	3.5	30	15	4.0	4.0	●	○	
R/L 005.0205-15	0.5	0.27	4.4	0.35	1.9	3.3	4.4	30	15	5.0	5.0	●	○	645.xxx
R/L 005.0205-20	0.5	0.27	4.4	0.35	1.9	3.3	4.4	35	20	5.0	5.0	●	—	
R/L 005.0407-15	0.75	0.40	4.4	0.45	1.9	3.3	4.4	30	15	5.0	5.0	●	○	676.xxx
R/L 005.0407-20	0.75	0.40	4.4	0.45	1.9	3.3	4.4	35	20	5.0	5.0	●	—	
R/L 006.0510-15	1.0	0.55	5.3	0.55	2.3	3.4	5.3	30	15	6.0	6.0	●	○	676.xxx
R/L 006.0510-22	1.0	0.55	5.3	0.55	2.3	3.4	5.3	37	22	6.0	6.0	●	○	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version
and grade
CN45F: R004.0105-10/CN45F

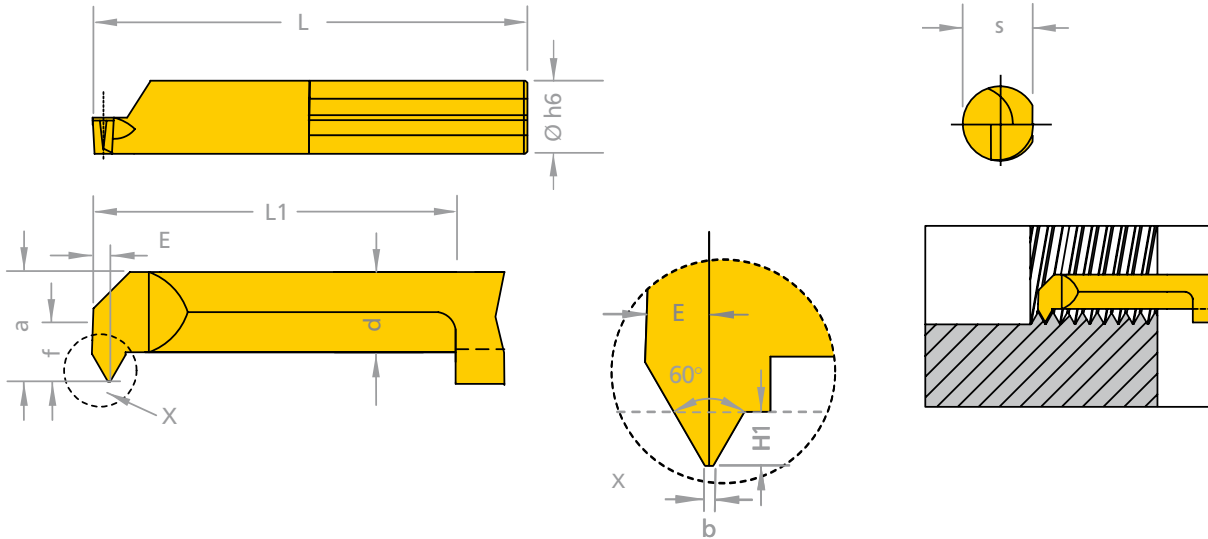
ULTRAMINI

Type Metric ISO-Standard Thread

Grooving, boring and profiling starting at Ø 0.2 mm

Metric ISO-standard thread full profile internal 60°

Bore Ø from 4.8 mm pitch P = 0.8 - 1.5 mm



View X enlarged
Right hand version shown
state right (R) or left (L) version

Dimensions in mm



part number	pitch P											U.S.A. Stock		suitable toolholder type	
		b	H1	s	E	f	d	a	L	L1	D min.	Ø h6	AL41F		
R/L 105.0408-15	0.8	0.10	0.43	4.4	0.5	1.9	3.3	4.4	30	15	4.8	5.0	○	645.xxx / xxx.5	
R/L 105.0510-15	1.0	0.12	0.54	4.4	0.55	1.9	3.3	4.4	30	15	4.8	5.0	◐		
R/L 106.0612-15	1.25	0.15	0.67	5.3	0.65	2.3	3.4	5.3	30	15	6.0	6.0	○	676.xxx	660 / xxx.6
R/L 106.0815-15	1.5	0.18	0.81	5.3	0.75	2.3	3.4	5.3	30	15	6.0	6.0	◐		
R/L 107.0815-15	1.5	0.18	0.81	6.3	0.75	2.8	3.8	6.3	30	15	7.0	7.0	◐	687	670 / xxx.7

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
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- ◑ = Right Hand in Stock

Carbide grades p. 92 see grades summary

Order-example: right hand version and grade
AL41F: R105.0408-15/AL41F

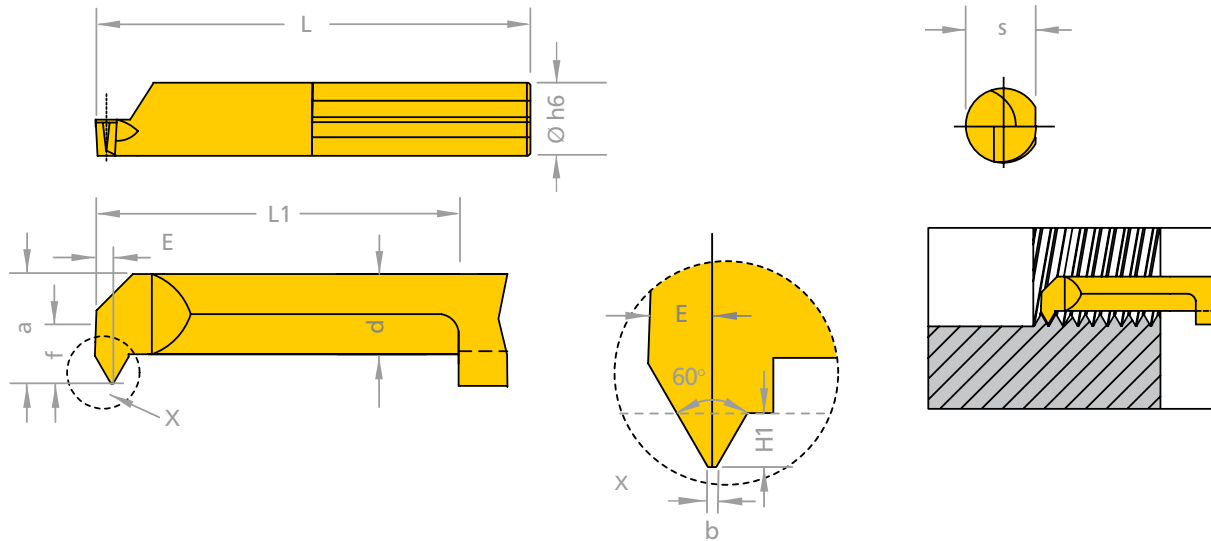
Type Metric ISO-Fine Thread

ULTRAMINI

Metric ISO-fine thread
full profile internal 60°

Bore Ø from 4.0 mm
pitch P = 0.5 - 1.0 mm

Grooving, boring and profiling
starting at Ø 0.2 mm



View X enlarged
Right hand version shown
state right (R) or left (L) version

Dimensions in mm



part number	pitch P	U.S.A. Stock										suitable toolholder type			
		b	H1	s	E	f	d	a	L	L1	D min.		Ø h6	AL41F	
R/L 104.0205-15	0.5	0.06	0.27	3.5	0.35	1.5	2.4	3.5	30	15	4.0	4.0	○	645.xxx	xxx.4
R/L 105.0205-15	0.5	0.06	0.27	4.4	0.35	1.9	3.3	4.4	30	15	5.0	5.0	◐		xxx.5
R/L 105.0407-15	0.75	0.09	0.40	4.4	0.45	1.9	3.3	4.4	30	15	5.0	5.0	◑	676.xxx	660 / xxx.6
R/L 106.0510-15	1.0	0.12	0.54	5.3	0.55	2.3	3.4	5.3	30	15	6.0	6.0	◒		

U.S.A. Stock

- ◐ = Both Right & Left Hand in Stock
- = Express Delivery
- ◑ = Left Hand in Stock
- ◒ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version
and grade
AL41F: R104.0205-15/AL41F

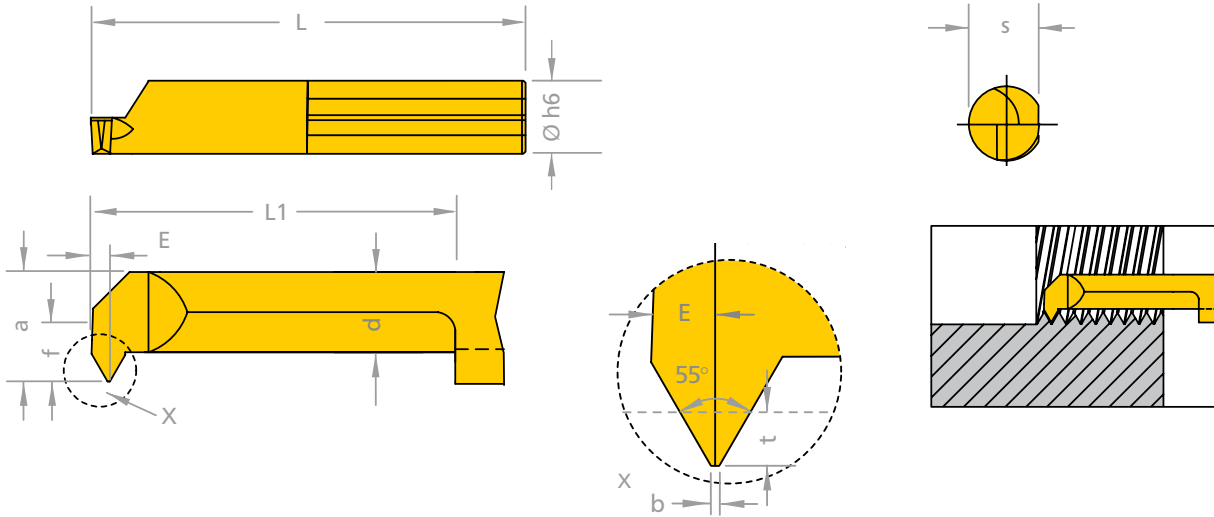
ULTRAMINI

Type Metric ISO-Whitworth Thread

Grooving, boring and profiling starting at Ø 0.2 mm

Metric ISO-whitworth thread partial profile internal 55°

Bore Ø from 4.8 mm



View X enlarged
Right hand version shown
State right (R) or left (L) version
Dimensions in mm



part number	TPI*	t	s	b	E	f	d	a	L	L1	D min.	Ø h6	U.S.A. Stock		suitable toolholder type	
													CN45F			
R/L 005.5548-15	48-24	0.40	4.4	0.06	0.45	1.9	3.3	4.4	30	15	4.8	5.0	●	645.xxx	xxx.5	
R/L 006.5548-15	48-24	0.40	5.3	0.06	0.45	2.3	3.4	5.3	30	15	6.0	6.0	●	676.xxx	660 /xxx.6	
R/L 006.5524-15	24-16	0.81	5.3	0.12	0.75	2.3	3.4	5.3	30	15	6.0	6.0	●		670 /xxx.7	
R/L 007.5524-15	24-16	0.81	6.3	0.12	0.75	2.8	3.8	6.3	30	15	7.0	7.0	●			

*: TPI = threads per inch

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version and grade
CN45F: R005.5548-15/CN45F

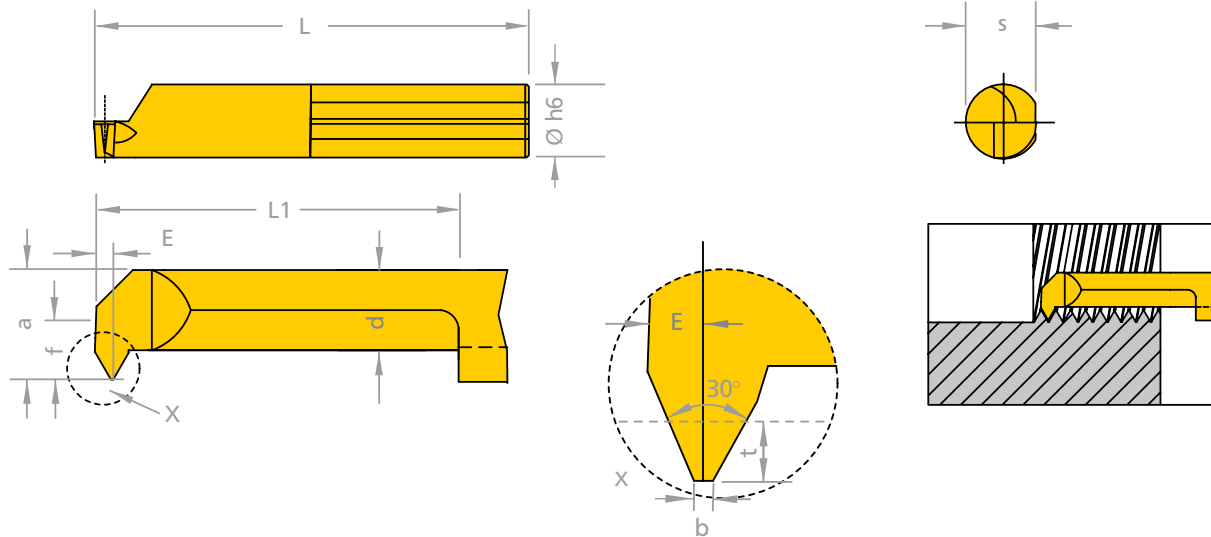
Type Trapezoidal Thread

ULTRAMINI

Trapezoidal thread
partial profile internal 30°

Bore Ø from 7.0 mm
pitch P = 2.0 - 3.0 mm

Grooving, boring and profiling
starting at Ø 0.2 mm



View X enlarged
Right hand version shown
State right (R) or left (L) version



Dimensions in mm



part number	pitch P	b	t	s	E	f	d	a	L	L1	D min.	Ø h6	U.S.A. Stock		suitable toolholder type	
													AL41F			
R/L 007.1220-22	2.0	0.6	1.25	6.3	0.75	2.8	3.8	6.3	37	22	7.0	7.0	○		676.xxx / 687	670 / xxx.7
R/L 007.1220-30	2.0	0.6	1.25	6.3	0.75	2.8	3.8	6.3	45	30	7.0	7.0	○			
R/L 007.1730-22	3.0	1.0	1.75	6.3	1.1	2.8	3.8	6.3	37	22	7.0	7.0	○		676.xxx / 687	670 / xxx.7
R/L 007.1730-30	3.0	1.0	1.75	6.3	1.1	2.8	3.8	6.3	45	30	7.0	7.0	○			

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version
and grade
AL41F: R007.xxxx-20/AL41F

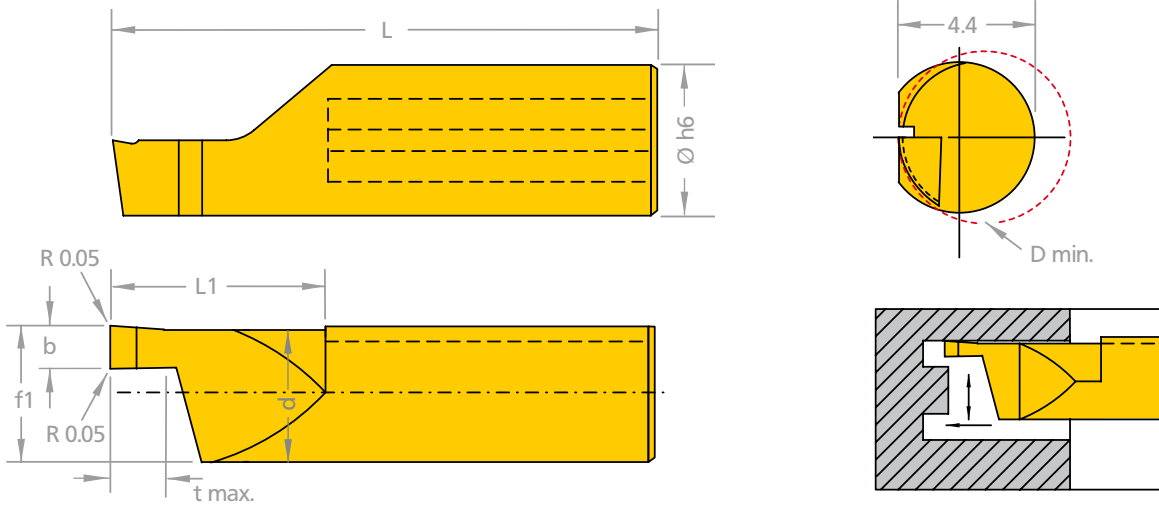
ULTRAMINI

Type 510 M

Grooving, boring and profiling starting at $\varnothing 0.2$ mm

Face grooving internal with corner-radius

From outer groove $\varnothing 5.0$ mm depth of groove up to 4.0 mm width of groove up to 2.0 mm



Left hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock									suitable toolholder type
	b +0.05	f1	d	L	L1	t max.	D min.	Ø h6	AL41F	
R/L 510M1008-10	1.0	4.3	4.0	26	11	2.0	5.0	5.0	○	645.xxx / xxx.5
R/L 510M1508-10	1.5	4.3	4.0	26	11	3.0	5.0	5.0	○	
R/L 510M2008-10	2.0	4.3	4.0	26	11	4.0	5.0	5.0	○	
R/L 510M1008-20	1.0	4.3	4.0	35	20	2.0	5.0	5.0	○	
R/L 510M1508-20	1.5	4.3	4.0	35	20	3.0	5.0	5.0	○	
R/L 510M2008-20	2.0	4.3	4.0	35	20	4.0	5.0	5.0	○	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version and grade
AL41F: R510M1008-10/AL41F

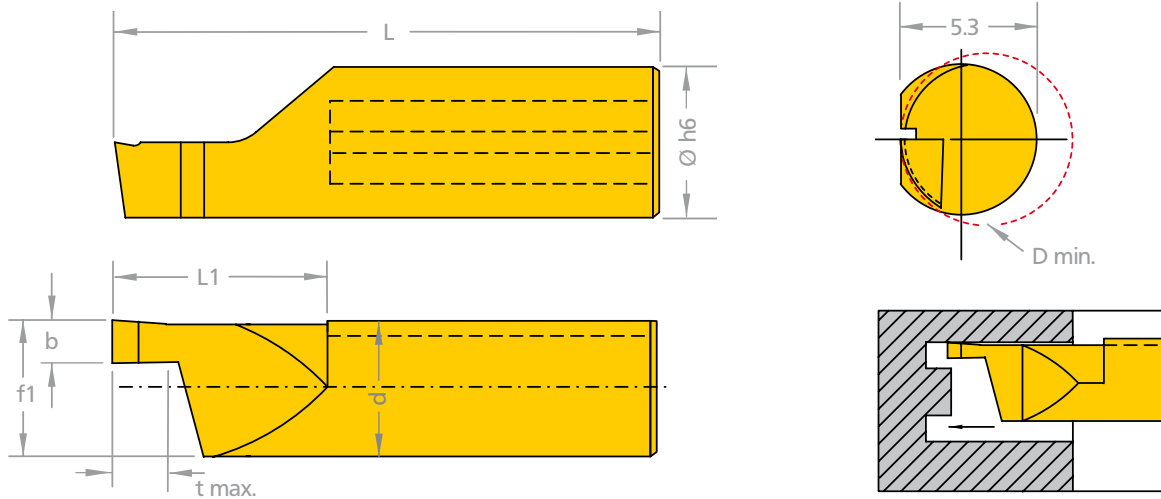
Type 610

ULTRAMINI

Face grooving internal

From outer groove \varnothing 6.0 mm
 Depth of groove up to 3.5 mm
 Width of groove up to 3.0 mm

Grooving, boring and profiling
 starting at \varnothing 0.2 mm



Left hand version shown
 State right (R) or left (L) version
 Dimensions in mm



part number	b +0.05	f1	d	L	L1	t max.	D min.	Ø h6	U.S.A. Stock		suitable toolholder type	
									CN45F	AL41F		
R/L 610.1008-10	1.0	5.2	4.9	26	11	1.5	6.0	6.0	●	○		
R/L 610.1508-10	1.5	5.2	4.9	26	11	2.5	6.0	6.0	○	○		
R/L 610.2008-10	2.0	5.2	4.9	26	11	3.0	6.0	6.0	○	○		
R/L 610.2508-10	2.5	5.2	4.9	26	11	3.5	6.0	6.0	○	○		
R/L 610.3008-10	3.0	5.2	4.9	26	11	3.5	6.0	6.0	○	○		
R/L 610.1008-20	1.0	5.2	4.9	35	20	1.5	6.0	6.0	○	○	676.xxx / xxx.6	660
R/L 610.1508-20	1.5	5.2	4.9	35	20	2.5	6.0	6.0	○	○		
R/L 610.2008-20	2.0	5.2	4.9	35	20	3.0	6.0	6.0	○	○		
R/L 610.2508-20	2.5	5.2	4.9	35	20	3.5	6.0	6.0	○	○		
R/L 610.3008-20	3.0	5.2	4.9	35	20	3.5	6.0	6.0	○	○		
R/L 610.1008-30	1.0	5.2	4.9	45	30	1.5	6.0	6.0	○	○		
R/L 610.1508-30	1.5	5.2	4.9	45	30	2.5	6.0	6.0	○	○		
R/L 610.2008-30	2.0	5.2	4.9	45	30	3.0	6.0	6.0	○	○		
R/L 610.2508-30	2.5	5.2	4.9	45	30	3.5	6.0	6.0	○	○		
R/L 610.3008-30	3.0	5.2	4.9	45	30	3.5	6.0	6.0	○	○		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version
 and grade
 CN45F: R610.1008-10/CN45F

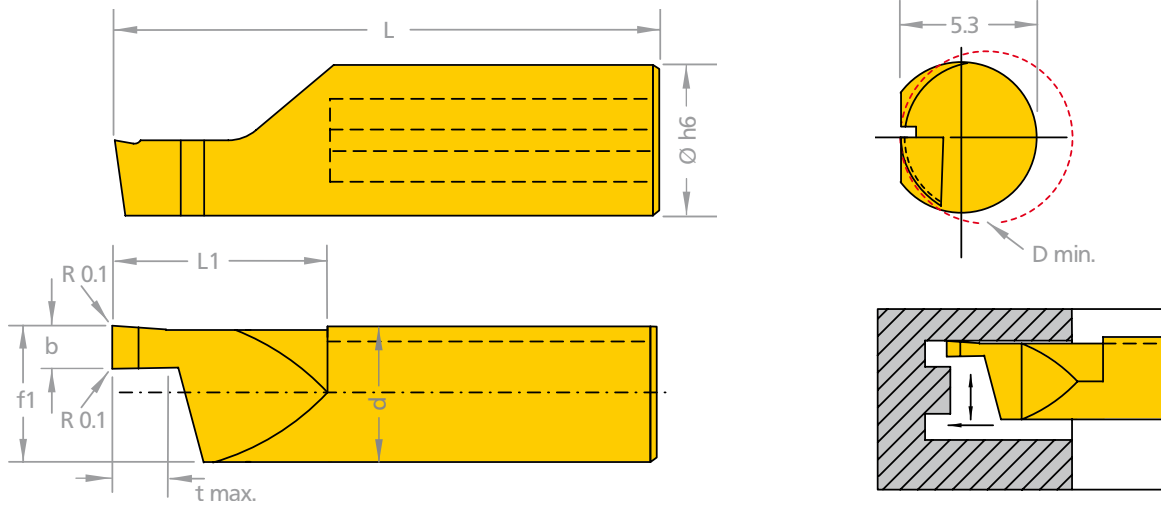
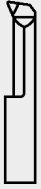
ULTRAMINI

type 610 M

Grooving, boring and profiling starting at $\varnothing 0.2$ mm

Face grooving internal with corner-radius

From outer groove $\varnothing 6.0$ mm
Depth of groove up to 6.0 mm
Width of groove up to 3.0 mm



Left hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock								AL41F	suitable toolholder type	
	b +0.05	f1	d	L	L1	t max.	D min.	\varnothing h6		676.xxx / xxx.6	660
R/L 610M1008-10	1.0	5.2	4.9	26	11	2.0	6.0	6.0	○		
R/L 610M1508-10	1.5	5.2	4.9	26	11	3.0	6.0	6.0	○		
R/L 610M2008-10	2.0	5.2	4.9	26	11	4.0	6.0	6.0	○		
R/L 610M2508-10	2.5	5.2	4.9	26	11	5.0	6.0	6.0	○		
R/L 610M3008-10	3.0	5.2	4.9	26	11	6.0	6.0	6.0	○		
R/L 610M1008-20	1.0	5.2	4.9	35	20	2.0	6.0	6.0	○		
R/L 610M1508-20	1.5	5.2	4.9	35	20	3.0	6.0	6.0	○		
R/L 610M2008-20	2.0	5.2	4.9	35	20	4.0	6.0	6.0	○		
R/L 610M2508-20	2.5	5.2	4.9	35	20	5.0	6.0	6.0	○		
R/L 610M3008-20	3.0	5.2	4.9	35	20	6.0	6.0	6.0	○		
R/L 610M1008-30	1.0	5.2	4.9	45	30	2.0	6.0	6.0	○		
R/L 610M1508-30	1.5	5.2	4.9	45	30	3.0	6.0	6.0	○		
R/L 610M2008-30	2.0	5.2	4.9	45	30	4.0	6.0	6.0	○		
R/L 610M2508-30	2.5	5.2	4.9	45	30	5.0	6.0	6.0	○		
R/L 610M3008-30	3.0	5.2	4.9	45	30	6.0	6.0	6.0	○		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version and grade
AL41F: R610M1008-10/AL41F

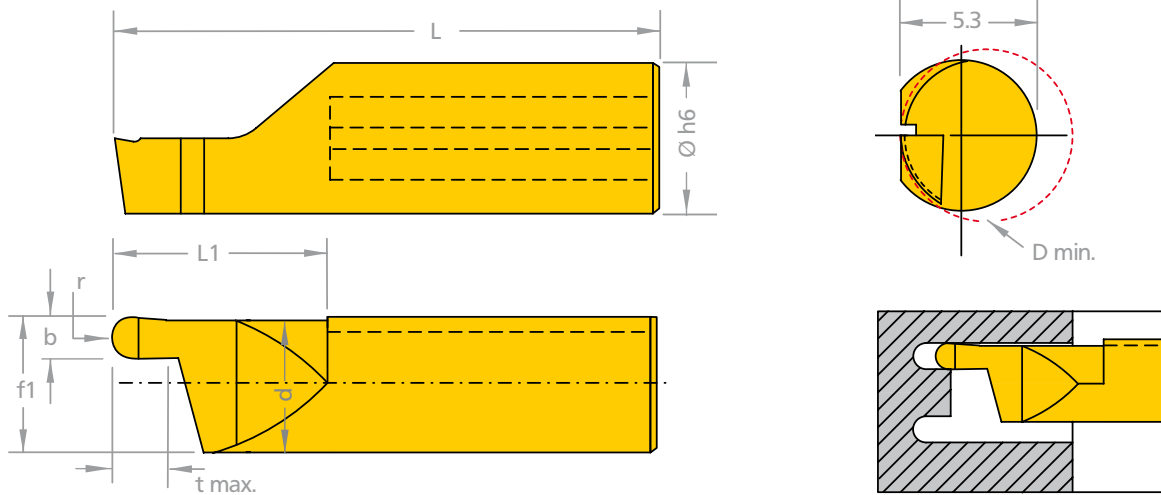
Type 610

ULTRAMINI

Face grooving internal
full radius

From outer groove \varnothing 6.0 mm
Depth of groove up to 6.0 mm
Width of groove up to 3.0 mm

Grooving, boring and profiling
starting at \varnothing 0.2 mm



Left hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock										suitable toolholder type	
	b +0.05	f1	r	d	L	L1	t max.	D min.	\varnothing h6	AL41F		
R/L 610.1005-10	1.0	5.2	0.5	4.9	26	11	2.0	6.0	6.0	○	676.xxx / xxx.6	660
R/L 610.1608-10	1.6	5.2	0.8	4.9	26	11	3.0	6.0	6.0	○		
R/L 610.2010-10	2.0	5.2	1.0	4.9	26	11	4.0	6.0	6.0	○		
R/L 610.2512-10	2.5	5.2	1.25	4.9	26	11	5.0	6.0	6.0	○		
R/L 610.3015-10	3.0	5.2	1.5	4.9	26	11	6.0	6.0	6.0	○		
R/L 610.1005-20	1.0	5.2	0.5	4.9	35	20	2.0	6.0	6.0	○		
R/L 610.1608-20	1.6	5.2	0.8	4.9	35	20	3.0	6.0	6.0	○		
R/L 610.2010-20	2.0	5.2	1.0	4.9	35	20	4.0	6.0	6.0	○		
R/L 610.2512-20	2.5	5.2	1.25	4.9	35	20	5.0	6.0	6.0	○		
R/L 610.3015-20	3.0	5.2	1.5	4.9	35	20	6.0	6.0	6.0	○		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version
and grade
AL41F: R610.1005-10/AL41F

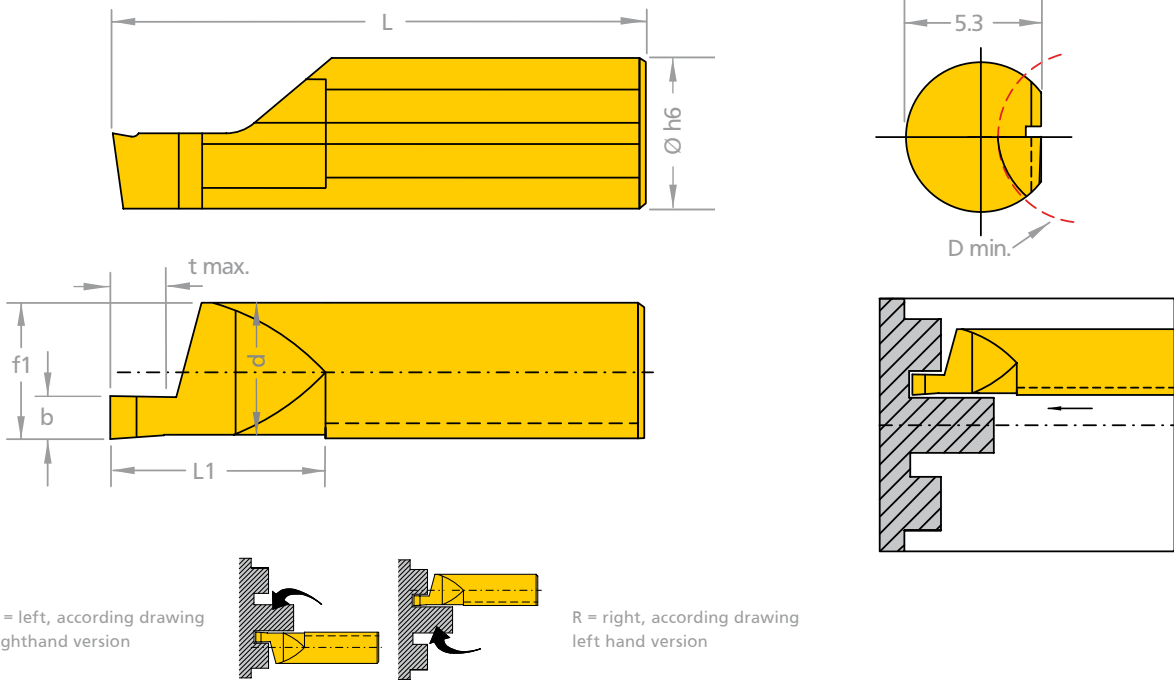
ULTRAMINI

Type 620

Grooving, boring and profiling starting at \varnothing 0.2 mm

Face grooving in pivots

From outer groove \varnothing 6.0/8.0 mm
Depth of groove up to 6.0 mm
Width of groove up to 3.0 mm



L = left, according drawing righthand version

R = right, according drawing left hand version

Left hand version shown
State right (R) or left (L) version
Dimensions in mm



part number	U.S.A. Stock									suitable toolholder type	
	b +0.05	f1	d	L	L1	t max.	D min.	Ø h6	AL41F		
R/L 620.1006-20	1.0	5.2	4.9	35	20	2.0	6.0	6.0	●	676.xxx / xxx.6	660
R/L 620.1506-20	1.5	5.2	4.9	35	20	3.0	6.0	6.0	●		
R/L 620.2006-20	2.0	5.2	4.9	35	20	4.0	6.0	6.0	●		
R/L 620.2506-20	2.5	5.2	4.9	35	20	5.0	6.0	6.0	●		
R/L 620.3006-20	3.0	5.2	4.9	35	20	6.0	6.0	6.0	●		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 92 see grades summary

Order-example: right hand version and grade
AL41F: R620.1006-20/AL41F

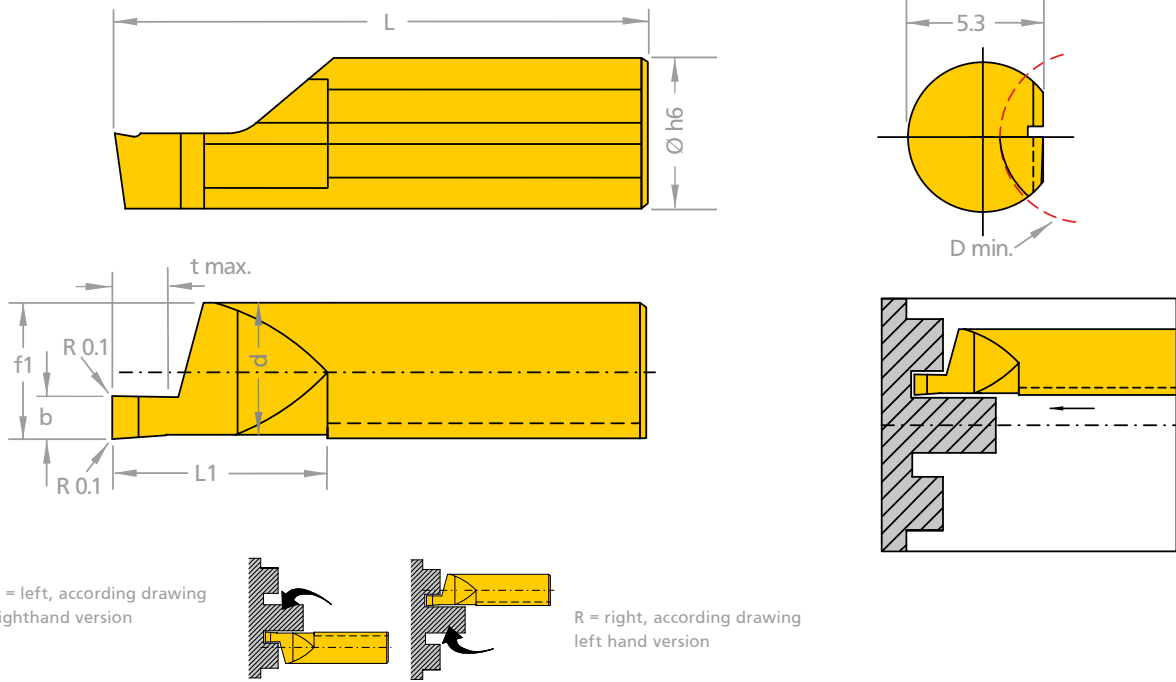
Type 620 M

ULTRAMINI

Face grooving
in pivots with corner-radius

From outer groove \varnothing 6.0 mm
Depth of groove up to 6.0 mm
Width of groove up to 3.0 mm

Grooving, boring and profiling
starting at \varnothing 0.2 mm



Left hand version shown
State right (R) or left (L) version
Dimensions in mm



part number	U.S.A. Stock									suitable toolholder type	
	b +0.05	f	d	L	L1	t max.	D min.	Ø h6	AL41F		
R/L 620M1006-20	1.0	5.2	4.9	35	20	2.0	6.0	6.0	○		
R/L 620M1506-20	1.5	5.2	4.9	35	20	3.0	6.0	6.0	○		
R/L 620M2006-20	2.0	5.2	4.9	35	20	4.0	6.0	6.0	○	676.xxx /	660
R/L 620M2506-20	2.5	5.2	4.9	35	20	5.0	6.0	6.0	○	xxx.6	
R/L 620M3006-20	3.0	5.2	4.9	35	20	6.0	6.0	6.0	○		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version
and grade
AL41F: R620M1006-20/AL41F

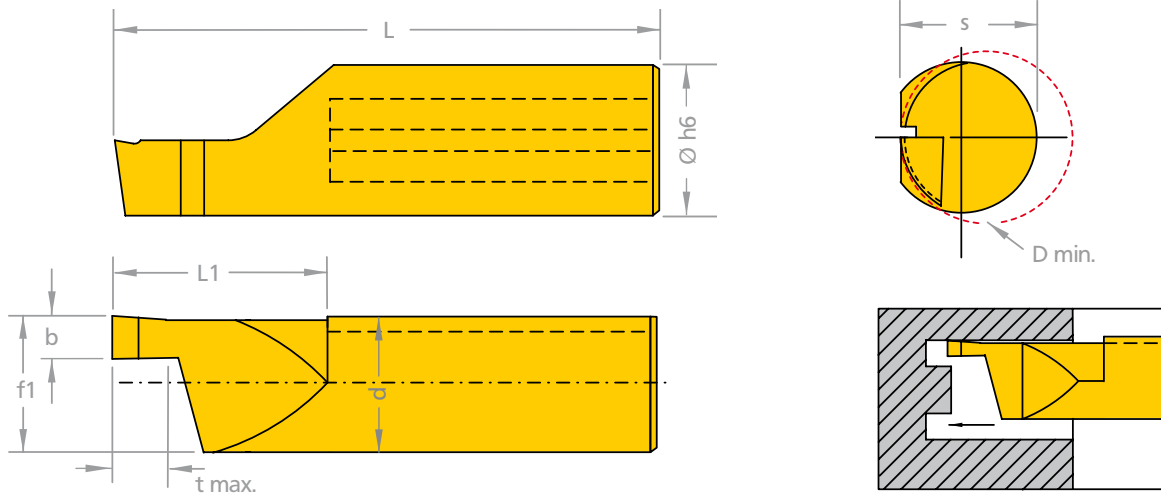
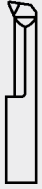
ULTRAMINI

Type 010

Grooving, boring and profiling starting at \varnothing 0.2 mm

Face grooving internal

From outer groove \varnothing 6.0 mm
Depth of groove up to 3.5 mm
Width of groove up to 3.0 mm



Left hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock									suitable toolholder type				
	s	b +0.05	f1	d	L	L1	t max.	D min.	\varnothing h6	CN45F	AL41F			
R/L 010.1006-10	5.3	1.0	5.2	4.9	26	11	1.5	6.0	6.0	●	●			660 / xxx.6
R/L 010.1506-10	5.3	1.5	5.2	4.9	26	11	2.0	6.0	6.0	●	●			
R/L 010.1008-10	6.3	1.0	5.9	5.6	26	11	1.5	8.0	7.0	●	●			
R/L 010.1508-10	6.3	1.5	5.9	5.6	26	11	2.5	8.0	7.0	●	●			
R/L 010.2008-10	6.3	2.0	5.9	5.6	26	11	3.0	8.0	7.0	●	●			
R/L 010.2508-10	6.3	2.5	5.9	5.6	26	11	3.5	8.0	7.0	●	●			
R/L 010.3008-10	6.3	3.0	5.9	5.6	26	11	3.5	8.0	7.0	●	●			
R/L 010.1008-20	6.3	1.0	5.9	5.6	35	20	1.5	8.0	7.0	○	●			
R/L 010.1508-20	6.3	1.5	5.9	5.6	35	20	2.5	8.0	7.0	○	●			
R/L 010.2008-20	6.3	2.0	5.9	5.6	35	20	3.0	8.0	7.0	●	●			
R/L 010.2508-20	6.3	2.5	5.9	5.6	35	20	3.5	8.0	7.0	○	●			
R/L 010.3008-20	6.3	3.0	5.9	5.6	35	20	3.5	8.0	7.0	●	●			

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version and grade
CN45F: R010.1008-10/CN45F

Type 010

ULTRAMINI

Face grooving internal

From outer groove Ø 6.0 mm
Depth of groove up to 3.5 mm
Width of groove up to 3.0 mm

Grooving, boring and profiling
starting at Ø 0.2 mm



part number	s	b +0.05	f1	d	L	L1	t max.	D min.	Ø h6	U.S.A. Stock		suitable toolholder type	
										CN45F	AL41F		
R/L 010.1008-30	6.3	1.0	5.9	5.6	45	30	1.5	8.0	7.0	●	○	676.xxx / 687	670 / xxx.7
R/L 010.1508-30	6.3	1.5	5.9	5.6	45	30	2.5	8.0	7.0	○	●		
R/L 010.2008-30	6.3	2.0	5.9	5.6	45	30	3.0	8.0	7.0	●	○		
R/L 010.2508-30	6.3	2.5	5.9	5.6	45	30	3.5	8.0	7.0	●	○		
R/L 010.3008-30	6.3	3.0	5.9	5.6	45	30	3.5	8.0	7.0	●	○		



U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

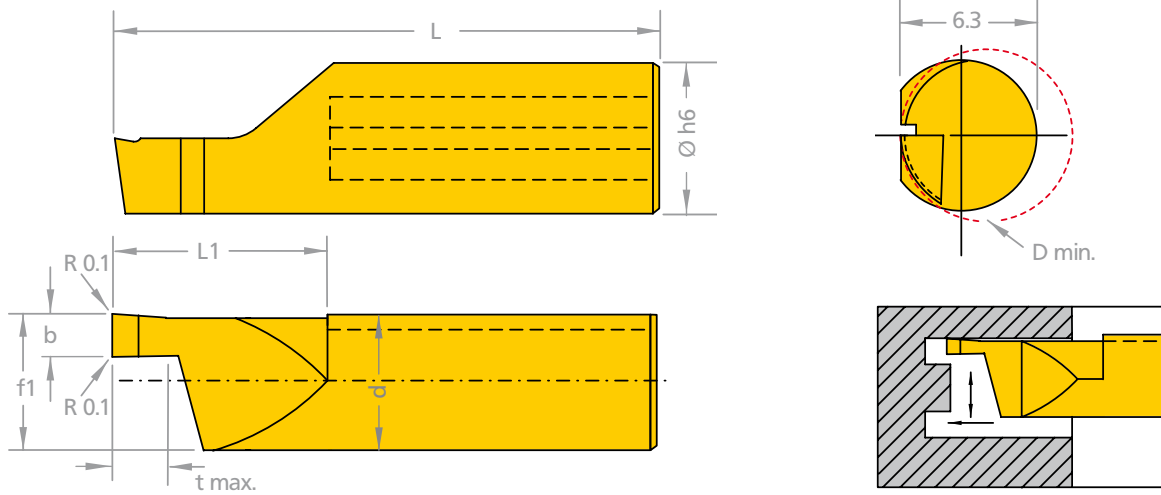
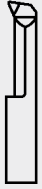
ULTRAMINI

Type 010 M

Grooving, boring and profiling starting at $\varnothing 0.2$ mm

Face grooving internal with corner radius

From outer groove $\varnothing 8.0$ mm
Depth of groove up to 6.0 mm
Width of groove up to 3.0 mm



Left hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock								AL41F	suitable toolholder type	
	b +0.05	f1	d	L	L1	t max.	D min.	Ø h6			
R/L 010M1008-10	1.0	5.9	5.6	26	11	2.0	8.0	7.0	○		
R/L 010M1508-10	1.5	5.9	5.6	26	11	3.0	8.0	7.0	○		
R/L 010M2008-10	2.0	5.9	5.6	26	11	4.0	8.0	7.0	○		
R/L 010M2508-10	2.5	5.9	5.6	26	11	5.0	8.0	7.0	○		
R/L 010M3008-10	3.0	5.9	5.6	26	11	6.0	8.0	7.0	○		
R/L 010M1008-20	1.0	5.9	5.6	35	20	2.0	8.0	7.0	○		
R/L 010M1508-20	1.5	5.9	5.6	35	20	3.0	8.0	7.0	○	676.xxx / 687	670 / xxx.7
R/L 010M2008-20	2.0	5.9	5.6	35	20	4.0	8.0	7.0	○		
R/L 010M2508-20	2.5	5.9	5.6	35	20	5.0	8.0	7.0	○		
R/L 010M3008-20	3.0	5.9	5.6	35	20	6.0	8.0	7.0	○		
R/L 010M1008-30	1.0	5.9	5.6	45	30	2.0	8.0	7.0	○		
R/L 010M1508-30	1.5	5.9	5.6	45	30	3.0	8.0	7.0	○		
R/L 010M2008-30	2.0	5.9	5.6	45	30	4.0	8.0	7.0	○		
R/L 010M2508-30	2.5	5.9	5.6	45	30	5.0	8.0	7.0	○		
R/L 010M3008-30	3.0	5.9	5.6	45	30	6.0	8.0	7.0	○		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

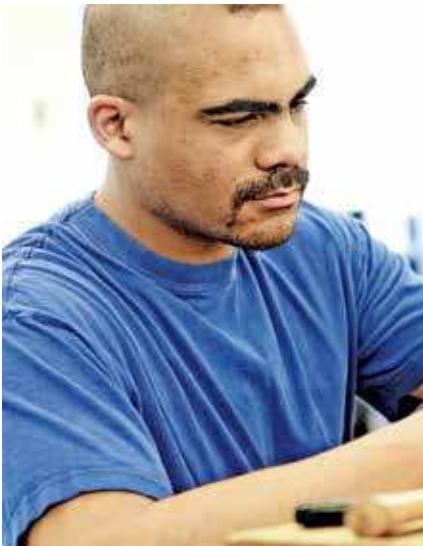
Carbide grades p. 96 see grades summary

Order-example: right hand version and grade
CN45F: R010.1008-10/CN45F

Impressions

ULTRAMINI

Grooving, boring and profiling
starting at \varnothing 0.2 mm



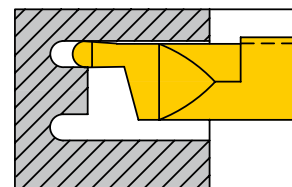
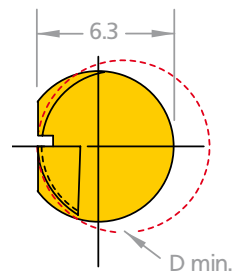
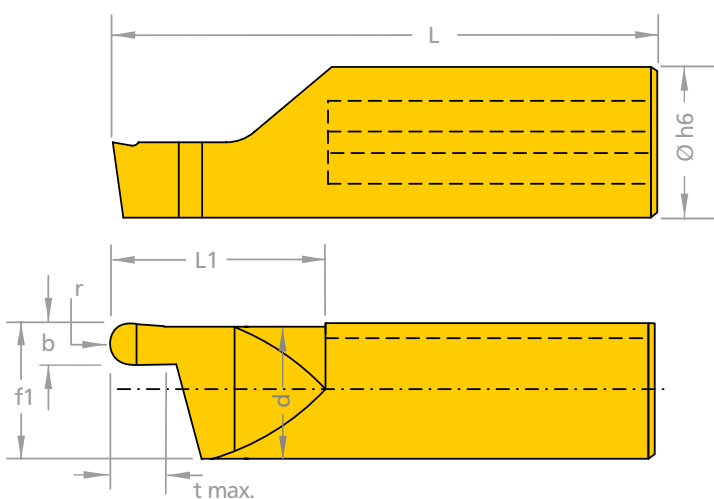
ULTRAMINI

Type 010

Grooving, boring and profiling starting at $\varnothing 0.2$ mm

Face grooving internal full radius

From outer groove $\varnothing 8.0$ mm
Depth of groove up to 6.0 mm
Width of groove up to 3.0 mm



Left hand version shown

State right (R) or left (L) version

Dimensions in mm

part number	U.S.A. Stock										suitable toolholder type	
	b +0.05	f1	r	d	L	L1	t max.	D min.	\varnothing h6	AL41F		
R/L 010.1005-10	1.0	5.9	0.5	5.6	26	11	2.0	8.0	7.0	●	676.xxx / 687	670 / xxx.7
R/L 010.1608-10	1.6	5.9	0.8	5.6	26	11	3.0	8.0	7.0	●		
R/L 010.2010-10	2.0	5.9	1.0	5.6	26	11	4.0	8.0	7.0	●		
R/L 010.2512-10	2.5	5.9	1.25	5.6	26	11	5.0	8.0	7.0	●		
R/L 010.3015-10	3.0	5.9	1.5	5.6	26	11	6.0	8.0	7.0	●		
R/L 010.1005-20	1.0	5.9	0.5	5.6	35	20	2.0	8.0	7.0	●		
R/L 010.1608-20	1.6	5.9	0.8	5.6	35	20	3.0	8.0	7.0	●		
R/L 010.2010-20	2.0	5.9	1.0	5.6	35	20	4.0	8.0	7.0	●		
R/L 010.2512-20	2.5	5.9	1.25	5.6	35	20	5.0	8.0	7.0	○		
R/L 010.3015-20	3.0	5.9	1.5	5.6	35	20	6.0	8.0	7.0	●		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version and grade
AL41F: R010.1005-10/AL41F

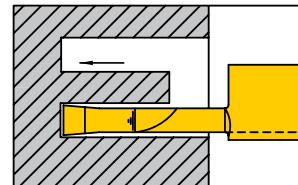
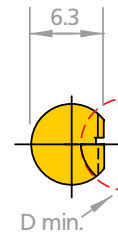
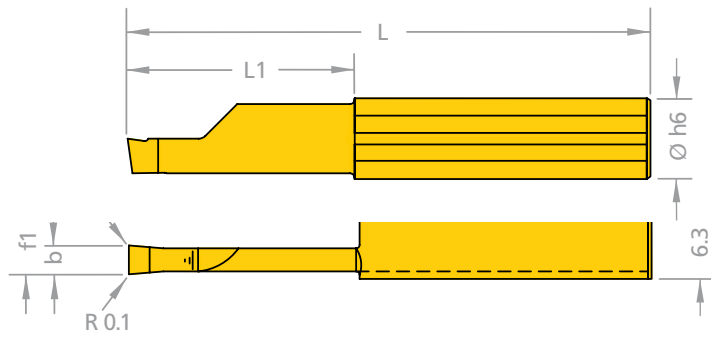
Type 015

ULTRAMINI

Face grooving

From outer groove \varnothing 8.0 mm
Depth of groove t max. 30.0 mm

Grooving, boring and profiling
starting at \varnothing 0.2 mm



Left hand version shown
State right (R) or left (L) version
Dimensions in mm



part number	b +0.05	f1	L	L1	t max.	D min.	\varnothing h6	U.S.A. Stock		suitable toolholder type	
								CN45F	AL41F		
R/L 015.1515-10	1.5	5.9	25	10	10	8.0	7.0	○	○	676.xxx / 687	670 / xxx.7
R/L 015.2015-15	2.0	5.9	30	15	15	8.0	7.0	○	○		
R/L 015.2015-20	2.0	5.9	35	20	20	8.0	7.0	○	○		
R/L 015.2515-20	2.5	5.9	35	20	20	8.0	7.0	◐	◐		
R/L 015.3015-20	3.0	5.9	35	20	20	8.0	7.0	◑	◑		
R/L 015.3015-30	3.0	5.9	45	30	30	8.0	7.0	◒	◒		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version
and grade
CN45F: R015.2515-20/CN45F

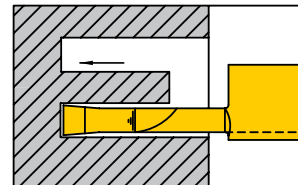
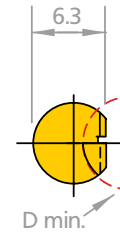
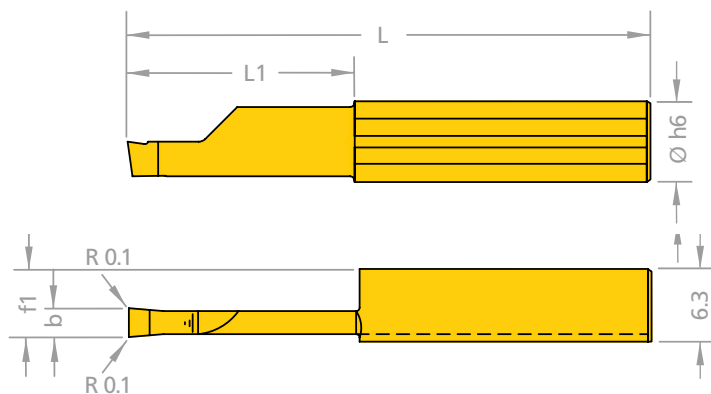
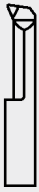
ULTRAMINI

Type 015 M

Grooving, boring and profiling starting at $\varnothing 0.2$ mm

Face grooving with corner-radius

From outer groove $\varnothing 8.0$ mm
Depth of groove t max. 30.0 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



part number	b +0.05	f1	L	L1	t max.	D min.	\varnothing h6	U.S.A. Stock		suitable toolholder type	
								AL41F			
R/L 015M.1515-10	1.5	5.9	25	10	10	8.0	7.0	○			
R/L 015M.2015-15	2.0	5.9	30	15	15	8.0	7.0	○			
R/L 015M.2014-20	2.0	5.9	35	20	20	8.0	7.0	○		676.xxx / 687	670 / xxx.7
R/L 015M.2515-20	2.5	5.9	35	20	20	8.0	7.0	○			
R/L 015M.3015-20	3.0	5.9	35	20	20	8.0	7.0	○			
R/L 015M.3015-30	3.0	5.9	45	30	30	8.0	7.0	○			

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example:
right hand version and grade
CN45F: R015M2515-20/CN45F

Type 016/020

ULTRAMINI

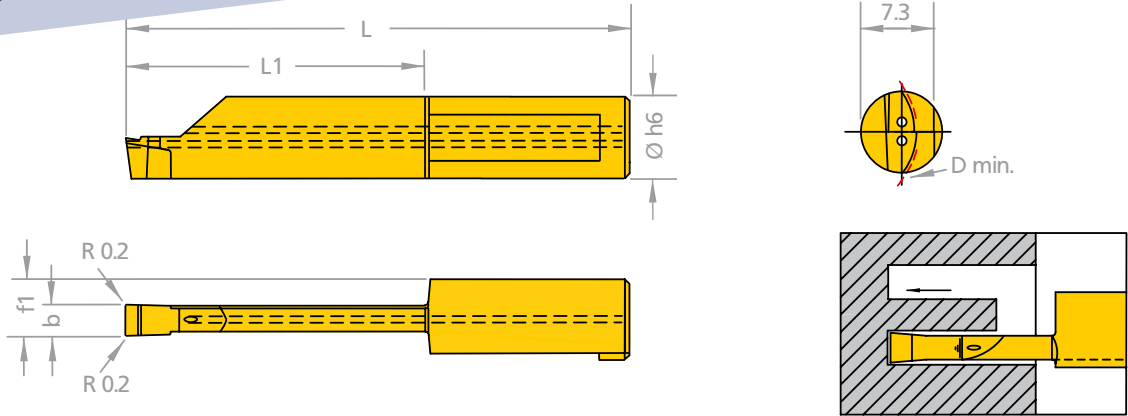
Face grooving with double internal cooling channel

From outer groove \varnothing 16.0 mm
Depth of groove t max. 40.0 mm

Grooving, boring and profiling starting at \varnothing 0.2 mm



For high pressure cooling up to 100 bar



Right hand version shown
State right (R) or left (L) version
Dimensions in mm



part number	U.S.A. Stock								suitable toolholder type	
	b +0.05	f1	L	L1	t max.	D min.	Ø h6	AL41F	687	680
R/L 016.0300-10	3.0	5.5	30	10	10	16	8.0	●		
R/L 016.0300-20	3.0	5.5	40	20	20	16	8.0	●		
R/L 020.0300-25	3.0	5.5	45	25	25	20	8.0	○		
R/L 020.0300-30	3.0	5.5	50	30	30	20	8.0	●		
R/L 020.0300-35	3.0	5.5	55	35	35	20	8.0	○		
R/L 020.0300-40	3.0	5.5	60	40	40	20	8.0	●	687	680
R/L 016.0400-10	4.0	6.0	30	10	10	16	8.0	○		
R/L 016.0400-20	4.0	6.0	40	20	20	16	8.0	●		
R/L 020.0400-25	4.0	6.0	45	25	25	20	8.0	○		
R/L 020.0400-30	4.0	6.0	50	30	30	20	8.0	●		
R/L 020.0400-35	4.0	6.0	55	35	35	20	8.0	○		
R/L 020.0400-40	4.0	6.0	60	40	40	20	8.0	●		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version and grade
AL41F: R016.0300-10/AL41F



ULTRAMINI

Type 016/020

Grooving, boring and profiling starting at Ø 0.2 mm

Face grooving with double internal cooling channel

From outer groove Ø 16.0 mm
Depth of groove t max. 40.0 mm



part number	b +0.05	f1	L	L1	t max.	D min.	Ø h6	U.S.A. Stock		suitable toolholder type	
								AL41F			
R/L 020.0500-20	5.0	6.5	40	20	20	20	8.0	●			
R/L 020.0500-25	5.0	6.5	45	25	25	20	8.0	○			
R/L 020.0500-30	5.0	6.5	50	30	30	20	8.0	●		687	680
R/L 020.0500-35	5.0	6.5	55	35	35	20	8.0	○			
R/L 020.0500-40	5.0	6.5	60	40	40	20	8.0	●			

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

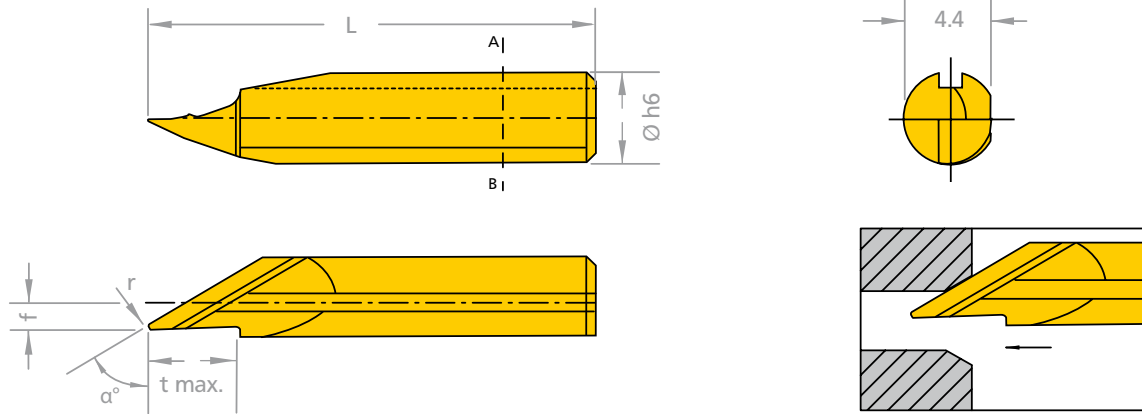
Type 520

ULTRAMINI

Chamfering internal bore

Bore \varnothing from 1.0 mm

Grooving, boring and profiling starting at \varnothing 0.2 mm



Right hand version shown

State right (R) or left (L) version

Dimensions in mm



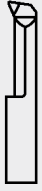
part number	U.S.A. Stock								suitable toolholder type
	a	f	r	L	t max.	D min.	\varnothing h6	AL41F	
R/L 520.0045-15	45°	1.5	0.2	30	3.5	1.0	5.0	○	645.xxx / xxx.5
R/L 520.0060-15	60°	1.5	0.2	30	4.0	1.0	5.0	○	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

Carbide grades p. 96 see grades summary

Order-example: right hand version and grade
AL41F: R520.0045-15/AL41F



ULTRAMINI

Grooving, boring and profiling starting at Ø 0.2 mm

Sets Ultramini 1 and 2



Set 1

Boring/profiling, copying and grooving right

Set 2

Grooving right

part number

part number

Toolholder 676.0016-D
645.0016-D

Toolholder 676.0016-D
645.0016-D

insert

R050.6-22/CN45F
R050.5-20/CN45F
R.060.5-20/CN45F
R050.4-16/CN45F
R.050.3-16/CN45F
R006.0200-22/CN45F
R.006.0150-22/CN45F
R005.0200-20/CN45F
R005.0150-20/CN45F
R004.0100-16/CN45F

insert

R006.0200-22/CN45F
R.006.0150-22/CN45F
R005.0200-20/CN45F
R005.0150-20/CN45F
R004.0100-16/CN45F

Part number of set 730 85 999

Part number of set 730 85 992

ULTRAMINI

Sets Ultramini 3 and 6

Grooving, boring and profiling starting at \varnothing 0.2 mm

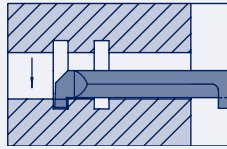


Set 3		Set 6	
Boring/ profiling, copying right		Right face grooving (internal) bore \varnothing dmin. 8.0 mm	
	part number		part number
Toolholder	676.0016-D 645.0016-D	Toolholder	676.0016-D
insert	R050.6-22/CN45F R050.5-20/CN45F R050.4-16/CN45F R.050.3-16/CN45F	insert	R010.2508-20/CN45F R010.2008-10/CN45F R010.1508-10/CN45F R010.3008-20/CN45F R010.1008-10/CN45F
Part number of set	730 85 994	Part number of set	730 85 996

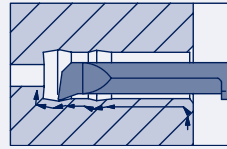
Cutting data

For grooving standard values for cutting speeds
feed rates grooving internal 0.0004" - 0.0032" IPR

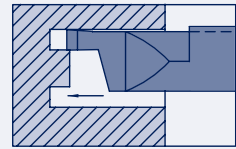
Feed rates f IPR.



0.0004" - 0.0012"



0.0008" - 0.0032"



0.0008" - 0.002"

Material to be machined

Material no.

Hardness (HB)

Cutting speeds Vc = SFM coat.
CN45F AL41F

Carbon steel

1212 9 SMn 28
A573-81 65 ST 37-3
5120 ST 52-3

140
180
200

100-590 260-660

Steel alloyed

4130 25 CrMo 4

350

100-260 230-330

Steel high alloyed

4140 42 CrMo4V
O2 90 MnCrV 8
H13 X 40 CrMoV

200

100-330 260-520

Steel stainless

431 20CrNi17 2
2332 X5CrNi18 10
430F X12CrMoS17

200
180

100-360 260-520
100-330 260-520

Cast steel

unalloyed
alloyed

180
220

100-590 300-590
100-590 230-590

Tempered steel

32510 GTW 35
50005 GTS 55

125
220

100-430 100-590
100-430 100-590

Cast iron

Class30 GG 20
Class55 GG 40

180
250

100-490 100-590
100-490 100-590

Cutting data

For grooving standard values for cutting speeds
feed rates grooving internal 0.0004" - 0.0032" IPR

Material to be machined	Material no.	Hardness (HB)	Cutting speeds Vc = SFM coat.	
			CN45F	AL41F
Cast iron	60-40-18 GGG 40	160	100-430	100-590
	100-70-03 GGG 70	250	100-430	100-590
Heat resistant alloys (Ni/Co)	annealed	250	100-260	100-260
Aluminum alloy castings	not hardenable	30-80	300-1970	300-1970
	hardenable	80-120	260-2300	2600-2300
Aluminum alloy forgings	not hardenable	80	300-1970	300-2630
	hardenable	100	300-1970	300-2300
Bronze-brass alloys			260-2300	260-2300
Hardened Steel		up to 66 HRC	XC2A-NH 200-260 *IPR .0008"	



Technical information:

Values for threading



Center height for Ultramini:

The seatings of the Ultramini guarantee the accurate center height of these tools. In spite of this please look at your tools because a difference in center height may cause problems especially when machining small diameters.

Removal of chips:

Please choose insert with small cutting widths, so the chips form nicely and will be able to flow out of the bore beside the tool. To avoid jamming of chips use a step technique.

Coolant Ultramini:

Use a filtered coolant system when possible for best tool life and for cooling the insert itself. A coolant pressure of 5 bar minimum is recommended.

General standard:

Values for threading

Carbide grade CN45F	Steel (N/mm ² tensile strenght)					Stainless steel	Cast iron	Aluminum	
	400-500	500-700	700-850	850-1150	over 1150				
V SFM	520	460	390	300	230	300	330	980	
Pitch P mm	threads per inch	number of passes							
0.5	48	6	6	7	7	8	8	7	6
0.75	32	8	8	9	9	10	10	9	8
1.0	24	10	10	12	12	12	12	12	10
1.25	20-19	12	12	14	14	15	16	14	12
1.5	16	15	15	17	17	18	18	17	15

Grades summary

Basic substrates:

K10F

All purpose micrograin carbide with good abrasion resistance. uncoated for applications with low or medium cutting speeds and machining off non-ferrous materials.

CBN

Ductile CBN grade for application with lower cutting speed. Suitable for hardened steel, interrupted cuts and cast iron.

Standard coatings:

CN45F

All purpose PVD-TiN coating. This all around grade is suitable for low and medium cutting speeds with restrictions on non-ferrous materials.

AL41F

Very universal TiAlN coating with a high resistance to high temperature and hardness. Very suitable also for non-ferrous metals.

* Special coatings:

CN5F

Coating for the processing of steel and non-ferrous materials with medium or low cutting speed.

XC

Coating for difficult to machine materials and for hardmachining >52HRC.

* coating only on request

Grades summary

AC60F

AlCr based high performance coating with high oxidation resistance, wear resistance and hot hardness resistance especially for milling.

HC1F

AlCr based high performance coating with high oxidation resistance, wear resistance and hot hardness resistance especially for turning.

PD2F

Coating for universal use with medium and low cutting speed.

PD3E

Tough coating with thick coating layer for very high cutting speed and feed as well as interrupted cuts.

C41C

Very smooth TiAlN coating for high performance machining with all materials.

AS2F

Coating for machining aluminium, alloys and non-ferrous metals.

XC2A

Coating with excellent hot hardness, high oxidation resistance and thermal insulation capacity. Perfect for hard machining > 60 HRC.

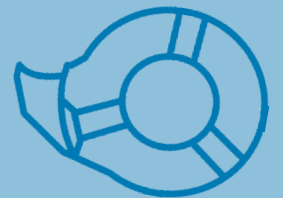


* coating only on request



Dümmel®

Minicut



**Grooving, boring and profiling
starting at Ø 7.8 mm**



MINICUT

Grooving, boring and profiling

Summary



Minicut Machining Example



Machining example
Minicut

... 104

Toolholders



Type 608 / 609 / 611 / 614 /
616 / 618
steel

... 105



Type 608 / 609 / 611 / 614 /
616 / 618
carbide

... 107



Type 614A
steel for face grooving

... 112

new

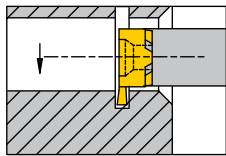


Type Flexo-toolholder
V08/V11

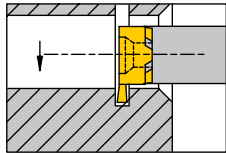
... 113



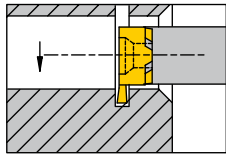
Inserts



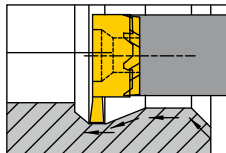
Grooving internal . . . 114
 min. bore Ø
 from 7.8 / 9.0 mm



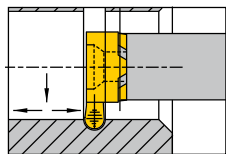
Grooving internal . . . 116
 min. bore Ø
 from 11 / 14 mm



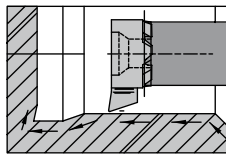
Grooving internal . . . 117
 min. bore Ø
 from 16 / 18 / 20 mm



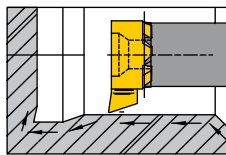
NC-profiling internal . . . 118
 min. bore Ø
 from 8 / 9 / 10 /
 11 / 14 / 16 mm



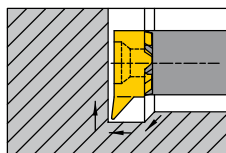
Grooving internal full radius . . . 119
 min. bore Ø
 from 8 / 9 / 11 / 14 / 16 mm



Inserts with CBN boring and copying internal . . . 121
 min. bore Ø
 from 7.8 / 11 / 13.8 / 15.5 mm



Boring and copying internal . . . 122
 min. bore Ø
 from 7.8 / 9 / 9.8 / 11 / 13.8 / 14 /
 15.5 mm

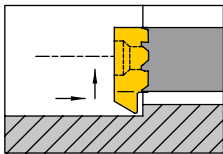


Boring / copying and profiling undercuts DIN 509 . . . 123
 min. bore Ø from 7.8 / 9.0 /
 11 / 13.7 / 15.8 / 18 / 20 mm

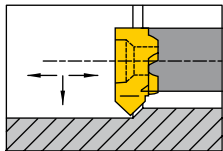
MINICUT

Grooving, boring and profiling

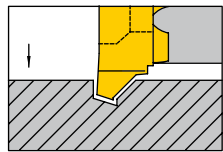
Summary



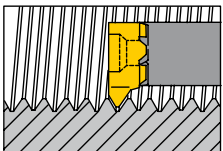
Boring by backward motion internal . . . 125
min. bore \varnothing
from 7.8 / 9 / 10 / 11 / 13.8 mm



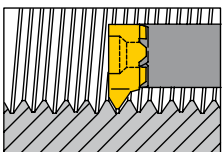
Chamfering and profiling internal . . . 126
min. bore \varnothing
from 8 / 9 / 11 / 14 mm



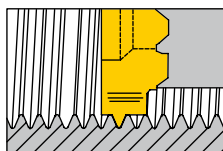
Pregrooving and chamfering . . . 127
min. bore \varnothing
from 8 / 9 / 11 / 14 / 16 mm



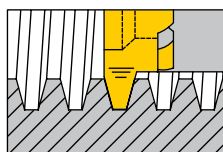
Metric thread ISO partial profile . . . 128
min. bore \varnothing
from 8 / 9 / 11 / 14 / 16 mm



Metric thread ISO full profile . . . 130
min. bore \varnothing
from 9 / 11 / 14 / 16 mm



Whitworth internal full profile . . . 132
min. bore \varnothing
from 11 / 14 / 16 mm



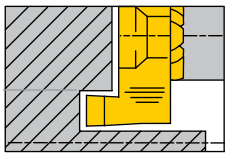
Trapezoidal thread profile . . . 133
min. bore \varnothing
from 9 / 10 / 11 / 14 / 16 mm

Summary

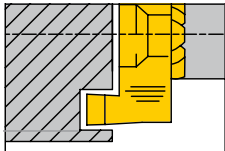


MINICUT

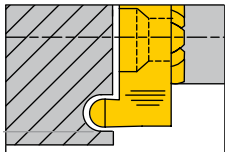
Grooving, boring and profiling



Face grooving in pivots . . . 134
min. bore \varnothing
from 12 mm

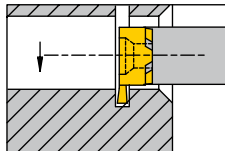


Face grooving . . . 135
 \varnothing 14 mm
from outer groove



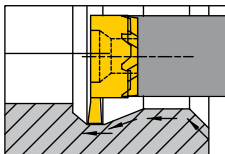
Face grooving full radius . . . 136
 \varnothing 14 mm
from outer groove

new



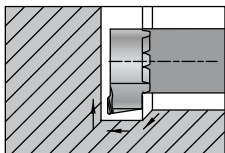
Grooving internal . . . 137
min. bore \varnothing
from 16 / 17 mm
depth of groove up to 6.5 mm

new



NC-profiling internal . . . 138
min. bore \varnothing
from 16 / 17 mm
depth of groove up to 6.5 mm
 $r = 0.2$ mm

new



Boring with special chipformer . . . 139
min. bore \varnothing from 9.0 mm



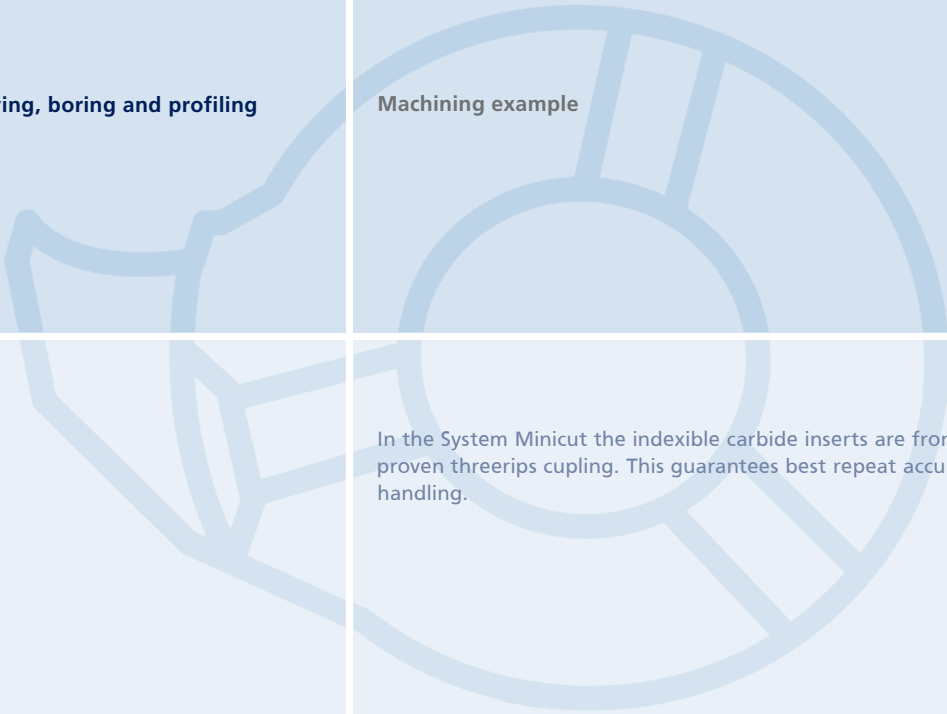
Technical Data . . . 140

MINICUT

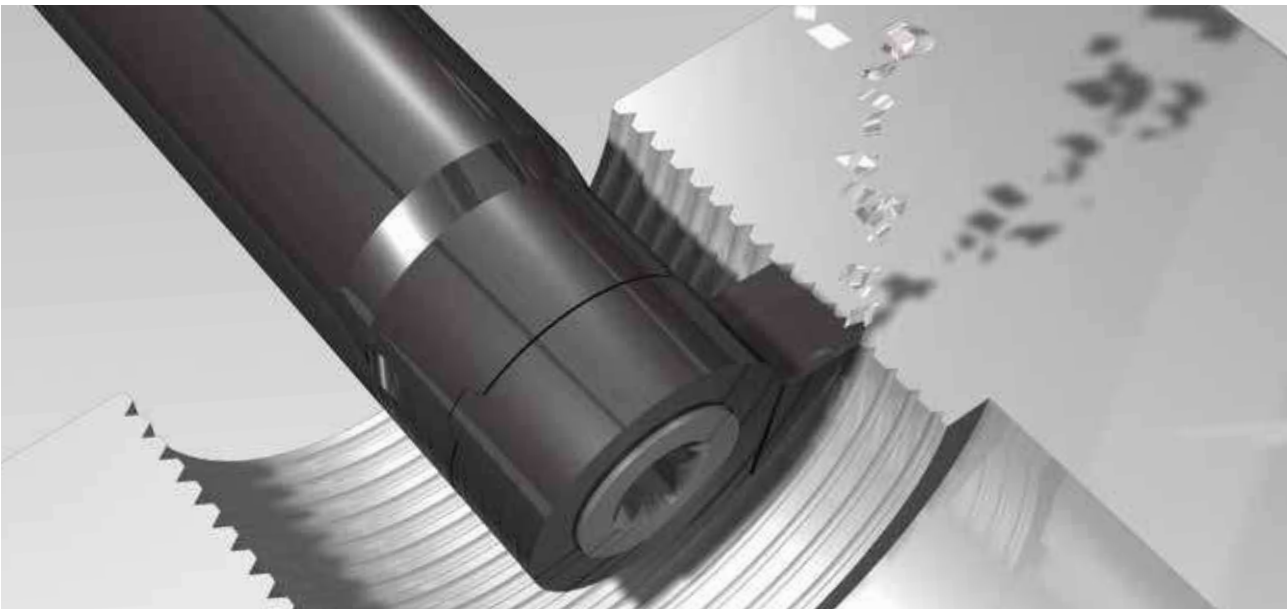


Grooving, boring and profiling

Machining example



In the System Minicut the indexible carbide inserts are frontal screwed by the proven threeerips coupling. This guarantees best repeat accuracy by most simple handling.



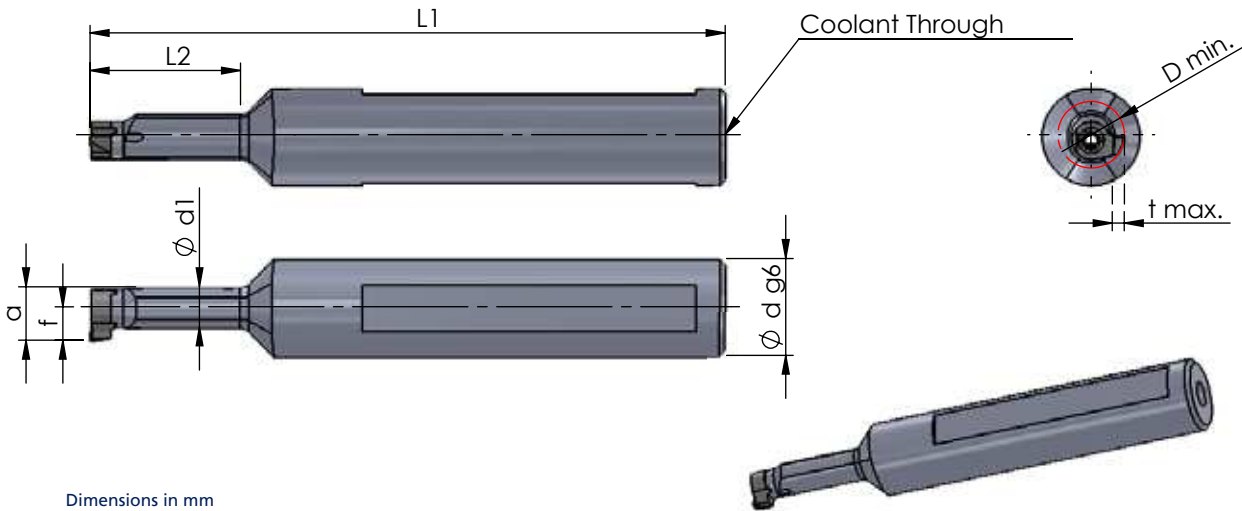
Type 608 / 609 / 611 / 614

MINICUT

Toolholder steel

Bore Ø from 7.8 mm

Grooving, boring and profiling



	part number	Ø d g6	d1	L1	L2	f	a	t max.	D min.	U.S.A. Stock	screw	key	torque	use with insert
new	608.0158.1E.ST	15.875	6x7	90	22	4.8	7.8	1	8	●	M2.6-MC	T8	1-1.5 Nm	R/LS08
	608.0016.1ST	16	6	80	12	4.8	7.8	1	8	●				
	608.0016.1E.ST	16	6x7	90	22	4.8	7.8	1	8	●			2 Nm	R/LS09
new	609.0016.1ST	16	6.6x7.4	95	14	5.5	8.6	2/3	9 / 10	○				
new	609.0016.1E.ST	16	6.6x7.4	105	25	5.5	8.6	2/3	9 / 10	○	M3.5-MC	T10	2.5-3 Nm	R/LS11
new	611.0158.2E.ST	15.875	8x9.5	110	29	6.7	10.7	2.3	11	●				
	611.0016.2ST	16	8	97	16	6.7	10.7	2.3	11	●				
	611.0016.2E.ST	16	8x9.5	110	29	6.7	10.7	2.3	11	●	M4-MC	T15	4-4.5 Nm	R/LS14 R/LS55 R/LS65
new	614.0158.3E.ST	15.875	9.5x11	120	38	*	*	4/6.5	14/17	●				
	614.0016.3ST	16	9.5x11	100	18	*	*	4/6.5	14/17	●				
	614.0016.3E.ST	16	9.5x11	120	38	*	*	4/6.5	14/17	●				

U.S.A. Stock

- = In Stock
- = Express Delivery

* Dimension according insert



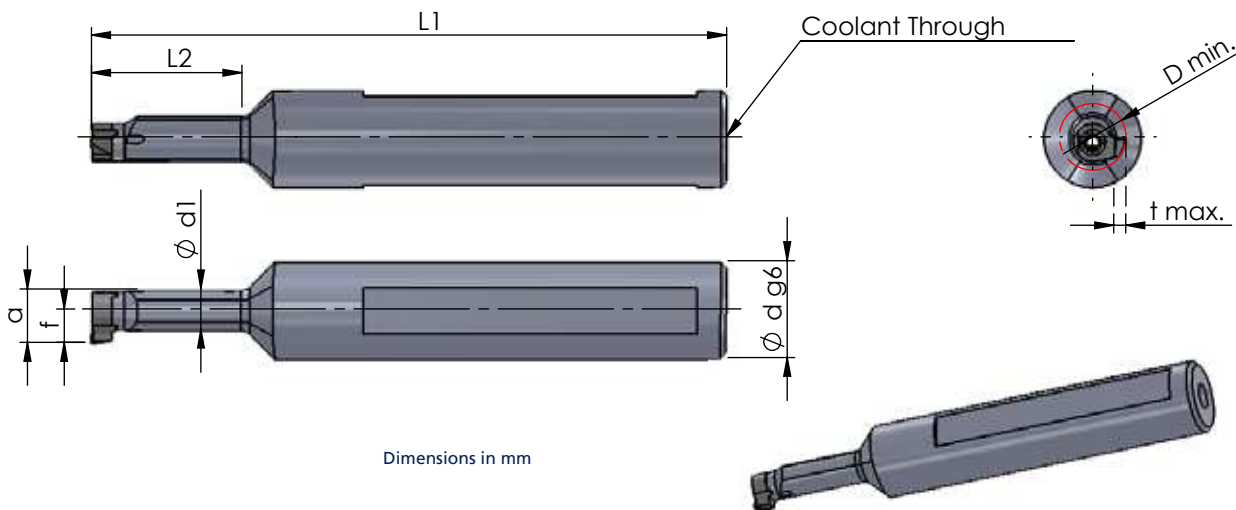
MINICUT

Type 616 / 618

Grooving, boring and profiling

Toolholder steel

Bore Ø from 7.8 mm



Dimensions in mm

new

part number	Ø d g6	d1	L1	L2	f	a	t max.	D min.	U.S.A. Stock	screw	key	torque	use with insert
616.0158.3E.ST INCH	15.875	11x13.5	120	42	10.2	15.7	4.3	16	●				
616.0016.3ST	16	11	100	22	10.2	15.7	4.3	16	●				R/LS16
616.0016.3E.ST	16	11x13.5	120	42	10.2	15.7	4.3	16	●	M5-MC	T20	6-6.5 Nm	
618.0020.3ST	20	11.5	95	25	*	*	8	18	○				R/LS 18
618.0020.3E.ST	20	11.5	120	45	*	*	8	18	○				

U.S.A. Stock

- = In Stock
- = Express Delivery

* Dimension according insert

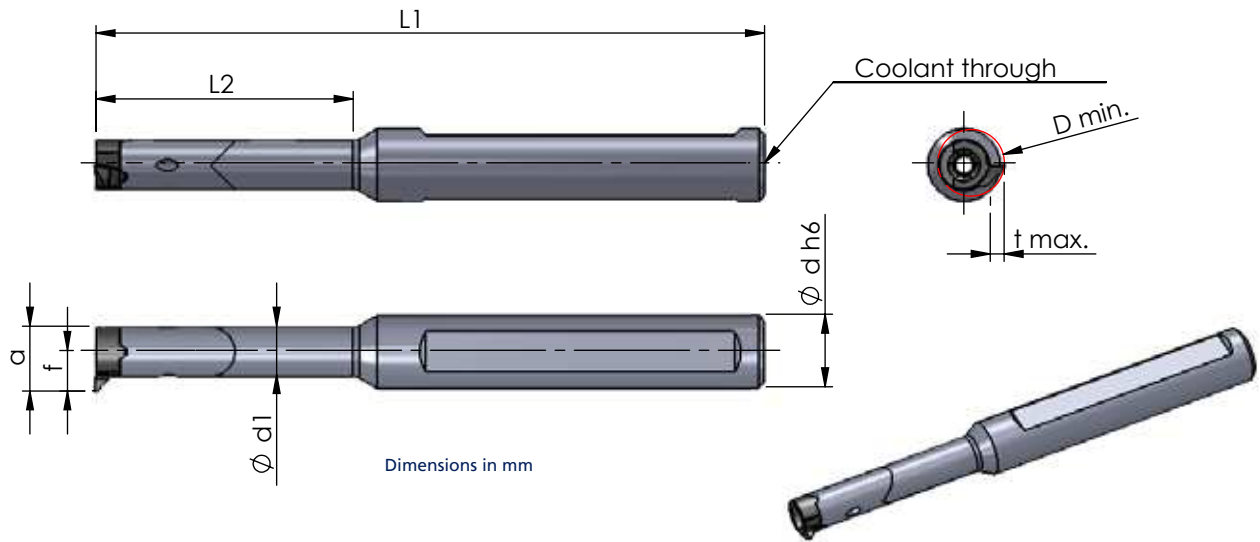
Type 608 / 609

MINICUT

Toolholder carbide

Bore Ø from 7.8 mm

Grooving, boring and profiling



--	--	--	--	--	--	--	--	--	--	--	--	--	--

new
new
new
new
new
new
new

part number	Ø d h6	d1	L1	L2	f	a	t max.	D min.	U.S.A. Stock	screw	key	torque	use with insert
608.0012.1HM	12	6	80	21	4.8	7.8	1	8	●	M2.6-MC	T8	1-1.5 Nm	R/LS08
608.0012.2HM	12	6	90	30	4.8	7.8	1	8	●				
608.0012.3HM	12	6	100	42	4.8	7.8	1	8	●				
608.0012.4HM	12	6	115	50	4.8	7.8	1	8	●				
608.0127.1HM	12.7	6	80	21	4.8	7.8	1	8	●				
608.0127.2HM	12.7	6	90	30	4.8	7.8	1	8	●				
608.0127.3HM	12.7	6	100	42	4.8	7.8	1	8	●				
609.0012.1HM	12	6.6x7.4	90	22	5.5	8.6	2/3	9 / 10	○			2 Nm	R/LS09
609.0012.2HM	12	6.6x7.4	98	30	5.5	8.6	2/3	9 / 10	○				
609.0012.3HM	12	6.6x7.4	110	42	5.5	8.6	2/3	9 / 10	○				
609.0012.4HM	12	6.6x7.4	122	56	5.5	8.6	2/3	9 / 10	○				

U.S.A. Stock

- = In Stock
- = Express Delivery

* Dimension according insert

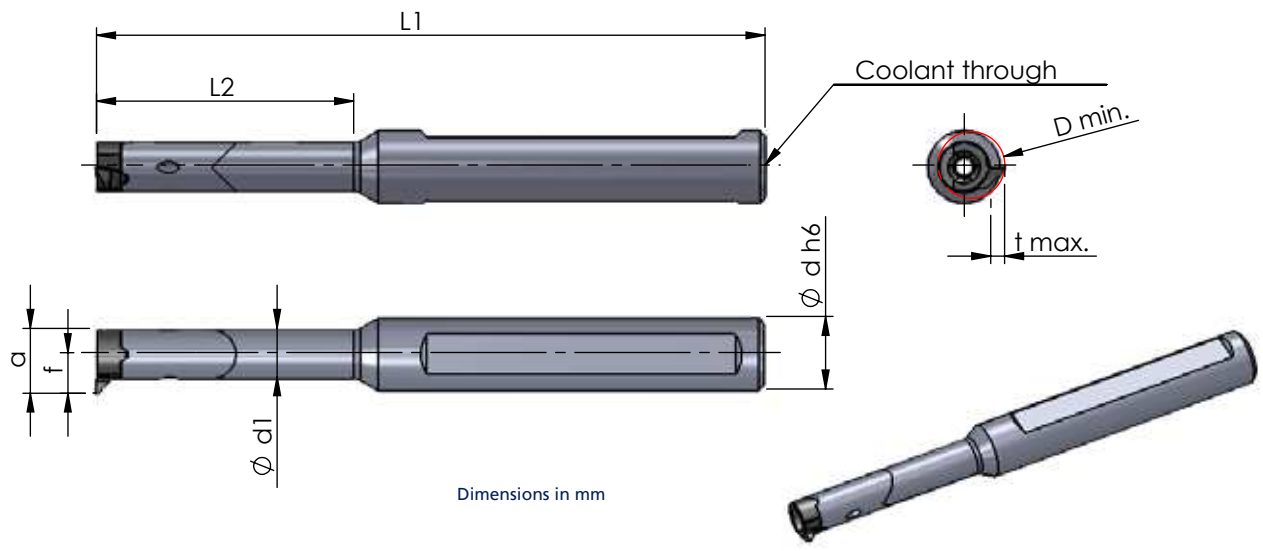
MINICUT

Type 611

Grooving, boring and profiling

Toolholder carbide

Bore Ø from 7.8 mm



Dimensions in mm

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	part number	Ø d h6	d1	L1	L2	f	a	t max.	D min.	U.S.A. Stock	screw	key	torque	use with insert
new	611.0012.1HM	12	8	95	29	6.7	10.7	2.3	11	●	M3.5-MC	T10	2.5-3 Nm	R/LS11
new	611.0012.2HM	12	8	110	42	6.7	10.7	2.3	11	●				
new	611.0012.3HM	12	8	120	56	6.7	10.7	2.3	11	●				
new	611.0012.4HM	12	8	130	64	6.7	10.7	2.3	11	●				
new	611.0127.1HM	12.7	8	95	29	6.7	10.7	2.3	11	●				
new	611.0127.2HM	12.7	8	110	42	6.7	10.7	2.3	11	●				
new	611.0127.3HM	12.7	8	120	56	6.7	10.7	2.3	11	●				

U.S.A. Stock

- = In Stock
- = Express Delivery

* Dimension according insert

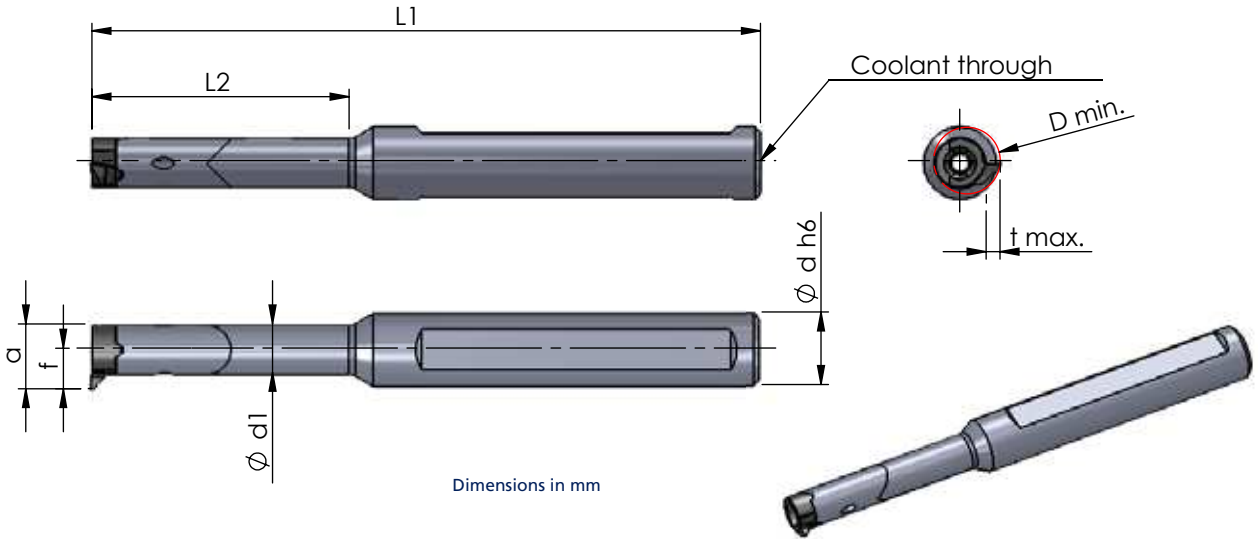
Type 614

MINICUT

Toolholder carbide

Bore Ø from 7.8 mm

Grooving, boring and profiling



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part number	Ø d h6	d1	L1	L2	f	a	t max.	D min.	U.S.A. Stock	screw	key	torque	use with insert
614.0012.1HM	12	9.5x11	100	34	*	*	4/6.5	14/17	●				
614.0012.2HM	12	9.5x11	110	45	*	*	4/6.5	14/17	●				
614.0012.3HM	12	9.5x11	130	64	*	*	4/6.5	14/17	●				
new 614.0127.1HM	12.7	9.5x11	100	34	*	*	4/6.5	14/17	●				
new 614.0127.2HM	12.7	9.5x11	110	45	*	*	4/6.5	14/17	●				
new 614.0127.3HM	12.7	9.5x11	130	64	*	*	4/6.5	14/17	●				
new 614.0158.1HM	15.875	9.5x11	100	34	*	*	4/6.5	14/17	●	M4-MC	T15	4-4.5 Nm	R/LS14 R/LS55 R/LS65
new 614.0158.2HM	15.875	9.5x11	110	45	*	*	4/6.5	14/17	●				
new 614.0158.3HM	15.875	9.5x11	130	64	*	*	4/6.5	14/17	●				
614.0016.1HM	16	9.5x11	100	34	*	*	4/6.5	14/17	●				
614.0016.2HM	16	9.5x11	110	45	*	*	4/6.5	14/17	●				
614.0016.3HM	16	9.5x11	130	64	*	*	4/6.5	14/17	●				
614.0016.4HM	16	9.5x11	145	75	*	*	4/6.5	14/17	●				

U.S.A. Stock

- = In Stock
- = Express Delivery

* Dimension according insert



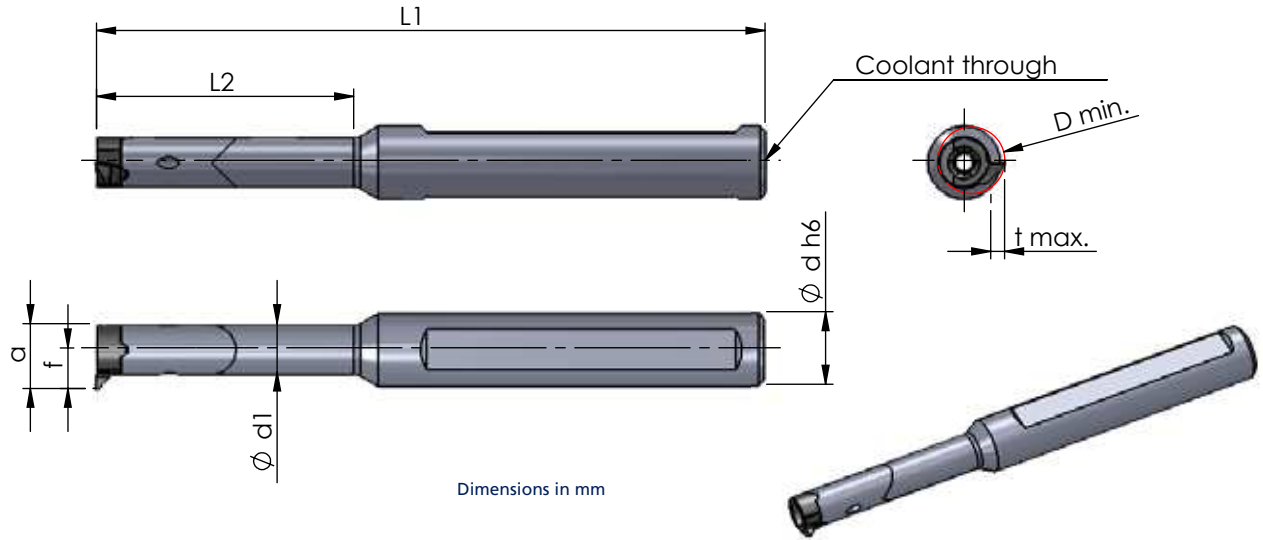
MINICUT

Type 616

Grooving, boring and profiling

Toolholder carbide

Bore Ø from 7.8 mm



Dimensions in mm

part number	Ø d h6	d1	L1	L2	f	a	t max.	D min.	U.S.A. Stock	screw	key	torque	use with insert
616.0012.1HM	12	11	130	40	10.2	15.7	4.3	16	●	M5-MC	T20	6-6.5 Nm	R/LS16
616.0012.2HM	12	11	130	56	10.2	15.7	4.3	16	●				
616.0012.3HM	12	11	150	80	10.2	15.7	4.3	16	●				
new 616.0127.1HM <small>INCH</small>	12.7	11	130	40	10.2	15.7	4.3	16	●				
new 616.0127.2HM <small>INCH</small>	12.7	11	130	56	10.2	15.7	4.3	16	●				
new 616.0127.3HM <small>INCH</small>	12.7	11	150	80	10.2	15.7	4.3	16	●				
new 616.0158.1HM <small>INCH</small>	15.875	11	130	40	10.2	15.7	4.3	16	●				
new 616.0158.2HM <small>INCH</small>	15.875	11	130	56	10.2	15.7	4.3	16	●				
new 616.0158.3HM <small>INCH</small>	15.875	11	150	80	10.2	15.7	4.3	16	●				
616.0016.1HM	16	11	130	40	10.2	15.7	4.3	16	●				
616.0016.2HM	16	11	130	56	10.2	15.7	4.3	16	●				
616.0016.3HM	16	11	150	80	10.2	15.7	4.3	16	●				

U.S.A. Stock

- = In Stock
- = Express Delivery

* Dimension according insert

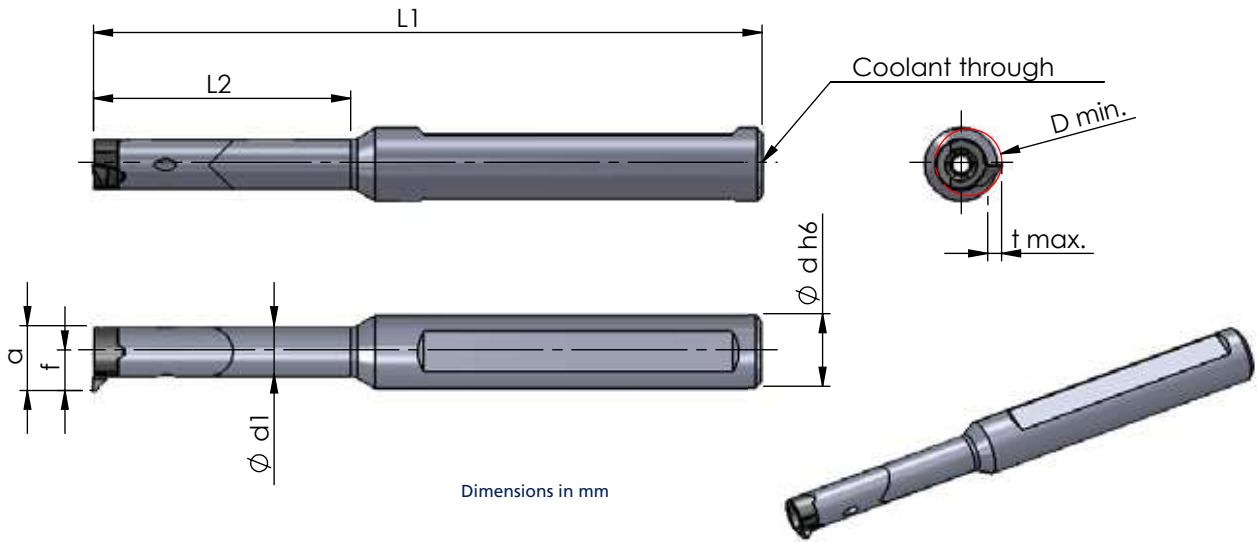
Type 618

MINICUT

Toolholder carbide

Bore \varnothing from 7.8 mm

Grooving, boring and profiling



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part number	\varnothing d h6	d1	L1	L2	f	a	t max.	D min.	U.S.A. Stock	screw	key	torque	use with insert
618.0016.1HM	16	11.5	100	42	*	*	8	18	○				
618.0016.2HM	16	11.5	130	60	*	*	8	18	○				
618.0016.3HM	16	11.5	160	85	*	*	8	18	○	M5-MC	T20	6-6.5 Nm	R/LS18
618.0020.3HM	20	11.5	160	85	*	*	8	18	○				

U.S.A. Stock

- = In Stock
- = Express Delivery

* Dimension according insert



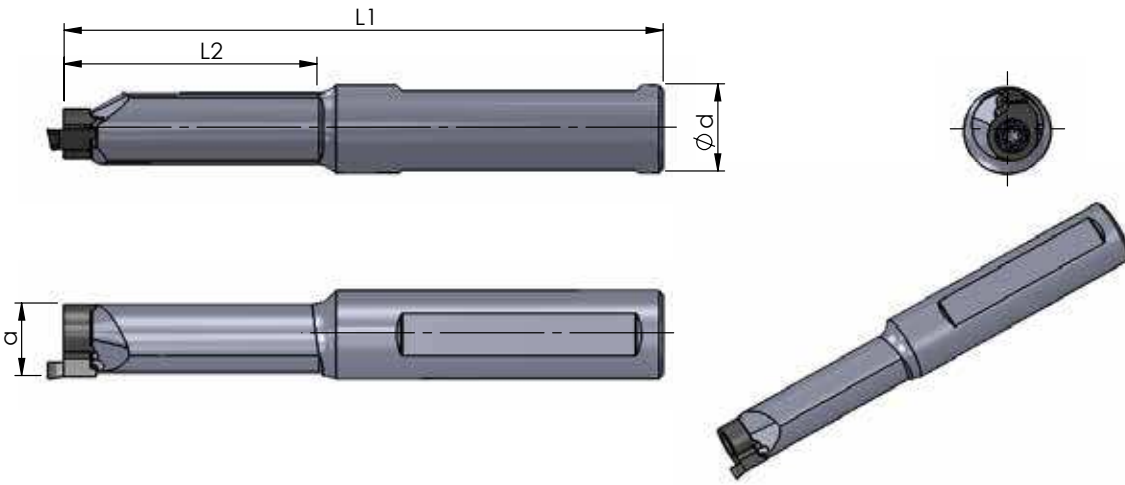
MINICUT

Type 614A

Grooving, boring and profiling

Toolholder face grooving

Bore Ø from 12 mm



Dimensions in mm



part number	Ø d g6	a	L1	L2	U.S.A. Stock	screw	key	torque	use with insert
R/L614.A016.3ST	16	13.5	90	25	●	M4-MC	T15	4-4.5 Nm	R/LS14
R/L614.A016.3E.ST	16	13.5	110	45	●				

new

part number	Ø d h6	a	L1	L2	U.S.A. Stock	screw	key	torque	use with insert
R/L614.A016.3HM	16	13.5	120	60	○	M4-MC	T15	4-4.5 Nm	R/LS14

Spare parts

Ø toolholder

	screw	lkey	torque	U.S.A. Stock
608	M2.6-MC	T8	1 – 1.5 Nm	○
609	M2.6-MC	T8	2 Nm	○
611	M3.5-MC	T10	2.5 – 3 Nm	○
614	M4-MC	T15	4 – 4.5 Nm	○
616	M5-MC	T20	6 – 6.5 Nm	○
618	M5-MC	T20	6 – 6.5 Nm	○

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

* Dimension according insert

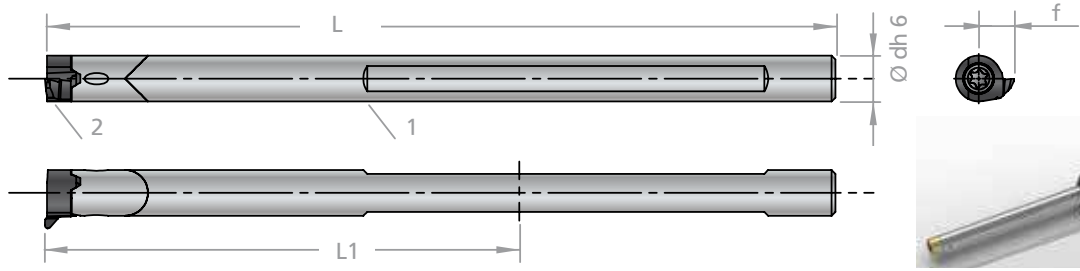
MINICUT

Type V08, V11

Grooving, boring and profiling

Flexo-toolholder V

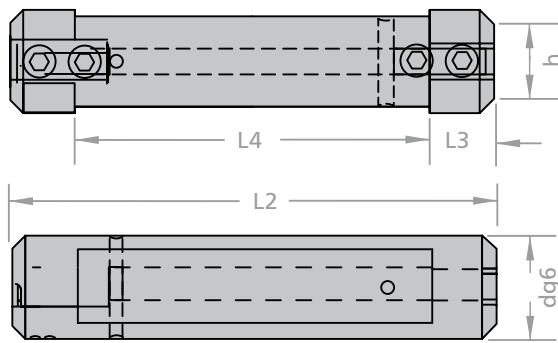
Min. bore Ø from 8.0 mm



new
new
new
new

part number	D min.	d h6	L	L1 min.	L1 max.	U.S.A. Stock	insert
V08.0006.2 HM	8	6	85	18	42	●	R/LS08
V08.0006.4 HM	8	6	103	40	80	●	R/LS08
V11.0008.2 HM	11	8	79	20	55	●	R/LS11
V11.0008.4 HM	11	8	129	50	105	●	R/LS11

Toolholder basic VG



Toolholder for right and left
Inserts usable

Dimensions in mm



new
new
new
new

part number	Ø d g6	L2	L3	L4	h	U.S.A. Stock	spare parts Ø toolholder	screw	key
VG08-16	16	75	10	55	14	●	16	110.687-16	111.687
VG08-20	20	90	10	70	18	●	20	110.687-20	111.687
VG11-16	16	75	10	55	14	●	16	110.687-16	111.687
VG11-20	20	90	10	70	18	●	20	110.687-20	111.687

● = In Stock
○ = Express Delivery





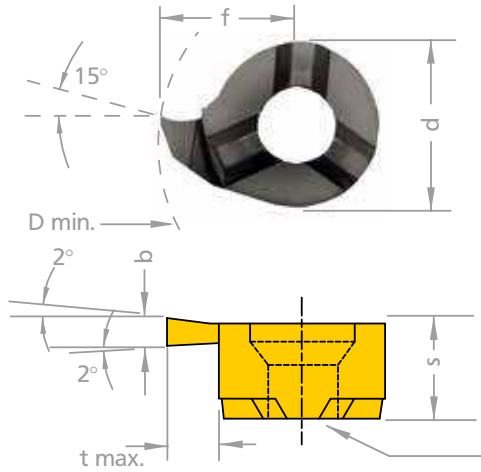
MINICUT

Inserts

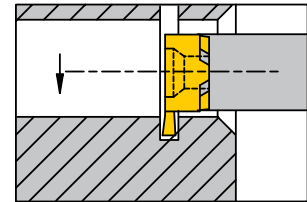
Grooving, boring and profiling

Grooving internal

Min. bore Ø from 7.8 mm



Toolholder face



Right hand (R): as shown
Lefthand version (L): mirror image

State right (R) or left (L) version

Dimensions in mm



part number	width of circlip	U.S.A. Stock							toolholder type	standard carbide grade
		b + 0.03	f	s	d	t max.	D min.	AL41F		
Ø 7.8 mm Circlip grooves										
R/LS008.0070	0.70	0.73	4.8	3.3	6	1.0	8	●	608	AL41F (=TiAlN)
R/LS008.0080	0.80	0.83	4.8	3.3	6	1.0	8	●		
R/LS008.0090	0.90	0.93	4.8	3.3	6	1.0	8	●		
R/LS008.0110	1.10	1.20	4.8	3.3	6	1.0	8	●		
R/LS008.0130	1.30	1.40	4.8	3.3	6	1.0	8	●		
R/LS008.0160	1.60	1.70	4.8	3.3	6	1.0	8	●		
Ø 7.8 mm Grooving										
R/LS008.0100	-	1.00	4.8	3.3	6	1.0	8	●	608	AL41F (=TiAlN)
R/LS008.0150	-	1.50	4.8	3.3	6	1.0	8	●		
R/LS008.0200	-	2.00	4.8	3.3	6	1.0	8	●		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

See pages 105 through 113 for Toolholders

Order example:
Right hand version and grade AL41F:
R5008.0070/AL41F

Inserts

MINICUT



Grooving internal

Min. bore Ø from 9.0 mm

Grooving, boring and profiling

part number

width of circlip

b + 0.03

f

s

d

t max.

D min.

U.S.A. Stock

AL41F

toolholder type

standard carbide grade

Ø 9.0 mm

Circlip grooves

new
new
new
new
new
new

part number	width of circlip	b + 0.03	f	s	d	t max.	D min.	U.S.A. Stock
R/LS009.0070	0.7	0.73	5.5	3.6	6.2	1.2	9.0	○
R/LS009.0080	0.8	0.83	5.5	3.6	6.2	1.3	9.0	○
R/LS009.0090	0.9	0.93	5.5	3.6	6.2	1.5	9.0	○
R/LS009.0110	1.1	1.2	5.5	3.6	6.2	1.8	9.0	○
R/LS009.0130	1.3	1.4	5.5	3.6	6.2	1.8	9.0	○
R/LS009.0160	1.6	1.7	5.5	3.6	6.2	1.8	9.0	○

609

AL41F (=TIALN)

Ø 9.0 mm

Grooving

new
new
new
new
new

part number	width of circlip	b + 0.03	f	s	d	t max.	D min.	U.S.A. Stock
R/LS009.0100	-	1.0	5.5	3.6	6.2	1.8	9.0	○
R/LS009.0150	-	1.5	5.5	3.6	6.2	1.8	9.0	○
R/LS009.0200	-	2.0	5.5	3.6	6.2	1.8	9.0	○
R/LS009.0250	-	2.5	5.5	3.6	6.2	1.8	9.0	○
R/LS009.0300	-	3.0	5.5	3.6	6.2	1.8	9.0	○

609

AL41F (=TIALN)

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

See pages 105 through 113 for Toolholders

Order example:
Right hand version and grade AL41F:
RS009.0070/AL41F



Inserts

Grooving internal

Min. bore Ø from 11 / 14 mm



part number	width of circlip	b + 0.03	f	s	d	t max.	D min.	U.S.A. Stock		toolholder type	standard carbide grade
								AL41F			
Ø 11 mm Circlip grooves											
R/LS011.0070	0.70	0.73	6.7	4.2	8	1.2	11	●		611	AL41F (=TiAlN)
R/LS011.0080	0.80	0.83	6.7	4.2	8	1.3	11	○			
R/LS011.0090	0.90	0.93	6.7	4.2	8	1.5	11	●			
R/LS011.0110	1.10	1.20	6.7	4.2	8	2.3	11	●			
R/LS011.0130	1.30	1.40	6.7	4.2	8	2.3	11	○			
R/LS011.0160	1.60	1.70	6.7	4.2	8	2.3	11	●			
Ø 11 mm Grooving											
R/LS011.0100	-	1.00	6.7	4.2	8	2.3	11	●		611	AL41F (=TiAlN)
R/LS011.0150	-	1.50	6.7	4.2	8	2.3	11	●			
R/LS011.0200	-	2.00	6.7	4.2	8	2.3	11	●			
R/LS011.0250	-	2.50	6.7	4.2	8	2.3	11	●			
R/LS011.0300	-	3.00	6.7	4.2	8	2.3	11	○			
Ø 14 mm Circlip grooves											
R/LS014.0070	0.70	0.73	9.0	5.3	9	1.2	14	○		614	AL41F (=TiAlN)
R/LS014.0080	0.80	0.83	9.0	5.3	9	1.3	14	○			
R/LS014.0090	0.90	0.93	9.0	5.3	9	1.5	14	●			
R/LS014.0110	1.10	1.20	9.0	5.3	9	4.0	14	●			
R/LS014.0130	1.30	1.40	9.0	5.3	9	4.0	14	○			
R/LS014.0160	1.60	1.70	9.0	5.3	9	4.0	14	●			
Ø 14 mm Grooving											
R/LS014.0150	-	1.50	9.0	5.3	9	4.0	14	●		614	AL41F (=TiAlN)
R/LS014.0200	-	2.00	9.0	5.3	9	4.0	14	●			
R/LS014.0250	-	2.50	9.0	5.3	9	4.0	14	●			
R/LS014.0300	-	3.00	9.0	5.3	9	4.0	14	●			

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

See pages 105 through 113 for Toolholders

Order example:
Right hand version and grade AL41F:
RS011.0070/AL41F

MINICUT

Inserts

Grooving, boring and profiling

Grooving internal

Min. bore Ø from 16 / 18 / 20 mm



part number	width of circlip	U.S.A. Stock							toolholder type	standard carbide grade
		b + 0.03	f	s	d	t max.	D min.	AL41F		
Ø 16 mm										
Circlip grooves										
R/LS016.0070	0.70	0.73	10.2	5.4	11	1.2	16	●	616	AL41F (=TiAlN)
R/LS016.0080	0.80	0.83	10.2	5.4	11	1.3	16	●		
R/LS016.0090	0.90	0.93	10.2	5.4	11	1.5	16	●		
R/LS016.0110	1.10	1.20	10.2	5.4	11	4.3	16	●		
R/LS016.0130	1.30	1.40	10.2	5.4	11	4.3	16	●		
R/LS016.0160	1.60	1.70	10.2	5.4	11	4.3	16	●		
Ø 16 mm										
Grooving										
R/LS016.0150	-	1.50	10.2	5.4	11	4.3	16	●	616	AL41F (=TiAlN)
R/LS016.0200	-	2.00	10.2	5.4	11	4.3	16	●		
R/LS016.0250	-	2.50	10.2	5.4	11	4.3	16	●		
R/LS016.0300	-	3.00	10.2	5.4	11	4.3	16	●		
R/LS016.0350	-	3.50	10.2	5.4	11	4.3	16	●		
R/LS016.0400	-	4.00	10.2	5.4	11	4.3	16	●		
Ø 18 mm										
Grooving										
R/LS018.0150	-	1.50	12.0	5.6	11	6.0	18	○	618	AL41F (=TiAlN)
R/LS018.0200	-	2.00	12.0	5.6	11	6.0	18	○		
R/LS018.0250	-	2.50	12.0	5.6	11	6.0	18	○		
R/LS018.0300	-	3.00	12.0	5.6	11	6.0	18	○		
R/LS018.0350	-	3.50	12.0	5.6	11	6.0	18	○		
R/LS018.0400	-	4.00	12.0	5.6	11	6.0	18	○		
Ø 20 mm										
Grooving										
R/LS020.0150	-	1.50	14.0	5.6	11	8.0	20	○	618	AL41F (=TiAlN)
R/LS020.0200	-	2.00	14.0	5.6	11	8.0	20	○		
R/LS020.0250	-	2.50	14.0	5.6	11	8.0	20	○		
R/LS020.0300	-	3.00	14.0	5.6	11	8.0	20	○		
R/LS020.0350	-	3.50	14.0	5.6	11	8.0	20	○		
R/LS020.0400	-	4.00	14.0	5.6	11	8.0	20	○		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

See pages 105 through 113 for Toolholders

Order example:
Right hand version and grade AL41F:
RS016.0070/AL41F





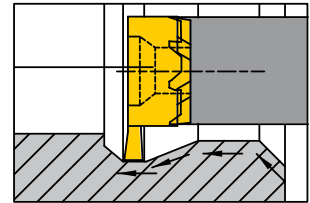
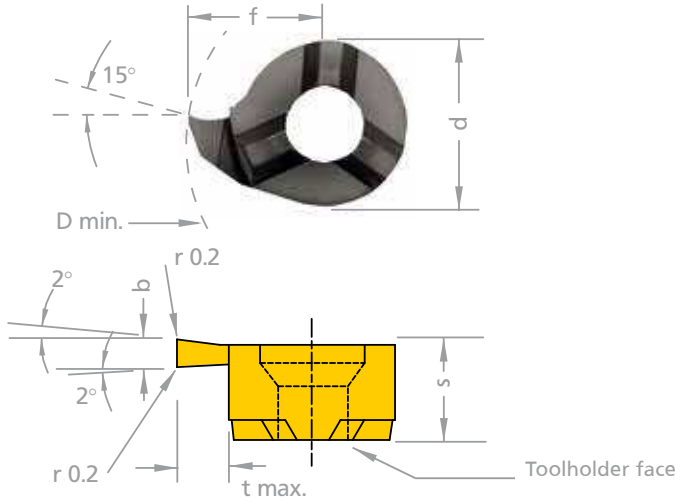
MINICUT

Grooving, boring and profiling

Inserts

NC-profiling internal

Min. bore Ø from 8 / 9 / 10 / 11 / 14 / 16 mm



Right hand (R): as shown
 Lefthand version (L): mirror image
 State right (R) or left (L) version
 Dimensions in mm



part number	b + 0.05	f	s	d	Ap max.*	t max.	D min.	U.S.A. Stock		toolholder type	standard carbide grade
								AL41F			
R/LS08.150.02	1.50	4.8	3.3	6	0.2	1	8	●		608	AL41F (=TIALN)
R/LS08.200.02	2	4.8	3.3	6	0.2	1	8	◐		608	
new new R/LS09.150.02	1.5	5.5	3.6	6.2	0.2	2	9	○		609	
new new R/LS09.200.02	2	5.5	3.6	6.2	0.2	2	9	○		609	
new new R/LS09.150.02.10	1.5	6.5	3.6	6.2	0.2	3	10	○		609	
new new R/LS09.200.02.10	2	6.5	3.6	6.2	0.2	3	10	○		609	
R/LS11.150.02	1.50	6.7	4.2	8	0.2	2.3	11	●		611	
R/LS11.200.02	2	6.7	4.2	8	0.2	2.3	11	●		611	
R/LS14.150.02	1.50	9	5.3	9	0.2	4	14	●		614	
R/LS14.200.02	2	9	5.3	9	0.2	4	14	●		614	
R/LS16.200.02	2	10.2	5.4	11	0.2	4.3	16	●		616	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

* Ap. max = maximum depth of cut (depending on material)

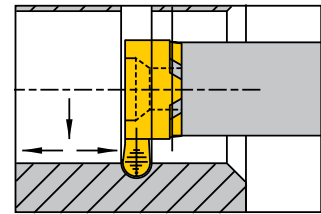
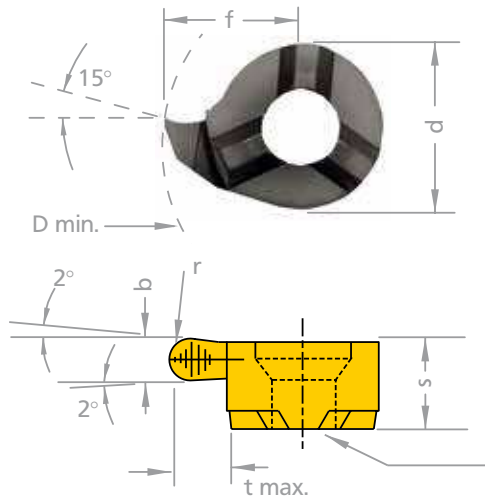
For use with toolholder 608 / 611 / 614 / 616:
 See pages 105 through 113

Order-example:
 Right hand version and grade AL41F: R508.150.02/AL41F



Full radius grooving internal

Min. bore Ø from 8 / 9 / 11 mm



Right hand (R): as shown
 Left hand version (L): mirror image
 State right (R) or left (L) version
 Dimensions in mm



part number	U.S.A. Stock								AL41F	toolholder type	standard carbide grade
	b + 0.05	r	f	s	d	t max.	D min.				
R/LS08.008R04	0.8	0.4	4.8	3.3	6	1.0	8	●	608	AL41F (=TiAlN)	
R/LS08.012R06	1.2	0.6	4.8	3.3	6	1.0	8	◐			
R/LS08.018R09	1.8	0.9	4.8	3.3	6	1.0	8	●			
R/LS08.020R10	2.0	1.0	4.8	3.3	6	1.0	8	○			
R/LS09.008R04	0.8	0.4	5.5	3.6	6.2	1.6	9	○	609		
R/LS09.012R06	1.2	0.6	5.5	3.6	6.2	1.6	9	○			
R/LS09.018R09	1.8	0.9	5.5	3.6	6.2	1.6	9	○			
R/LS09.020R10	2.0	1.0	5.5	3.6	6.2	1.6	9	○			
R/LS11.008R04	0.80	0.4	6.7	4.2	8	2.3	11	●	611		
R/LS11.012R06	1.20	0.6	6.7	4.2	8	2.3	11	◐			
R.LS11.016R08	1.6	0.8	6.7	4.2	8	2.3	11	○			
R/LS11.018R09	1.80	0.9	6.7	4.2	8	2.3	11	◐			
R/LS11.020R10	2.00	1.0	6.7	4.2	8	2.3	11	●			
R/LS11.024R12	2.40	1.2	6.7	4.2	8	2.3	11	○			
R/LS11.030R15	3.00	1.5	6.7	4.2	8	2.3	11	●			

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

For use with toolholder 608 / 609 / 611:
 See pages 105 through 113

Order example:
 Right hand version and grade AL41F:
 R508.008R04/AL41F



MINICUT

Grooving, boring and profiling

Inserts

Full radius grooving internal

Min. bore Ø from 14 / 16 mm

	part number	b + 0.05	r	f	s	d	t max.	D min.	U.S.A. Stock		toolholder type	standard carbide grade	
									AL41F				
new	R/LS14.008R04	2	1	4.8	3.3	9	4	14	○		614	AL41F (=TiAlN)	
	R/LS14.012R06	1.20	0.6	9	5.3	9	4	14	●				
	R/LS14.018R09	1.80	0.9	9	5.3	9	4	14	◐				
	R/LS14.020R10	2	1	9	5.3	9	4	14	●				
	R/LS14.022R11	2.2	1.1	9	5.3	9	4	14	◐				
	R/LS14.030R15	3	1.5	9	5.3	9	4	14	●				
new	R/LS16.016R08	1.6	0.8	10.2	5.4	11	4.3	16	○		616		
	R/LS16.018R09	1.8	0.9	10.2	5.4	11	4.3	16	◐				
new	R/LS16.020R10	2	1	10.2	5.4	11	4.3	16	○				
	R/LS16.022R11	2.2	1.1	10.2	5.4	11	4.3	16	◐				
new	R/LS16.024R12	2.4	1.2	10.2	5.4	11	4.3	16	○				
	R/LS16.030R15	3	1.5	10.2	5.4	11	4.3	16	◐				
new	R/LS16.032R16	3.2	1.6	10.2	5.4	11	4.3	16	○				
	R/LS16.040R20	4	2	10.2	5.4	11	4.3	16	◐				

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

See pages 105 through 113 for Toolholders

Order example:
Right hand version and grade CBN:
RS14.008R04/CBN

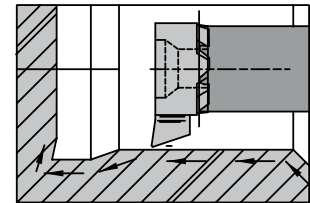
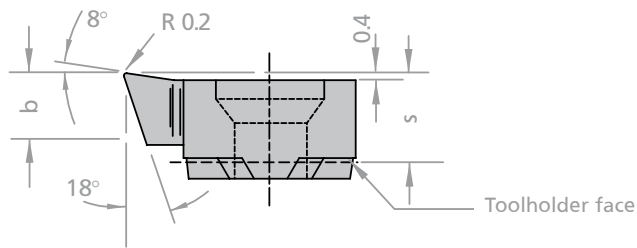
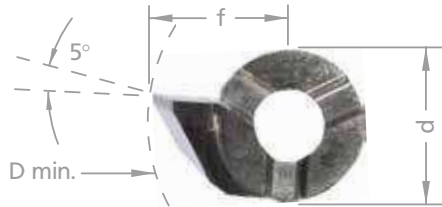
Inserts

MINICUT

Internal with CBN boring and copying of hardened parts

Min. bore Ø from 7.8 / 11 / 13.8 / 15.5 mm

Grooving, boring and profiling



Right hand (R): as shown
Left hand version (L): mirror image

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock						toolholder type	standard carbide grade
	b	f	s	d	D min.	CBN		
R/LS08.1846.02/CBN	3.30	4.65	3.5	6	7.8	○	608	CBN
R/LS11.1867.02/CBN	3.90	6.70	4.2	8	11.0	○	611	
R/LS14.1887.02/CBN	5.00	8.70	5.3	9	13.8	○	614	
R/LS16.1897.02/CBN	5.00	9.70	5.4	11	15.5	○	616	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

See pages 105 through 113 for Toolholders

Order example:
Right hand version and grade CBN:
R508.1846.02/CBN

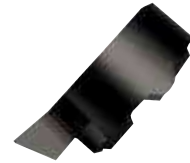
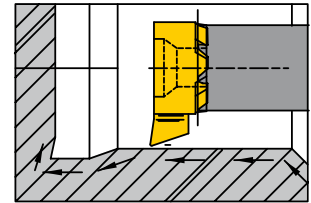
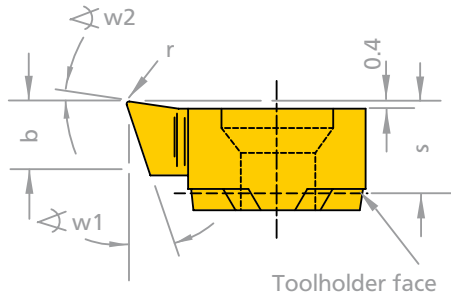
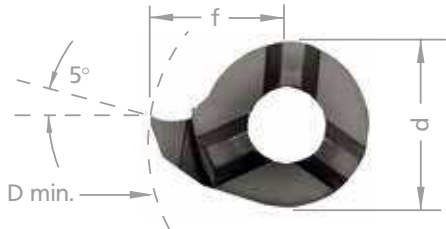
MINICUT

Inserts

Grooving, boring and profiling

Boring and copying internal

Min. bore Ø
from 7.8 / 9 / 9.8 / 11 /
13.8 / 14 / 15.5 mm



Right hand (R): as shown
Left hand version (L): mirror image

State right (R) or left (L) version

Dimensions in mm



part number	b	w1	w2	r	f	s	d	Ap max.*	D min.	U.S.A. Stock AL41F	toolholder type	standard carbide grade
new R/LS08.1846.005	3.04	18°	8°	0.05	4.65	3.5	6	0.6	7.8	○	608 609 611 614 616	AL41F (=TiAlN)
R/LS08.1846.02	3.3	18°	8°	0.2	4.65	3.5	6	0.6	7.8	◐		
new R/LS08.2046.02	3.4	20°	20°	0.2	4.65	3.5	6	0.6	7.8	○		
new R/LS09.1855.02	3.5	18°	8°	0.2	5.5	3.6	6.2	0.8	9	○		
new R/LS09.2055.02	3.5	20°	20°	0.2	5.5	3.6	6.2	0.8	9	○		
R/LS11.1855.02	3.9	18°	8°	0.2	5.5	4.2	8	1	9.8	●		
R/LS11.1867.02	3.9	18°	8°	0.2	6.7	4.2	8	1	11	●		
new R/LS11.2067.02	4.1	20°	20°	0.2	6.7	4.2	8	1	11	○		
R/LS14.1887.02	5	18°	8°	0.2	8.7	5.3	9	1.5	13.8	●		
new R/LS14.2087.02	5.2	20°	20°	0.2	8.7	5.3	9	1.5	14	○		
new R/LS16.1897.02	5	18°	8°	0.2	9.7	5.4	11	1.5	15.5	●		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

* Ap. max = maximum depth of cut (depending on material)

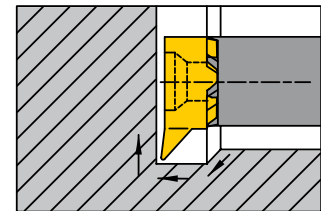
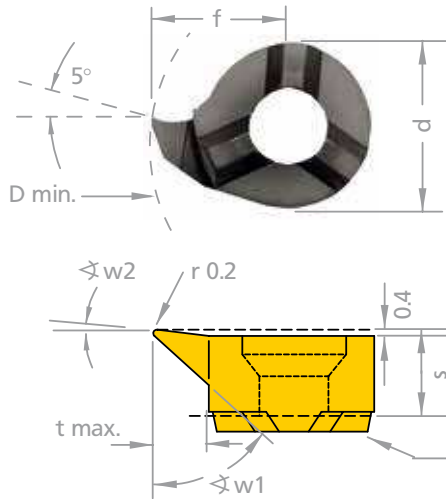
For use with toolholder:
608 / 609 / 611 / 614 / 616
see page see pages 105 through 113

Order example: right hand version and grade
AL41F: R508.1846.02/AL41F



Boring and profiling
undercuts DIN 509 and copying

Min. bore Ø
from 7.8 / 9 / 11 / 13.7 / 15.8 / 18 / 20 mm



Right hand (R): as shown
Left hand version (L): mirror image

State right (R) or left (L) version

Dimensions in mm



Boring and profiling undercuts (DIN 509)

new

part number	w1	w2	f	s	d	Ap max.*	t max.	D min.	U.S.A. Stock		toolholder type	standard carbide grade
									AL41F			
R/LS08.4746.02	47°	3°	4.65	3.5	6	0.4	1.2	7.8	●		608	AL41F (=TiAlN)
R/LS09.4755.02	47°	3°	5.5	3.6	6.2	0.5	1.5	9	○		609	
R/LS11.4767.02	47°	3°	6.7	4.2	8	0.6	2.3	11	●		611	
R/LS14.4787.02	47°	3°	8.7	5.3	9	0.8	3	13.7	●		614	
R/LS16.4710.02	47°	3°	10.2	5.4	11	1	4.3	15.8	◐		616	
R/LS18.4712.02	47°	3°	12	5.6	11	1	6	18	○		618	
R/LS20.4714.02	47°	3°	14	5.6	11	1.2	8	20	○		618	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

* Ap. max = maximum depth of cut (depending on material)

For use with toolholder 608 / 609 / 611 / 614 / 616 / 618: see page 105 through 113

Order example: right hand version and grade AL41F: R508.4746.02/AL41F



MINICUT

Inserts

Boring and profiling
undercuts DIN 509 and copying

Min. bore Ø
from 7.8 / 11 / 13.7 / 15.8 mm

Copying



part number	w1	w2	f	s	d	Ap max.*	t max.	D min.	U.S.A. Stock		toolholder type	standard carbide grade
									AL41F			
R/LS08.2555.02	30°	5°	4.65	3.5	6	0.4	1.2	7.8	●		608	AL41F (=TiAlN)
R/LS11.2755.02	30°	5°	6.7	4.2	8	0.6	2.3	11	○		611	
R/LS14.3555.02	30°	5°	8.7	5.3	9	0.8	4	13.7	◐		614	
R/LS16.4055.02	30°	5°	10.2	5.4	11	0.8	4.3	15.8	◑		616	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

* Ap. max = maximum depth of cut
(depending on material)

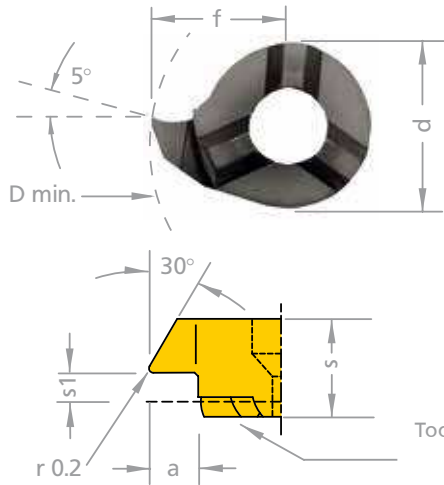
For use with toolholder 608 / 611 / 614 / 616:
see pages 105 through 113

Order example:
Right hand version and grade AL41F:
RS08.3046.02/AL41F

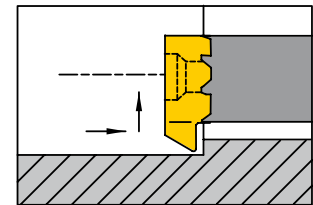


Boring by backward motion internal

Min. bore Ø from 7.8 / 9 / 10 / 11 / 13.8 mm



Toolholder face



Right hand (R): as shown
Left hand version (L): mirror image

State right (R) or left (L) version

Dimensions in mm



new
new

part number	f	s	s1	d	Ap max.*	a	D min.	U.S.A. Stock		toolholder type	standard carbide grade
								AL41F			
R/LS08.3046.02	4.65	3.5	1	6	0.6	1.3	7.8	●	○	608	AL41F (=TiAlN)
R/LS09.3055.02	5.5	3.55	1.2	6.2	0.8	1.7	9	○	○	609	
R/LS09.3065.02	6.5	3.55	1.2	6.2	0.8	2.3	10	○	○	609	
R/LS11.3067.02	6.7	4.3	1.6	8	1	2.3	11	●	○	611	
R/LS14.3087.02	8.7	5.4	2.4	9	1.5	3.5	13.8	●	○	614	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

* Ap. max = maximum dept of cut (depending on material)

For use with toolholder 608 / 609 / 611 / 614: see pages 105 through 113

Order example:
Right hand version and grade AL41F:
R508.3046.02/AL41F



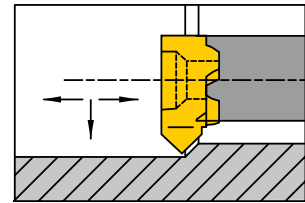
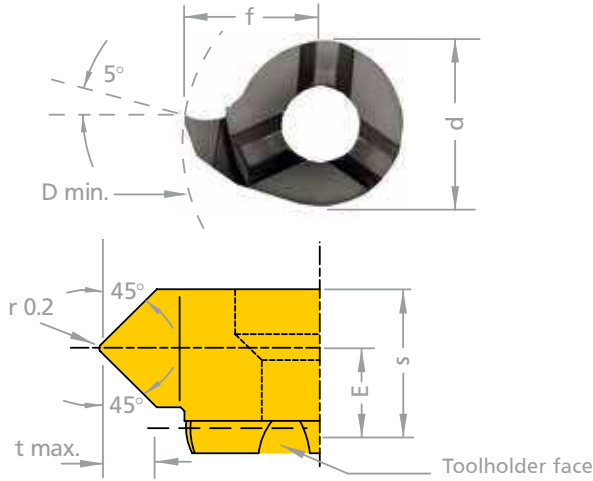
MINICUT

Grooving, boring and profiling

Inserts

Chamfering and profiling internal

Min. bore Ø from 8 / 9 / 11 / 14 mm



Right hand (R): as shown
 Left hand version (L): mirror image
 State right (R) or left (L) version
 Dimensions in mm



new

part number	f	s	d	E	Ap max.*	t max.	D min.	U.S.A. Stock		toolholder type	standard carbide grade
								AL41F			
R/LS08.4545.02	4.8	3.5	6	1.8	0.6	1.4	8	●		608	AL41F (=TiAlN)
R/LS09.4545.02	5.5	3.55	6.2	1.8	0.8	1.3	9	○		609	
R/LS11.4545.02	6.7	4.3	8	2.2	1	1.5	11	◐		611	
R/LS14.4545.02	9	5.4	9	2.8	1.2	1.5	14	◑		614	

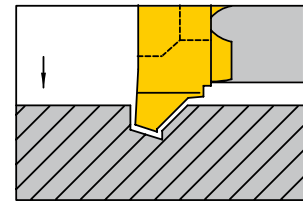
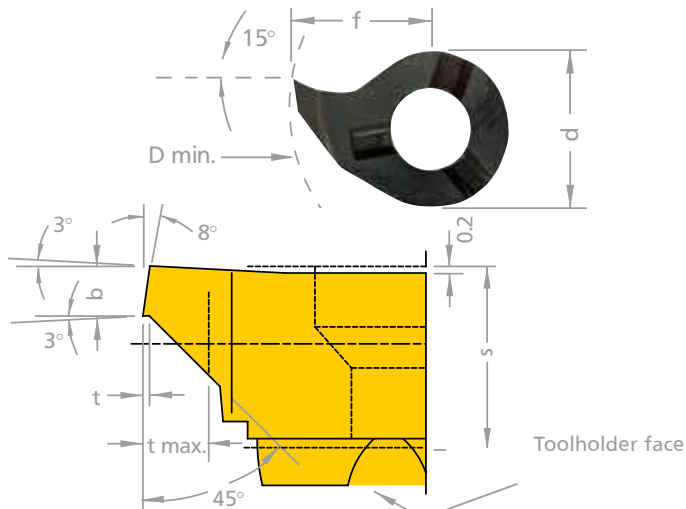
U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

* Ap. max = maximum depth of cut (depending on material)

For use with toolholder 608 / 609 / 611 / 614: see pages 105 through 113

Order example:
 Right hand version and grade AL41F:
 RS08.4545.02/AL41F



Right hand (R): as shown
Left hand version (L): mirror image

State right (R) or left (L) version

Dimensions in mm



new

part number	U.S.A. Stock								toolholder type	standard carbide grade
	b	t	f	s	d	t max.	D min.	AL41F		
R/LS08.0810.45	1	0.2	4.8	3.3	6	1	8	●	608	AL41F (=TIALN)
R/LS09.0810.45	1	0.2	5.5	3.6	6.2	1.5	9	○	609	
R/LS11.0810.45	1	0.2	6.7	4.2	8	1.5	11	●	611	
R/LS14.0815.45	1	0.2	9	5.3	9	1.5	14	◐	614	
R/LS16.0815.45	1	0.2	10.2	5.4	11	1.5	16	●	616	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

For use with toolholder 608 / 609 / 611 / 614 / 616:
see pages 105 through 113

Order example:
Right hand version and grade AL41F:
RS08.0810.45/AL41F



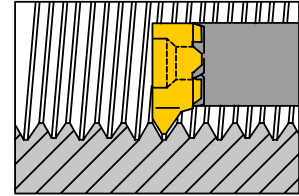
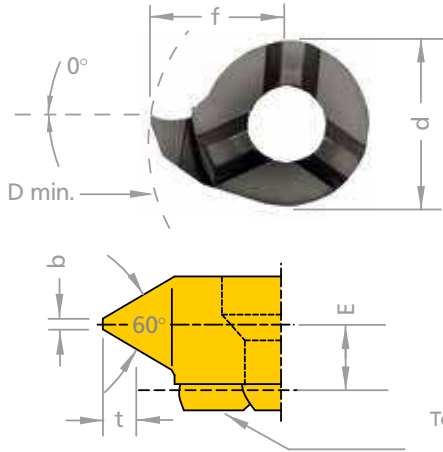
MINICUT

Inserts

grooving, boring and profiling

Metric thread

Threading internal partial profile
min. bore Ø from 8 / 9 / 11 / 14 / 16 mm



Eight hand (R): as shown
Left hand version (L): mirror image

State right (R) or left (L) version

Dimensions in mm



part number	P pitch	t	b	f	s	d	E	D min.	U.S.A. Stock		toolholder type	standard carbide grade
									AL41F			
R/LS08.0205.01	0.5 - 0.75	0.43	0.06	4.8	3.5	6	2.95	8	●		608	AL41F (=TiAlN)
R/LS08.0510.01	1 - 1.25	0.7	0.12	4.8	3.5	6	2.7	8	●		608	
R/LS08.0815.01	1.5 - 1.75	0.95	0.18	4.8	3.5	6	2.25	8	●		608	
new R/LS09.0205.01	0.5 - 0.75	0.27	0.06	5.5	3.55	6.2	3.2	9	○		609	
new R/LS09.0510.01	1 - 1.25	0.54	0.12	5.5	3.55	6.2	3	9	○		609	
new R/LS09.0815.01	1.5 - 1.75	0.81	0.18	5.5	3.55	6.2	2.8	9	○		609	
new R/LS09.0917.01	1.75 - 2	0.95	0.2	5.5	3.55	6.2	2.6	9	○		609	
new R/LS09.1020.01	2 - 2.5	1.08	0.25	5.5	3.55	6.2	2.5	9	○		609	
new R/LS09.1325.01	2.5 - 3	1.35	0.31	5.5	3.55	6.2	2.1	9	○		609	
new R/LS09.1630.01	3 - 3.5	1.62	0.37	5.5	3.55	6.2	1.9	9	○		609	
R/LS11.0205.01	0.5 - 0.75	0.41	0.06	6.7	4.3	8	3.75	11	●		611	
R/LS11.0510.01	1 - 1.25	0.55	0.12	6.7	4.3	8	3.6	11	●		611	
R/LS11.0815.01	1.5 - 1.75	0.81	0.18	6.7	4.3	8	3.2	11	●		611	
R/LS11.1020.01	2 - 2.5	1.08	0.25	6.7	4.3	8	2.9	11	●		611	
R/LS11.1325.01	2.5 - 3	1.35	0.31	6.7	4.3	8	3	11	●		611	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

For use with toolholder 608 / 609 / 611:
see pages 105 through 113

Order example:
Right hand version and grade AL41F:
R508.0815.01/AL41F



Metric thread

Threading internal partial profile
min. bore Ø from 8 / 9 / 11 / 14 / 16 mm

part number	P pitch	t	b	f	s	d	E	D min.	U.S.A. Stock		toolholder type	standard carbide grade
									AL41F			
R/LS14.0510.01	1.0 – 1.25	0.55	0.12	9	5.4	9	4.6	14	●		614	AL41F (=Ti/ALN)
R/LS14.0815.01	1.5 – 1.75	0.81	0.18	9	5.4	9	4.3	14	●		614	
R/LS14.1020.01	2.0 – 2.5	1.08	0.25	9	5.4	9	3.9	14	●		614	
R/LS14.1325.01	2.5 – 3.0	1.35	0.31	9	5.4	9	3.65	14	●		614	
R/LS16.0510.01	1.0 – 1.25	0.55	0.12	10.2	5.5	11	4.8	16	●		616	AL41F (=Ti/ALN)
R/LS16.0815.01	1.5 – 1.75	0.81	0.18	10.2	5.5	11	4.3	16	●		616	
R/LS16.1020.01	2.0 – 2.5	1.08	0.25	10.2	5.5	11	3.9	16	●		616	
R/LS16.1325.01	2.5 – 3.0	1.35	0.31	10.2	5.5	11	3.7	16	●		616	



U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

* Ap. max = maximum depth of cut (depending on material)

For use with toolholder 614 / 616: see pages 105 through 113

Order example:
Right hand version and grade AL41F:
RS08.3046.02/AL41F



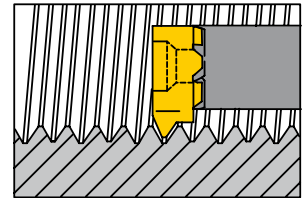
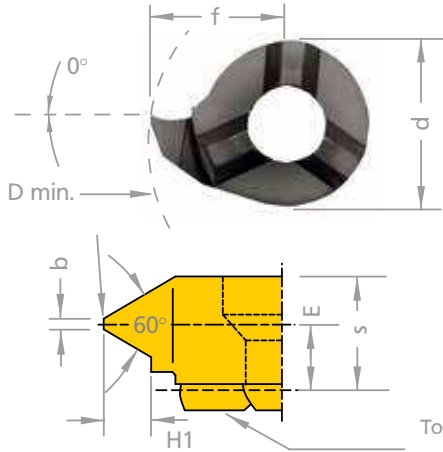
MINICUT

Grooving, boring and profiling

Inserts

Metric thread

Threading internal full profile
min. bore Ø from 9 / 11 / 14 mm



Toolholder face

Right hand (R): as shown
Left hand version (L): mirror image

State right (R) or left (L) version

Dimensions in mm



	part number	P pitch	H1	b	f	s	d	E	D min.	U.S.A. Stock		toolholder type	standard carbide grade
										AL41F			
new	R/LS09.0205.02	0.5	0.27	0.06	5.5	3.55	6.2	3.25	9	○		609	AL41F (=TiAlN)
new	R/LS09.0510.02	1.0	0.54	0.12	5.5	3.55	6.2	3	9	○		609	
new	R/LS09.0815.02	1.5	0.81	0.18	5.5	3.55	6.2	2.8	9	○		609	
new	R/LS09.0917.02	1.75	0.95	0.2	5.5	3.55	6.2	2.7	9	○		609	
new	R/LS09.1020.02	2.0	1.08	0.25	5.5	3.55	6.2	2.6	9	○		609	
new	R/LS09.1325.02	2.5	1.35	0.31	5.5	3.55	6.2	2.5	9	○		609	
new	R/LS09.1630.02	3.0	1.62	0.37	5.5	3.55	6.2	2.2	9	○		609	
	R/LS11.0510.02	1.0	0.54	0.12	6.7	4.3	8	3.6	11	○		611	
	R/LS11.0815.02	1.5	0.81	0.18	6.7	4.3	8	3.3	11	◐		611	
	R/LS11.1020.02	2.0	1.08	0.25	6.7	4.3	8	2.9	11	○		611	
	R/LS11.1325.02	2.5	1.35	0.31	6.7	4.3	8	2.95	11	○		611	
	R/LS11.1630.02	3.0	1.62	0.37	6.7	4.3	8	2.9	11	○		611	
	R/LS14.0205.02	0.5	0.27	0.06	9	5.4	9	4.8	14	○		614	
	R/LS14.0510.02	1.0	0.54	0.12	9	5.4	9	4.7	14	○		614	
	R/LS14.0815.02	1.5	0.81	0.18	9	5.4	9	4.3	14	○		614	
	R/LS14.1020.02	2.0	1.08	0.25	9	5.4	9	4.2	14	○		614	
	R/LS14.1325.02	2.5	1.35	0.31	9	5.4	9	3.65	14	○		614	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

For use with toolholder 609 / 611 / 614
see pages 105 through 113

Order example:
Right hand version and grade AL41F:
R511.1020.02/AL41F

Inserts

Metric thread

Threading internal full profile
min. bore Ø from 16 mm

MINICUT

Grooving, boring and profiling



part number	P pitch	H1	b	f	s	d	E	D min.	U.S.A. Stock		toolholder type	standard carbide grade
									AL41F			
R/LS16.0510.02	1	0.54	0.12	10.2	5.5	11	4.8	16	○		616	AL41F (=TiAlN)
R/LS16.0815.02	1.5	0.81	0.18	10.2	5.5	11	4.3	16	○		616	
R/LS16.1020.02	2	1.08	0.25	10.2	5.5	11	4.05	16	○		616	
R/LS16.1325.02	2.5	1.35	0.31	10.2	5.5	11	4.2	16	○		616	
R/LS16.1630.02	3	1.62	0.37	10.2	5.5	11	4.0	16	○		616	
R/LS16.1835.02	3.5	1.89	0.43	10.2	5.5	11	3.9	16	○		616	
R/LS16.2140.02	4	2.16	0.50	10.2	5.5	11	3.6	16	○		616	



U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

For use with toolholder 616
see pages 105 through 113

Order example:
Right hand version and grade AL41F:
RS11.1020.02/AL41F



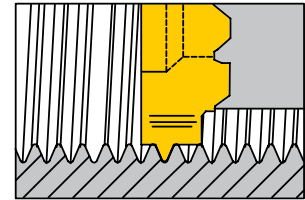
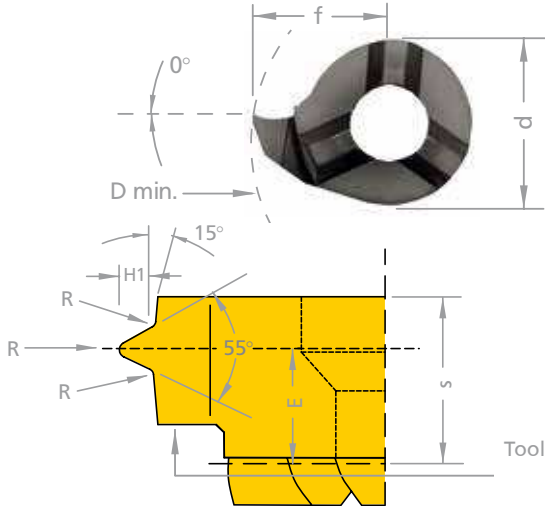
MINICUT

grooving, boring and profiling

Inserts

Threading internal whitworth full profile

Min. bore Ø from 11 / 14 / 16 mm



Right hand (R): as shown
 Left hand version (L): mirror image
 State right (R) or left (L) version
 Dimensions in mm



part number	P pitch	H1	Gg inch	f	s	d	E	D min.	U.S.A. Stock		toolholder type	standard carbide grade
									AL41F			
R/LS11.0813.19	1.337	0.85	19	6.7	4.3	8	2.7	11	○		611	AL41F (=TIALN)
R/LS11.1118.14	1.814	1.16	14	6.7	4.3	8	3	11	○		611	
R/LS14.0813.19	1.337	0.85	19	9	5.35	9	3.8	14	○		614	
R/LS14.1118.14	1.814	1.16	14	9	5.35	9	3.6	14	○		614	
R/LS16.1118.14	1.814	1.16	14	10.2	5.5	11	3.9	16	○		616	
R/LS16.1423.11	2.309	1.48	11	10.2	5.5	11	3.5	16	○		616	

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

For use with toolholder 611 / 614 / 616:
 see pages 105 through 113

Order example:
 Right hand version and grade AL41F:
 RS11.0813.19/AL41F

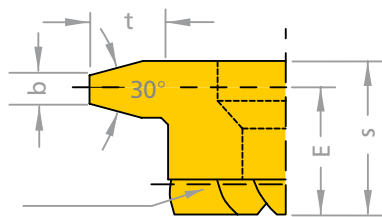
Inserts

MINICUT

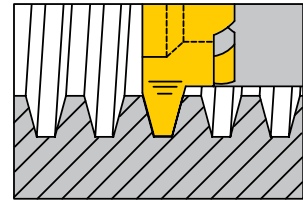
Trapezoidal thread
Threading internal

Min. bore Ø from 9 / 10 / 11 / 14 / 16 mm

Grooving, boring and profiling



Toolholder face



Right hand (R): as shown
Left hand version (L): mirror image

State right (R) or left (L) version

Dimensions in mm



new
new
new
new

part number	D min.	P pitch	t	f	E	s	b	d	U.S.A. Stock		toolholder type	standard carbide grade
									AL41F			
R/LS09.1015.01	9	1.5	0.9	5.5	3.0	3.55	0.47	6.2	○		609	AL41F (=TIALN)
R/LS09.1220.01	9	2.0	1.25	5.5	2.85	3.55	0.60	6.2	○			
R/LS09.1730.01	9	3.0	1.75	5.5	2.25	3.55	0.96	6.2	○			
R/LS09.2240.01	10	4.0	2.25	5.5	2.25	3.55	1.33	6.2	○			
R/LS11.1015.01	11.0	1.5	0.9	6.7	3.7	4.3	0.47	8.0	○		611	
R/LS11.1220.01	11.0	2.0	1.25	6.7	3.5	4.3	0.60	8.0	○			
R/LS11.1730.01	11.0	3.0	1.75	6.7	3.2	4.3	0.96	8.0	○			
R/LS11.2240.01	11.0	4.0	2.25	6.7	2.6	3.95	1.33	8.0	○			
R/LS14.1220.01	14.0	2.0	1.25	9.0	4.3	5.3	0.60	9.0	○		614	
R/LS14.1730.01	14.0	3.0	1.75	9.0	4.0	5.3	0.96	9.0	○			
R/LS14.2240.01	14.0	4.0	2.25	9.0	4.0	5.3	1.33	9.0	○			
R/LS14.2750.01	14.0	5.0	2.75	9.0	3.55	5.3	1.69	9.0	○			
R/LS16.1220.01	16.0	2.0	1.25	9.7	4.5	5.5	0.60	11.0	○		616	
R/LS16.1730.01	16.0	3.0	1.75	9.7	4.3	5.5	0.96	11.0	○			
R/LS16.2240.01	16.0	4.0	2.25	9.7	4.0	5.5	1.33	11.0	○			
R/LS16.2750.01	16.0	5.0	2.75	10.2	3.6	5.5	1.69	11.0	○			
R/LS16.3560.01	16.0	6.0	3.50	10.2	3.3	5.5	1.92	11.0	○			

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

For use with toolholder 609 / 611 / 614 / 616:
see pages 105 through 113

Order example:
Right hand version and grade AL41F:
RS11.1015.01/AL41F



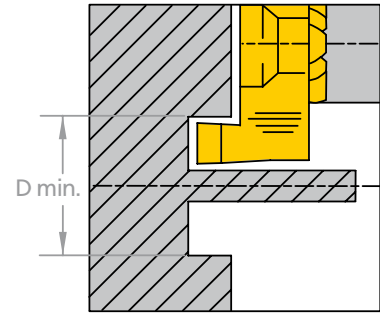
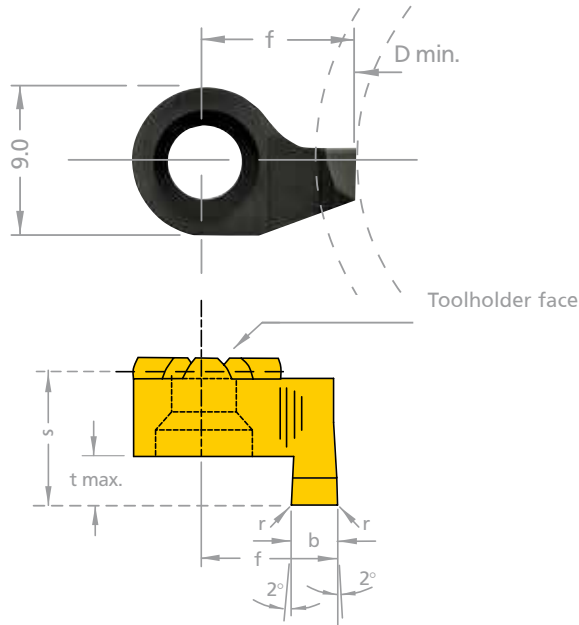
MINICUT

Grooving, boring and profiling

Inserts

Face grooving in pivots

From outer groove Ø 12 mm



R = right hand version shown (rotation left)
L = left hand version, mirror image (rotation right)

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock							toolholder type	standard carbide grade
	b + 0.03	f	r	s	t max.	D min.	AL41F		
R/LS014.1210.00	1.00	7.0	-	8.3	1.5	12	●	614 614A	AL41F (=Ti/AlN)
R/LS014.1215.02	1.50	7.5	0.2	8.3	2.5	12	●		
R/LS014.1220.02	2.00	8.0	0.2	8.3	3.0	12	●		
R/LS014.1225.02	2.50	8.5	0.2	8.3	3.0	12	◐		
R/LS014.1230.02	3.00	9.0	0.2	8.3	3.0	12	●		
R/LS014.1220.52	2.00	8.0	0.2	10.3	5.0	12	●		
R/LS014.1225.52	2.50	8.5	0.2	10.3	5.0	12	●		
R/LS014.1230.52	3.00	9.0	0.2	10.3	5.0	12	●		
RS014.1230.62	3.00	9.0	0.2	11.3	6.0	12	◑		

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

For use with toolholder 614 / 614A:
see pages 105 through 113

Order example:
Right hand version and grade AL41F:
RS014.1210.00/AL41F

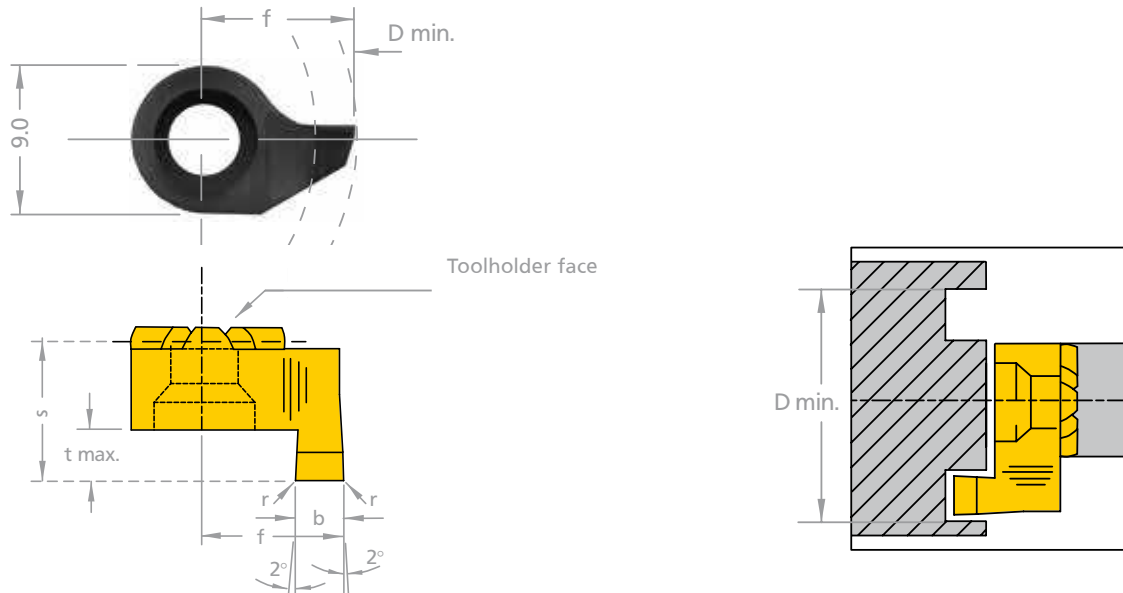
Inserts

Face grooving

From outer groove Ø 14 mm

MINICUT

Grooving, boring and profiling



R = righthand version shown
(rotation left)
L = lefthand version, mirror image
(rotation right)

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock							AL41F	toolholder type	standard carbide grade
	b + 0.03	f	r	s	t max.	D min.				
R/LS014.1410.00	1.00	9.0	-	8.3	1.5	14	●	614 614A	AL41F (=TiAlN)	
R/LS014.1415.02	1.50	9.0	0.2	8.3	2.5	14	●			
R/LS014.1420.02	2.00	9.0	0.2	8.3	3.0	14	●			
R/LS014.1425.02	2.50	9.0	0.2	8.3	3.0	14	◐			
R/LS014.1430.02	3.00	9.0	0.2	8.3	3.0	14	○			
R/LS014.1420.52	2.00	9.0	0.2	10.3	5.0	14	●			
R/LS014.1425.52	2.50	9.0	0.2	10.3	5.0	14	●			
R/LS014.1430.52	3.00	9.0	0.2	10.3	5.0	14	●			
RS014.1430.62	3.00	9.0	0.2	11.3	6.0	14	◐			

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

For use with toolholder 614 / 614A:
see pages 105 through 113

Order example:
Right hand version and grade AL41F:
RS014.1410.00/AL41F



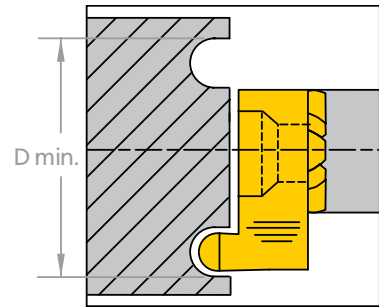
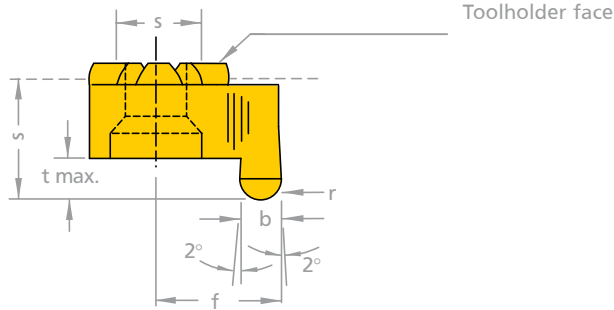
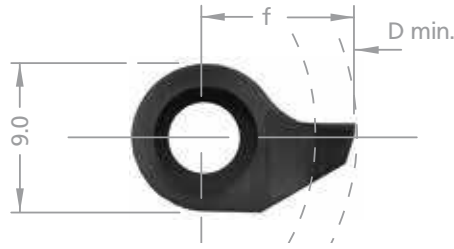
MINICUT

Grooving, boring and profiling

Inserts

Face grooving full radius

From outer groove Ø 14 mm



R = right hand version shown
(rotation left)
L = left hand version, mirror image
(rotation right)

State right (R) or left (L) version

Dimensions in mm



part number	U.S.A. Stock							toolholder type	standard carbide grade
	b +0.03	f	r	s	t max.	D min.	AL41F		
R/LS014.1410.05	1.00	9.0	0.5	8.3	1.5	14.0	○	614 614A	AL41F (=TiAlN)
R/LS014.1416.08	1.60	9.0	0.8	8.3	2.5	14.0	○		
R/LS014.1420.10	2.00	9.0	1.0	8.3	3.0	14.0	○		
R/LS014.1425.12	2.50	9.0	1.2	8.3	3.0	14.0	○		
R/LS014.1430.15	3.00	9.0	1.5	8.3	3.0	14.0	◐		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

For use with toolholder 614 / 614A:
see pages 105 through 113

Order example:
Right hand version and grade AL41F:
R5014.1410.05/AL41F

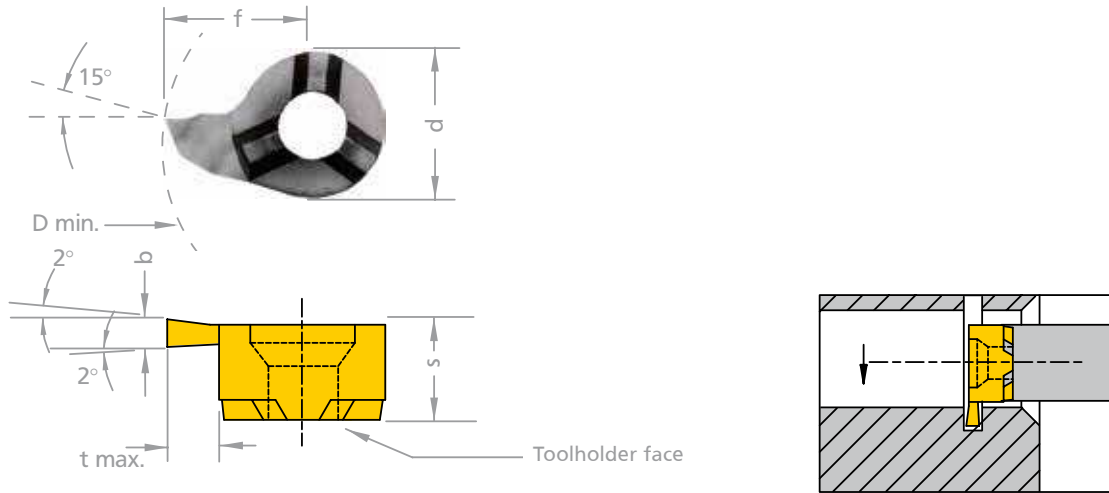
Inserts

Internal grooving
maximum depth of groove

Min. bore Ø from 16 / 17 mm

MINICUT

Grooving, boring and profiling



Right hand (R): as shown
Left hand version (L): mirror image
State right (R) or left (L) version
Dimensions in mm



part number	U.S.A. Stock							toolholder type	standard carbide grade
	b +0.03	f	s	d	t max.	D min.	AL41F		
Min. bore Ø from 16 mm									
R/LS55.150.00	1.50	10.5	5.2	9	5.5	16.0	●	614	AL41F (=TIALN)
R/LS55.200.00	2.00	10.5	5.2	9	5.5	16.0	○		
R/LS55.250.00	2.50	10.5	5.2	9	5.5	16.0	○		
R/LS55.300.00	3.00	10.5	5.2	9	5.5	16.0	○		
min. bore Ø from 17 mm									
R/LS65.150.00	1.50	11.5	5.2	9	6.5	17.0	○	614	AL41F (=TIALN)
R/LS65.200.00	2.00	11.5	5.2	9	6.5	17.0	●		
R/LS65.250.00	2.50	11.5	5.2	9	6.5	17.0	○		
R/LS65.300.00	3.00	11.5	5.2	9	6.5	17.0	○		

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

For use with toolholder 614:
see pages 105 through 113

Order example:
Right hand version and grade AL41F:
R555.150.00/AL41F



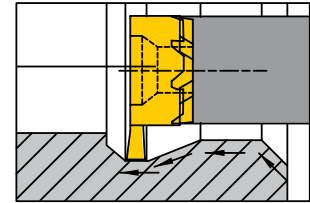
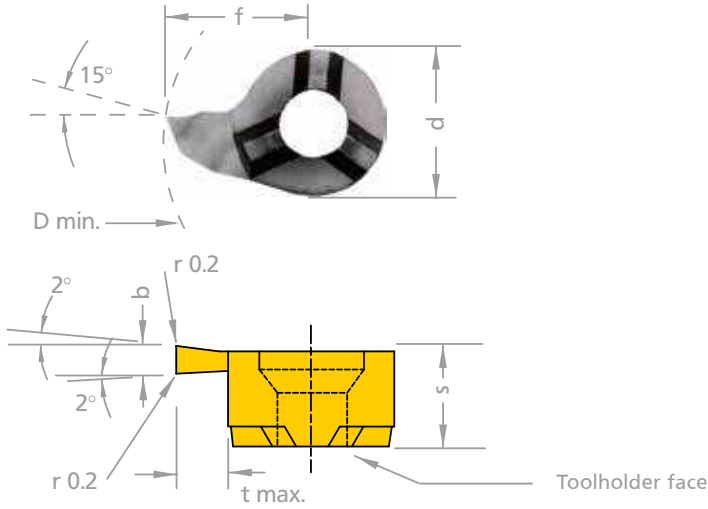
MINICUT

Grooving, boring and profiling

Inserts

NC profiling internal
maximum depth of groove

Min. bore Ø from 16 / 17 mm



Right hand (R): as shown
Left hand version (L): mirror image

State right (R) or left (L) version

Dimensions in mm

part number

b +0.03

r

f

s

d

t max.

D min.

U.S.A. Stock

AL41F

toolholder type

standard carbide grade

Min. bore Ø from 16 mm

R/LS55.150.02	1.50	0.2	10.5	5.2	9	5.5	16.0	●
R/LS55.200.02	2.00	0.2	10.5	5.2	9	5.5	16.0	●
R/LS55.250.02	2.50	0.2	10.5	5.2	9	5.5	16.0	●
R/LS55.300.02	3.00	0.2	10.5	5.2	9	5.5	16.0	●

614

AL41F
(=TIALN)

Min. bore Ø from 17 mm

R/LS65.150.02	1.50	0.2	11.5	5.2	9	6.5	17.0	●
R/LS65.200.02	2.00	0.2	11.5	5.2	9	6.5	17.0	●
R/LS65.250.02	2.50	0.2	11.5	5.2	9	6.5	17.0	●
R/LS65.300.02	3.00	0.2	11.5	5.2	9	6.5	17.0	●

614

AL41F
(=TIALN)

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

For use with toolholder 614:
see pages 105 through 113

Order example:
Right hand version and grade AL41F:
R555.150.02/AL41F

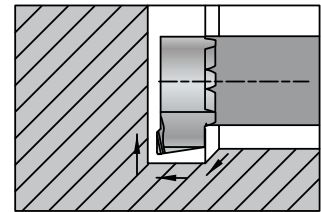
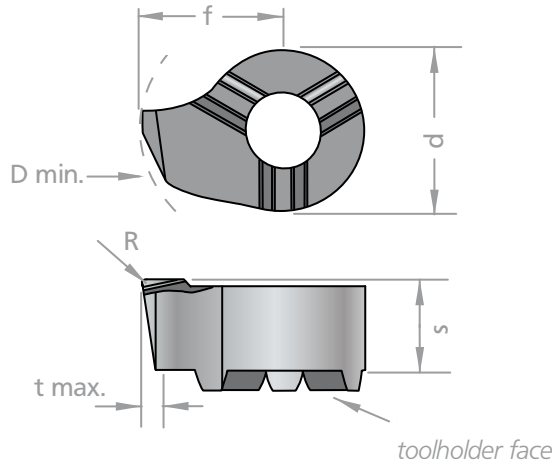
Inserts

MINICUT

Boring with special chipformer

Min. bore Ø from 9.0 mm

Grooving, boring and profiling



Right hand (R): as shown
Left hand version (L): mirror image

State right (R) or left (L) version

Dimensions in mm

Boring with special chipformer

new

part number	U.S.A. Stock						toolholder type	standard carbide grade
	f	s	d	t max.	D min.	AL41F		
R/LS09.055C.02	5.5	3.6	6.2	0.5	9.0	○	609	AL41F (=TIALN)

U.S.A. Stock

- = Both Right & Left Hand in Stock
- = Express Delivery
- ◐ = Left Hand in Stock
- ◑ = Right Hand in Stock

* Apage max = maximum dept of cut (depending on material)

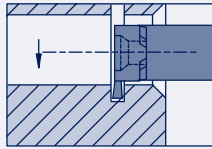
For use with toolholder 609: see pages 105 through 113

Order example:
Right hand version and grade AL41F:
RS09.055C.02/AL41F

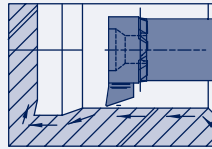
Cutting data

For grooving standard values for cutting speeds

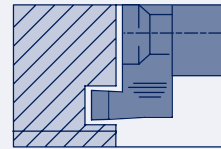
Feed rates f IPR.



0.0004" - 0.0012"



0.0012" - 0.004"



0.0004" - 0.0012"

Material to be machined

Material no.

Hardness (HB)

Cutting speeds $V_c =$ SFM
coat.

AL41F

Carbon steel

1212 9 SMn 28
A573-81 65 ST 37-3
5120 ST 52-3

140
180
200

260-660

Steel alloyed

4130 25 CrMo 4

350

230-330

Steel high alloyed

4140 42 CrMo4V
O2 90 MnCrV 8
H13 X 40 CrMoV

200

260-520

Steel stainless

431 20CrNi17 2
2332 X5CrNi18 10
430F X12CrMoS17

200
180

260-520
260-520

Cast steel

unalloyed
alloyed

180
220

300-590
230-590

Tempered steel

32510 GTW 35
50005 GTS 55

125
220

100-590
100-590

Cast iron

Class30 GG 20
Class55 GG 40

180
250

100-590
100-590

Cutting data

For grooving standard values for cutting speeds

Material to be machined	Material no.	Hardness (HB)	Cutting speeds Vc = SFM coat. AL41F
Cast iron	60-40-18 GGG 40	160	100-590
	100-70-03 GGG 70	250	100-590
Heat resistant alloys (Ni/Co)	annealed	250	100-260
Aluminum alloy castings	not hardenable	30-80	300-1970
	hardenable	80-120	2600-2300
Aluminum alloy forgings	not hardenable	80	300-2630
	hardenable	100	300-2300
Bronze-brass alloys			260-2300

Grades summary

Basic substrates:

K10F

All purpose micrograin carbide with good abrasion resistance. Uncoated for applications with low or medium cutting speeds and machining off non-ferrous materials.

CBN

Ductile CBN grade for application with lower cutting speed. Suitable for hardened steel, interrupted cuts and cast iron.

Standard coatings:

CN45F

All purpose PVD-TIN coating. this all round grade is suitable for low and medium cutting speeds with restrictions on non-ferrous materials.

AL41F

Very universal TiAlN coating with a high resistance to high temperature and hardness. very suitable also for non-ferrous metals.

*) Special coatings:

CN5F

Coating for the processing of steel and non-ferrous materials with medium or low cutting speed.

XC

Coating for difficult to machine materials and for hardmachining >52HRC.

*) coating only on request

Grades summary

AC60F	AlCr based high performance coating with high oxidation resistance, wear resistance and hot hardness resistance especially for milling.
HC1F	AlCr based high performance coating with high oxidation resistance, wear resistance and hot hardness resistance especially for turning.
PD2F	Coating for universal use with medium and low cutting speed.
PD3E	Tough coating with thick coating layer for very high cutting speed and feed as well as interrupted cuts.
C41C	Very smooth TiAlN coating for high performance machining with all materials.
AS2F	Coating for machining aluminium, alloys and non-ferrous metals.
XC2A	Coating with excellent hot hardness, high oxidation resistance and thermal insulation capacity. Perfect for hard machining > 60 HRC.

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Paul Dümmel Werkzeugfabrik GmbH



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