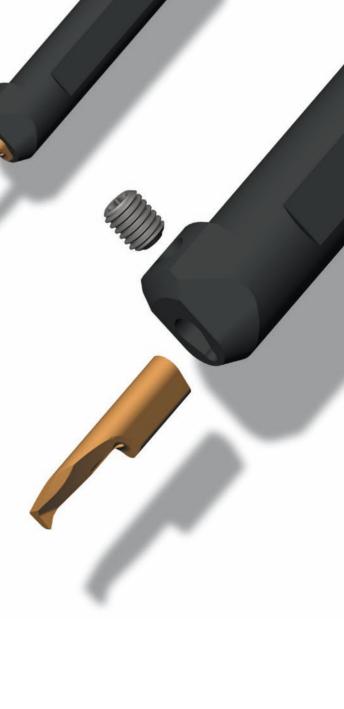
Grooving, boring, face grooving, threading

# The same toolholder can be used for all inserts

# **Type 105**

- special shaped backend of inserts guarantees accurate center height and indexability without resetting the machine
- through coolant supply
- enlarged backend of inserts gives a rigid clamping and good vibration resistance



## ≥Ø.008" (0.2 mm)

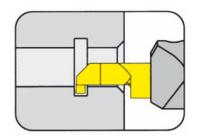
(ph HORN ph



## **BU105**

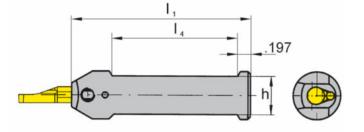
with through coolant supply

Bore Ø from	.008″
Depth of groove up to	.098″
Width of groove up to	.079″



for use with Insert

Type 105 U105





Picture = right hand cutting version shown

Part number	d	l <sub>1</sub>	h	Ι <sub>4</sub>
BU105.0500.01	.500	2.950	.433	2.160
BU105.0625.01	.625	2.950	.551	2.160
BU105.0750.01	.750	3.540	.671	2.750
BU105.1000.01	1.000	3.540	.921	2.750

Further sizes upon request

#### Ordering note:

Toolholders can be used with right and left hand inserts.

#### Spare parts

A4

Toolholder	Screw	TORX PLUS® Wrench
BU105	6.075T15P	T15PQ

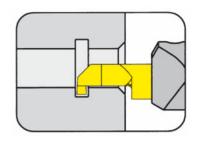
Dimensions in inch



**B105** 

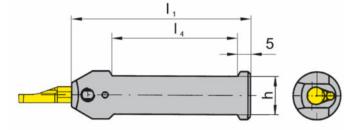
with through coolant supply

Bore Ø from	.008″ (0.2 mm)
Depth of groove up to	.098″ (2.5 mm)
Width of groove up to	.079″ (2.0 mm)



for use with Insert

Type 105 U105





Picture = right hand cutting version shown

Part number	d	l <sub>1</sub>	h	۱ <sub>4</sub>
B105.0010.01	10	75	9	50
B105.0012.01	12	75	11	50
B105.0016.01	16	75	14	50
B105.0020.01	20	90	18	55
B105.0025.01	25	100	23	55
Further sizes upon request				Dimensions in mm

#### Ordering note:

Toolholders can be used with right and left hand inserts.

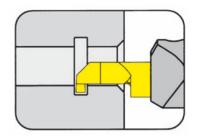
Toolholder	Screw	TORX PLUS® Wrench
B105.00	6.075T15P	T15PQ



## B105/BU105

with through coolant supply

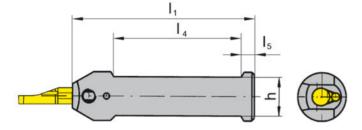
Bore Ø from	.008″ (0.2 mm)
Depth of groove up to	.098″ (2.5 mm)
Width of groove up to	.079″ (2.0 mm)



Dimensions in mm

for use with Insert

Type 105 U105





Picture = right hand cutting version shown

Part number	d	I <sub>1</sub>	h	۱ <sub>4</sub>	I <sub>5</sub>	Remark
B105.0022.01	22.00	90.0	20.00	55	5	-
B105.0028.01	28.00	120.0	26.00	72	12	**
BU105.0750.5.01	3/4"	90.0	17.04	70	5	**
BU105.0750.5.3.01	3/4"	152.5	17.05	70	5	**
BU105.1000.5.01	1"	90.0	23.40	65	5	**
BU105.1000.5.3.01	1"	152.5	23.40	70	5	**

Further sizes upon request

\*\* Adapter of cooling M12x1,5 for Traub

#### Ordering note:

Toolholders can be used with right and left hand inserts.

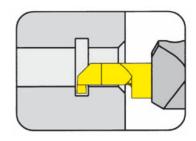
Toolholder	Screw	TORX PLUS® Wrench
B/BU105	6.075T15P	T15PQ



**B105** 

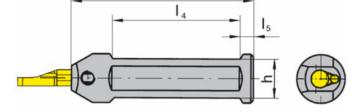
with through coolant supply

Bore Ø from	.008″ (0.2 mm)
Depth of groove up to	.098″ (2.5 mm)
Width of groove up to	.079″ (2.0 mm)

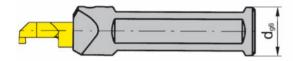


for use with Insert

Type 105 U105



 $I_1$ 



Picture = right hand cutting version shown

Part number	d	l <sub>1</sub>	h	I <sub>4</sub>	I <sub>5</sub>
B105.0022.1.2.01	22	120	20	72	5
Further sizes upon request				C	)imensions in mm

#### Ordering note:

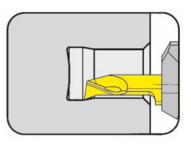
Toolholders can be used with right and left hand inserts.

Toolholder	Screw	TORX PLUS® Wrench
B105.0022.1.2.01	6.075T15P	T15PQ



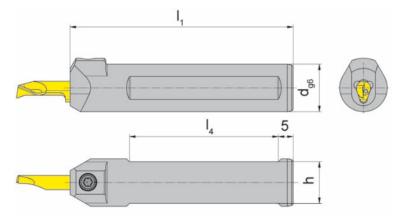
B105 with through coolant supply

Bore Ø from	.008″ (0.2 mm)
Depth of groove up to	.098″ (2.5 mm)
Width of groove up to	.079″ (2.0 mm)



for use with Insert

Type 105 U105



Picture = right hand cutting version shown

Part number d  $I_1$ h  $I_4$ B105.0012.K.01 12 75 50 11 B105.0016.K.01 16 75 14 50 B105.0020.K.01 20 90 18 50

Further sizes upon request

#### Ordering note:

Toolholders can be used with right and left hand inserts.

#### Spare parts

**A8** 

Toolholder	Screw	TORX PLUS® Wrench
B105.00	6.075T15P	T15PQ

Dimensions in mm

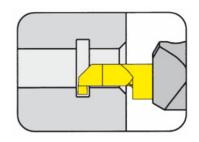
with additional through coolant bores



B105

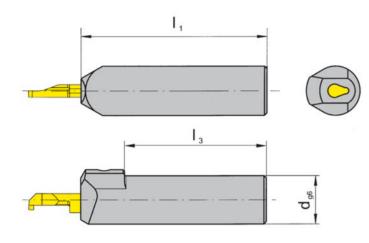
with through coolant supply

Bore Ø from	.008″ (0.2 mm)
Depth of groove up to	.098″ (2.5 mm)
Width of groove up to	.079″ (2.0 mm)



for use with Insert

Type 105 U105



Picture = right hand cutting version shown

Part number	d	l <sub>1</sub>	ا <sub>ع</sub>
B105.0010.01A	10	75	57
B105.0012.01A	12	75	63
B105.0016.01A	16	75	63

Further sizes upon request

#### Ordering note:

Toolholders can be used with right and left hand inserts.

### Spare parts

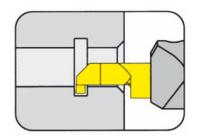
Toolholder	Screw	TORX PLUS® Wrench
B105.001	6.075T15P	T15PQ



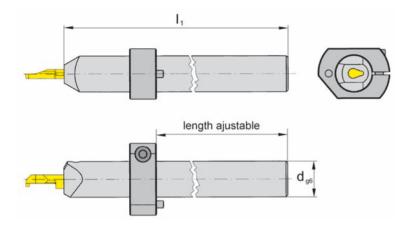
B105

with through coolant supply

Bore Ø from	.008″ (0.2 mm)
Depth of groove up to	.098″ (2.5 mm)
Width of groove up to	.079″ (2.0 mm)



for use with Insert



Type 105 U105

Picture = right hand cutting version shown

Part number	d	l <sub>1</sub>
B105.0020.2.01	20	150
B105.0025.2.01	25	150

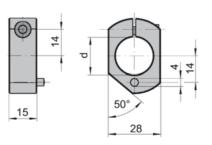
Further sizes upon request

#### Ordering note:

Toolholders can be used with right and left hand inserts.

Adjusting ring is not combined with the toolholder - separate order required!

### Adjusting ring



Part number "Adjusting ring"	d	Type of machine
020.0020.1665	20	Tornos DECO
020.0025.2234	25	



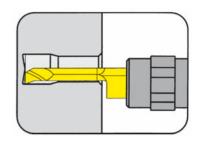
Α

## **TOOLHOLDER Type**

B105

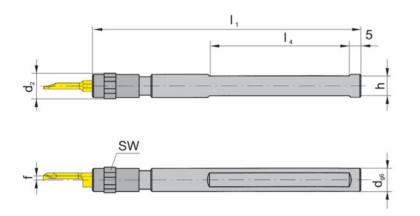
with through coolant supply

Bore Ø from ≤.118"(3.0mm) or ≥.197"(5.0mm)



for use with Insert

Type 105/U105 (Ø ≤.118"/3.0mm) (Ø ≥.197"/5.0mm)



Picture = right hand cutting version shown

Part number	d	I <sub>1</sub>	h	d <sub>2</sub>	I <sub>4</sub>	Bore Range	SW
B105.0010.9.01	10	100	9	11	50	* ≤ 3.0	10
B105.0012.11.01 B105.0016.11.01	12 16	100	11 15	16	50	* ≥ 5.0	13

Further sizes upon request

f see inserts type 105

Dimensions in mm

\* only valid for standard inserts

#### Ordering note:

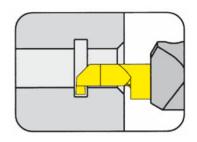
Toolholders can be used with right and left hand inserts.

Toolholder	Chucking nut
B105.0010.9.01	020.0010.1719
B105.00101	020.0016.1999



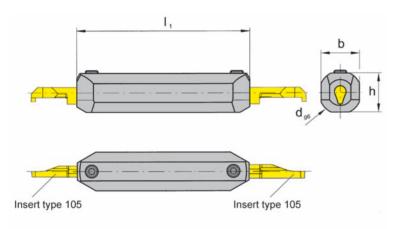
<b>BU105</b>	)
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Bore Ø from	.008″
Depth of groove up to	.098″
Width of groove up to	.079″



for use with Insert

Type 105 U105



#### Picture = right and left hand cutting version shown

Part number	d	l <sub>1</sub>	h	b
BU105.0750.2.2.01	.750	4.724	.671	.671
Further sizes upon request				Dimensions in inch

#### Ordering note:

Toolholders can be used with right and left hand inserts.

Toolholder	Screw	TORX PLUS® Wrench
BU105.0750.2.2.01	6.075T15P	T15PQ

## **GROOVING and BORING**

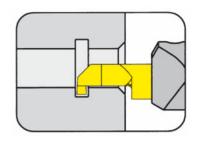


## **TOOLHOLDER Type**

B105	

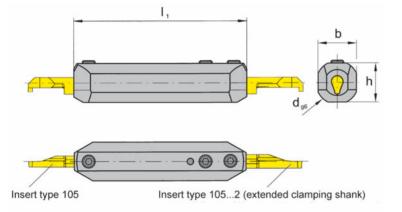
no coolant supply

Bore Ø from	.008″ (0.2 mm)
Depth of groove up to	.098″ (2.5 mm)
Width of groove up to	.079″ (2.0 mm)



for use with Insert

105 105...2 U105



Туре

#### Picture = right and left hand cutting version shown

Part number	d	I <sub>1</sub>	h	b
B105.0020.1.03	20	80	18	18
Further sizes upon request				Dimensions in mm

#### Ordering note:

Toolholders can be used with right and left hand inserts.

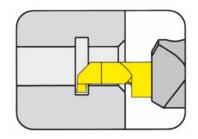
Toolholder	Screw	TORX PLUS® Wrench
B105.0020.1.03	6.075T15P	T15PQ



**B105** 

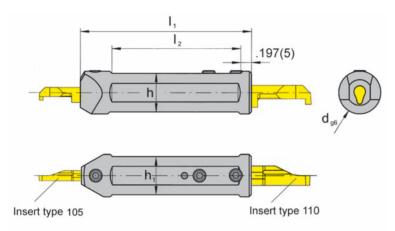
with through coolant supply

Bore Ø from	.008/.236" (0.2/6.0 mm)
Depth of groove up to	.098./157" (2.5/4.0 mm)
Width of groove up to	.079/.118" (2.0/3.0 mm)



for use with Insert

Туре 105/U105 110/U110



Picture = right and left hand cutting version shown

Part number	d	l <sub>1</sub>	l <sub>2</sub>	h	h <sub>1</sub>
B105.0020.1.10	20	80	60	18	18
Further sizes upon request					Dimensions in mm

#### Ordering note:

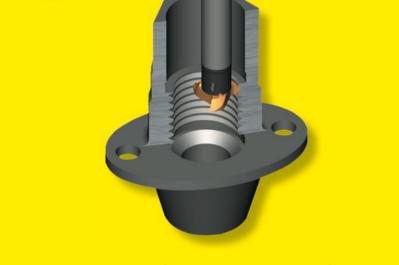
Toolholders can be used with right and left hand inserts.

Toolholder	Screw	TORX PLUS® Wrench
B105.0020.1.10	6.075T15P	T15PQ

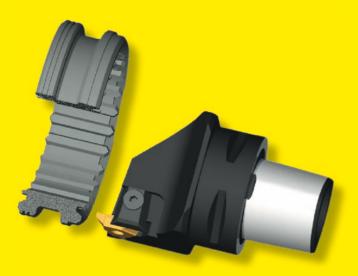


Α

## SOLUTIONS PLUS Program



## Need faster delivery? Inquire about our Solutions Plus Program.



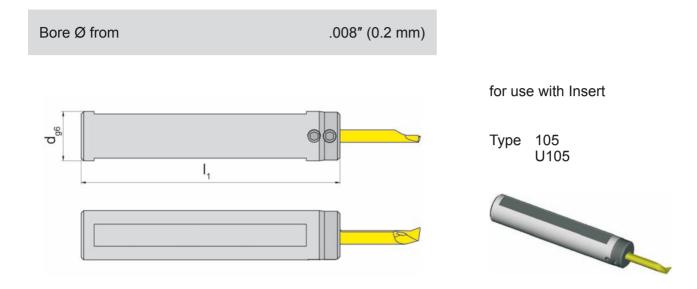




## BASIC TOOLHOLDER Type

IR105 with through coolant supply





Picture = right hand cutting version shown

Part number	d	I <sub>1</sub>	Type of machine
IR105.34.100 IR105.34.40 IR105.34.50 IR105.34.70 IR105.20.30 IR105.20.50 IR105.10.100 IR105.10.60	3/4" 3/4" 3/4" 20,00 20,00 1" 1"	100 40 50 70 30 50 100 60	CITIZEN
IR105.16.30 IR105.16.50 IR105.16.70 IR105.22.100 IR105.22.120 IR105.22.38 IR105.22.50 IR105.22.70	16,00 16,00 22,00 22,00 22,00 22,00 22,00 22,00	30 50 70 100 120 38 50 70	STAR
IR105.18.310 IR105.20.170 IR105.20.185 IR105.25.100 IR105.25.150 IR105.28.80	18,00 20,00 20,00 25,00 25,00 28,00	310 170 185 100 150 80	TORNOS

Further sizes upon request

#### Note:

Coolant supply must be ordered separately!

Dimensions in mm and inch

## **GROOVING and BORING**

## CARTRIDGE Type

Bore Ø from

σ

Picture = right hand cutting version shown

Part number	l <sub>1</sub>	I <sub>2</sub>	d,
IR105.1640.IKV	40	23	16,00
IR105.3440.IKV	40	23	3/4"
IR105.2040.IKV	40	23	20,00
IR105.2240.IKV	40	23	22,00
IR105.2560.IKV	60	23	25,00
IR105.1060.IKV	60	23	1"

**IR105** 

with through coolant supply

.008" (0.2 mm)

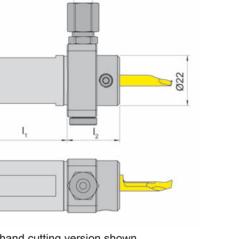
Further sizes upon request

#### Note:

Coolant supply must be ordered separately!

## Spare parts

Cartridge Graf	Screw	TORX PLUS® Wrench
IR105	6.075T15P	T15PQ

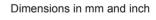


M8x1

for use with Insert

Type 105 U105









GRAF

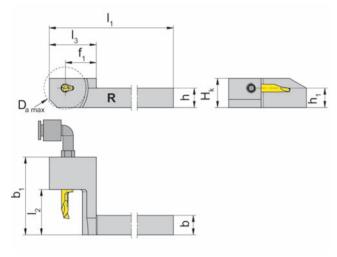


HC105 with screwed clamping

Bore Ø from

.008″ (0.2 mm)

Coolant supply through cranked fittin



L = left hand version shown

R = right hand version

Part number	I <sub>1</sub>	l <sub>2</sub>	h	h <sub>1</sub>	f <sub>1</sub>	I <sub>3</sub>	b	b <sub>1</sub>	D <sub>a max</sub>	H <sub>k</sub>	Remark
R/LHC105.0707.21	99	18	7	7	19	29	7	32.0	26	13	*
R/LHC105.0808.21	99	18	8	8	19	29	8	32.0	26	13	*
RHC105.1010.11	99	8	10	10	19	29	10	22.7	26	16	*
R/LHC105.1010.21 R/LHC105.1010.41	99	18 28	10	10	19	29	10	38.0 48.0	26	16	
R/LHC105.1212.21 R/LHC105.1212.41	99	18 28	12	12	19	29	12	38.0 48.0	26	18	
R/LHC105.1616.21 R/LHC105.1616.41	104	18 28	16	16	24	34	16	38.0 48.0	36	22	

State R or L version

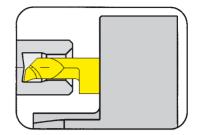
Further sizes upon request

#### Note:

\* = no through coolant supply!

#### Spare parts

Toolholder	Screw	TORX PLUS® Wrench	Screwed angle fittin
R/LHC10507./08	6.075T15P	T15PQ	-
RHC10511	6.075T15P	T15PQ	-
R/LHC105.121/41	6.075T15P	T15PQ	KQ2L06-M5



for use with Insert

Type 105 U105



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## **TOOLHOLDER Type HC105** with screwed clamping Bore Ø from .008" (0.2 mm) for use with Insert $I_1$ $I_2$ Туре 105 U105 0 Ť R 4 č f<sub>1</sub> (q) à م R = right hand version shown L = left hand version

Part number H<sub>k</sub> h  $f_1$ b b<sub>1</sub> I<sub>1</sub>  $I_2$ h<sub>1</sub> R/LHC105.1212.01 18 90 12 12 12 17 7.5 16 R/LHC105.1616.01 130 16 16 22 16

State R or L version

Further sizes upon request

#### Spare parts

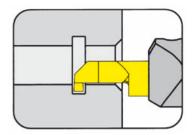
Toolholder	Screw	TORX PLUS® Wrench
R/LHC105.1	6.075T15P	T15PQ



H105 with screwed clamping

Bore Ø from

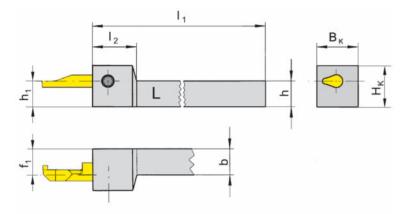




Dimensions in mm

for use with Insert

Type 105 U105



L = left hand version shown

R = right hand version

Part number	I <sub>1</sub>	I <sub>2</sub>	h	h <sub>1</sub>	f <sub>1</sub>	b	B <sub>K</sub>	H <sub>k</sub>
R/LH105.0808.01	90	17	8	8	7.5	8	16	14
R/LH105.1010.01	90	17	10	10	7.5	10	16	16
R/LH105.1212.01	90	17	12	12	7.5	12	16	18
R/LH105.1616.01	110	17	16	16	7.5	16	16	22

State R or L version

Further sizes upon request

### Spare parts

A20

Toolholder	Screw	TORX PLUS® Wrench
R/LH105	6.075T15P	T15PQ

Δ

## **HORN - THE LEADERS IN GROOVING TECHNOLOGY**



## **High Performance Reaming**

SYSTEM DR URMA Licence

Large selection of base material, coatings and geometries. High repeatability when replacing inserts. Diameters from 11.9 mm - 140.6 mm.

## HORN - INTELLIGENT TOOL DESIGN AT WORK.

For further information, please contact HORN USA.



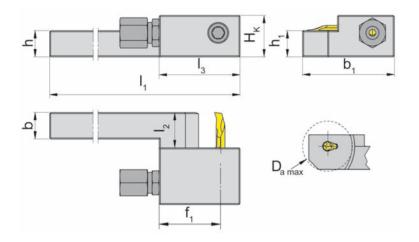
962 with screwed clamping



Bore Ø from

.008″ (0.2 mm)

Coolant through fittin



for use with Insert

Type 105 U105



R = right hand version shown

L = left hand version

Part number	I <sub>1</sub>	I <sub>2</sub>	h	h <sub>1</sub>	f <sub>1</sub>	I <sub>3</sub>	b	b <sub>1</sub>	D <sub>a max</sub>	H <sub>k</sub>
962.08.01R 962.08.02L	130	15	8	8	27	37	8	42	26	15
962.10.01R 962.10.02L	130	15	10	10	27	37	10	42	26	17
962.12.01R 962.12.02L	130	15	12	12	27	37	12	42	26	19
962.16.01R 962.16.02L	130	15	16	16	27	37	16	42	32	23
962.20.01R 962.20.02L	130	15	20	20	27	37	20	42	32	27

Further sizes upon request

#### Note:

Coolant supply must be ordered separately!

#### Spare parts

A22

Toolholder	Screw	TORX PLUS® Wrench	Coolant supply
962	6.075T15P	T15PQ	004.00.19

In the UNITED STATES call us toll free 1 - 888 - 818 HORN



GRAF

## **TOOLHOLDER Type**

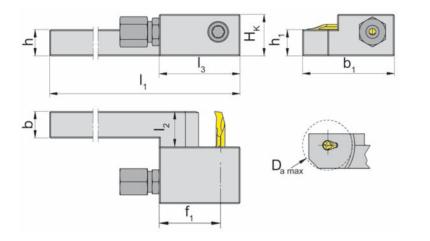
962

with screwed clamping

Bore Ø from

.008" (0.2 mm)

Coolant through fittin



for use with Insert

Type 105 U105



R = right hand version shown

L = left hand version

Part number	I <sub>1</sub>	I <sub>2</sub>	h	h <sub>1</sub>	f <sub>1</sub>	I <sub>3</sub>	b	b <sub>1</sub>	D <sub>a max</sub>	H <sub>k</sub>
962.08.03R 962.08.04L	130	30	8	8	27	37	8	57	26	15
962.10.03R 962.10.04L	130	30	10	10	27	37	10	57	26	17
962.12.03R 962.12.04L	130	30	12	12	27	37	12	57	26	19
962.16.03R 962.16.04L	130	30	16	16	27	37	16	57	32	23
962.20.03R 962.20.04L	130	30	20	20	27	37	20	57	32	27

Further sizes upon request

#### Note:

Coolant supply must be ordered separately!

#### Spare parts

Toolholder	Screw	TORX PLUS® Wrench	Coolant supply
962	6.075T15P	T15PQ	004.00.19



963 with screwed clamping



Bore Ø from

.008″ (0.2 mm)

b.

Coolant through fittin

4

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for use with Insert

Type 105 U105



R = right hand version shown

L = left hand version

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Part number	I <sub>1</sub>	I <sub>2</sub>	h	h <sub>1</sub>	f <sub>1</sub>	I <sub>3</sub>	b	b <sub>1</sub>	D <sub>a max</sub>	H <sub>k</sub>
963.08.01R 963.08.02L	130	15	8	8	40	50	8	42	26	15
963.10.01R 963.10.02L	130	15	10	10	40	50	10	42	26	17
963.12.01R 963.12.02L	130	15	12	12	40	50	12	42	26	19
963.16.01R 963.16.02L	130	15	16	16	45	50	16	42	32	23
963.20.01R 963.20.02L	130	15	20	20	45	50	20	42	32	27

Further sizes upon request

#### Note:

Coolant supply must be ordered separately!

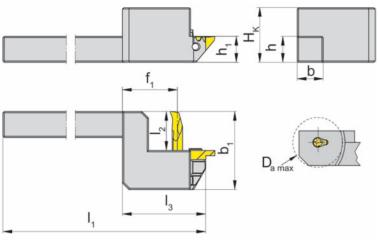
#### Spare parts

Toolholder	Screw	TORX PLUS® Wrench	Coolant supply
963	6.075T15P	T15PQ	004.00.19



Α

## **TOOLHOLDER Type** AIH GRAF Bore Ø from .008" (0.2 mm)



for use with Insert

Туре 105 U105 S274

R = right hand version shown

L = left hand version

Part number	I <sub>1</sub>	I <sub>2</sub>	h	h <sub>1</sub>	f <sub>1</sub>	I <sub>3</sub>	b	b <sub>1</sub>	D <sub>a max</sub>	H <sub>k</sub>	Remark
AIH.974.R/L1010.K04 AIH.974.R/L1212.K04 AIH.974.R/L1616.K04 AIH.974.R/L2020.K04	130	15	10 12 16 20	10 12 16 20	23 23 26 29	35 35 38 38	10 12 16 20	30	20 20 26 32	17 19 23 23	*
AIH.R/L1010.K08 AIH.R/L1212.K08 AIH.R/L1616.K08 AIH.R/L2020.K08	130	15	10 12 16 20	10 12 16 20	21 21 24 27	30	10 12 16 20	30	20 20 26 32	17 19 23 23	**

State R or L version

Note:

\* These toolholders can be equipped with HORN inserts type 105 and S274

\*\* These toolholders can be equipped with HORN inserts type 105 and Graf inserts CS08

Further sizes upon request

#### Spare parts

Toolholder	Screw	Screw	TORX PLUS® Wrench
AIH	030.3509.T15P	6.075T15P	T15PQ





#### **Tools for Tornos DECO2000**



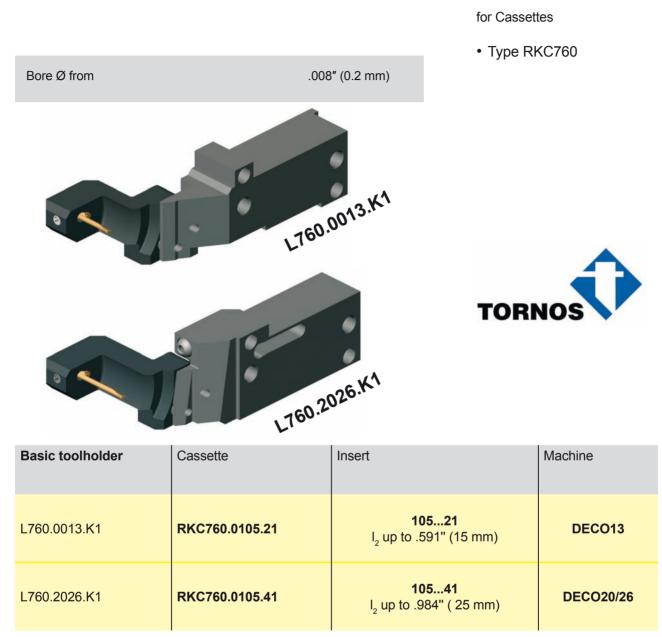
RHC105.0710.41

**105...41** I<sub>2</sub> up to .984" ( 25 mm)

Dimensions in inch (mm)



### **Tools for Tornos DECO2000**

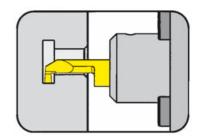


Dimensions in inch (mm)



## **BASIC TOOLHOLDER Type**

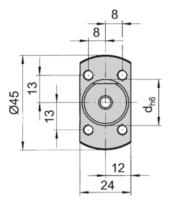
**BGT** without cartridge

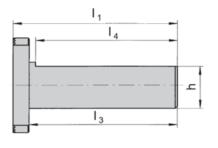


## Adjustable round shanks for toolholder BKT105.2445.01/2

with through coolant supply

A







Part number	d	I <sub>1</sub>	h	l <sub>3</sub>	۱ <sub>4</sub>	Machine tool
BGT001.0010.50	10	57.50	9	50	47	
BGT001.0016.21 BGT001.0R16.21	16	28.50	14	21	18	Star
BGT001.0020.100	20	107.50	18	100	97	Tornos
BGT001.0022.30 BGT001.0022.70	22	36.35 77.50	20	30 70	27 67	Star
BGT001.0025.70	25	77.50	23	70	67	
BGT001.0028.80	28	87.50	26	81	77	Traub

Further sizes upon request

Dimensions in mm

#### Note:

BGT001.0022.30 without through coolant supply

Basic toolholder	Screw	O-ring
BGT001.0	DIN912M5X10	DIN37707X3

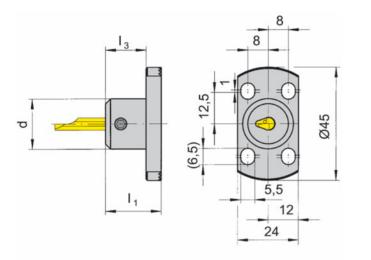


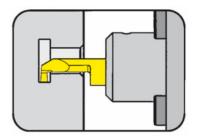
Α

## ADJUSTABLE HOLDER Type

Bore Ø from Depth of groove up to Width of groove up to

with through coolant supply





for use with Insert

Type 105 U105



Part number	d	l <sub>1</sub>	l <sub>3</sub>
BKT105.2445.01	20	22	16
BKT105.2445.02		32	26

**BKT** 

.008" (0.2 mm) .098" (2.5 mm)

.079" (2.0 mm)

Further sizes upon request

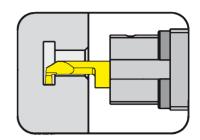
Dimensions in mm

Adjustable holder	Screw	TORX PLUS® Wrench
BKT105.2445.0	6.075T15P	T15PQ



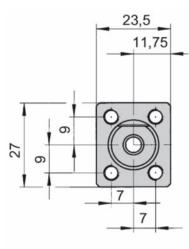
## BASIC TOOLHOLDER Type

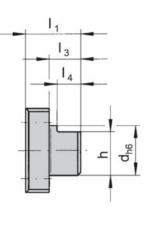
**BGT** without cartridge



### Adjustable round shanks for toolholder BKT105.2327.01

with through coolant supply







Part number	d	I <sub>1</sub>	h	l <sub>3</sub>	۱ <sub>4</sub>	Machine tool
BGT001.1627.10	16	17.5	14	10	7.5	Star

Further sizes upon request

Dimensions in mm

### Spare parts

Basic toolholderScrewO-ringBGT001.1627.10DIN912M5X10DIN37707X3

## **GROOVING and BORING**

## **BASIC TOOLHOLDER Type**

without cartridge

**BGT** 

## Adjustable round shanks for toolholder BKT105.2327.01

with through coolant supply

#### 20 7 21 19 Ø52 d<sub>g6</sub> Œ 19 $(\cdot)$ 7 $I_3$ 12 ۱. 24

Part number	d	l <sub>1</sub>	h	ا <sub>ع</sub>
BGT001.0R22.25	22	37	20	25
Further sizes upon request				Dimensions in mm

Further sizes upon request

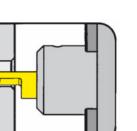
### Spare parts

Basic toolholder Screw

BGT001.0R22.25 DIN912M5X10







Α



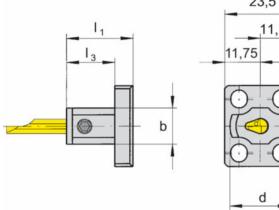
## ADJUSTABLE HOLDER Type

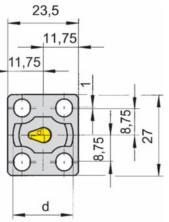
Bore Ø from Depth of groove up to Width of groove up to

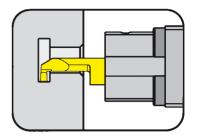
.008" (0.2 mm) .098" (2.5 mm) .079" (2.0 mm)

**BKT** 

with through coolant supply







for use with Insert

Type 105 U105



Part number	d	l <sub>1</sub>	l <sub>3</sub>	b
BKT105.2327.01	20	22	16	12

Further sizes upon request

Dimensions in mm

Adjustable holder	Screw	TORX PLUS® Wrench
BKT105.2327.01	6.075T15P	T15PQ



Α

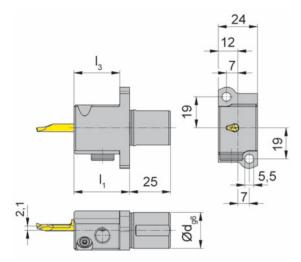
## **TOOLHOLDER Type**

**B105** 

with through coolant supply

Bore Ø from	.008″ (0.2 mm)
Depth of groove up to	.098″ (2.5 mm)
Width of groove up to	.079″ (2.0 mm)

Through coolant supply G1/8"



Star SV 12/20/32

for use with Insert

105

U105

Туре

L = left hand version

SR 10/20/32 and SB 16

Part number	d	l <sub>1</sub>	I <sub>3</sub>
LB105.A022.26.31	22	34	28
Further sizes upon request			Dimensions in mm

Toolholder	Screw	TORX PLUS® Wrench
LB105.A022.26.31	6.075T15P	T15PQ

A



## **BASIC TOOLHOLDER Type**





for adjustable holder Graf type N and HORN BKT105.2445.01/2



Part number	d	I <sub>1</sub>	h	b	Machine tool
G016021 G016040	16,00	21 40	14	6	Star Traub/Manurhin
G034040 G034050 G034120	3/4"	40 50 120	18	6	Citizen
G020030 G020040 G020100 G020150	20,00	30 40 100 150	18	6	Citizen Hanwha Tornos Manurhin/Tornos
G022023 G022025SR16/20R G022030 G022030SR32 G022070	22,00	23 25 30 30 70	20	6 12 6 12 6	Star

Further sizes upon request

Dimensions in mm and inch

## **GROOVING and BORING**



## **BASIC TOOLHOLDER Type**

**G** without cartridge



for adjustable holder Graf type N and HORN BKT105.2445.01/2

Part number	d	I <sub>1</sub>	h	b	Machine tool
G025060 G025070 G025100 G025160	25,0	60 70 100 160	23	12 6 6 6	Hanwha Manurhin/Tornos Manurhin/Tornos Manurhin/Tornos
G010060 G010100	1"	60 100	23	6	Citizen
G028006 G028080	28,0	6 80	26	12	Hanwha Traub
G030045	30,0	45	27	12	Maier
G033040	33,0	40	31	12	Hanwha
G034020 G034044	34,0	20 44	32	12	Maier Maier/Hanwha

Further sizes upon request

Dimensions in mm and inch

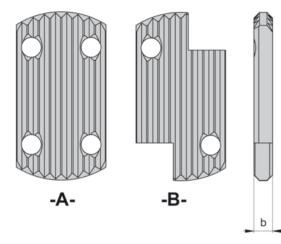


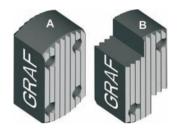
## **ADAPTOR Type**

Z without cartridge



for adjustable holder Graf type N and HORN BKT105.2445.01/2





Part number	b	Form
Z5 Z10 Z15 Z20 Z25 Z30	5 10 15 20 25 30	A
Z5SR16/20R Z10SR16/20R Z15SR16/20R Z20SR16/20R Z25SR16/20R Z30SR16/20R	5 10 15 20 25 30	В

Further sizes upon request

## **GROOVING and BORING**

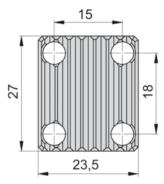


## **ADAPTOR Type**

Z without cartridge



for adjustable holder HORN BKT.105.2327.01







Part number	b
Z10SW7	10
Z15SW7	15
Z20SW7	20
Z25SW7	25
Z30SW7	30

Further sizes upon request



## **ADAPTOR Type**

Α

Ν

without Cartridge

**GRAF** 

for adjustable holder Graf type N and HORN BKT105.2445.01/2 for back working Part number N11 For alternatively 2 cartridges Part number N12 For alternatively 3 cartridges (

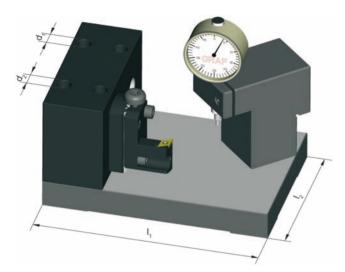
Part number N93IK

with through coolant supply



# DEVICE FOR HEIGHT ADJUSTING Type HVR40

for back working holder HVR40



Part number	d <sub>1</sub>	d <sub>2</sub>	I <sub>1</sub>	I <sub>2</sub>	System
12.0506 12.0507 12.0508 12.0511 12.0523	16 3/4" 30 25 20	22 1" 34 33 28	250	180	STAR CITIZEN MAIER HANWHA HANWHA

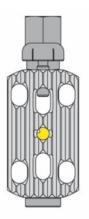
Dimensions in mm and inch



## ADJUSTABLE HOLDER Type

Bore Ø from	.008″ (0.2 mm)
Depth of groove up to	.098" (2.5 mm)
Width of groove up to	.079″ (2.0 mm)

with through coolant supply



Ν

for use with Insert

Type 105 U105



Picture = right hand cutting version shown

Part number	l <sub>1</sub>	l <sub>3</sub>
N09IK	40	15
Further sizes upon request		Dimensions in mm

## Spare parts

Adjustable holder	Screw	Height adjustment screw	Coolant supply
N09IK	6.075T15P	002.00.69	004.00.19

#### In the UNITED STATES call us toll free 1 - 888 - 818 HORN

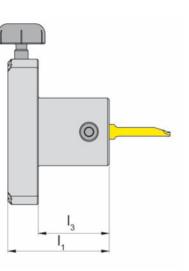


## ADJUSTABLE HOLDER Type

Bore Ø from	.008″ (0.2 mm)
Depth of groove up to	.098″ (2.5 mm)
Width of groove up to	.079″ (2.0 mm)

no through coolant supply





Ν

for use with Insert

Type 105 U105



Picture = right hand cutting version shown

Part number	l <sub>1</sub>	I <sub>3</sub>
N09	30	20
Further sizes upon request		Dimensions in mm

Adjustable holder	Screw	Height adjustment screw
N09	6.075T15P	002.00.69



## ADJUSTABLE HOLDER Type

Bore Ø from	.008″ (0.2 mm)
Depth of groove up to	.098″ (2.5 mm)
Width of groove up to	.079" (2.0 mm)

Ν

with through coolant supply

Picture = right hand cutting version shown

	GZ

Part number	l <sub>1</sub>	I <sub>3</sub>
N73IK	40	15
Further sizes upon request		Dimensions in mm

## Spare parts

Adjustable holder	Screw	Height adjustment screw	Coolant supply
N73IK	6.075T15P	002.00.69	004.00.19

A42

#### In the UNITED STATES call us toll free 1 - 888 - 818 HORN

for use with Insert

Type 105 U105



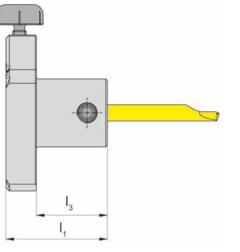


## ADJUSTABLE HOLDER Type

Bore Ø from	.008″ (0.2 mm)
Depth of groove up to	.098" (2.5 mm)
Width of groove up to	.079″ (2.0 mm)

no through coolant supply





Ν

for use with Insert

Type 105 U105



Picture = right hand cutting version shown

Part number	I <sub>1</sub>	<sub>3</sub>
N73	30	20
Eurther sizes upon request		Dimonsions in mm

Further sizes upon request

Dimensions in mm

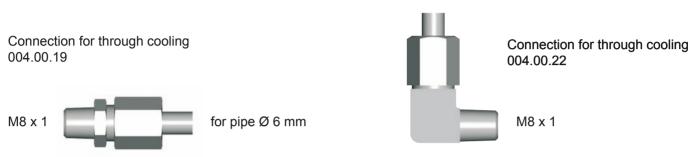
Adjustable holder	Screw	Height adjustment screw
N73	6.075T15P	002.00.69

Α

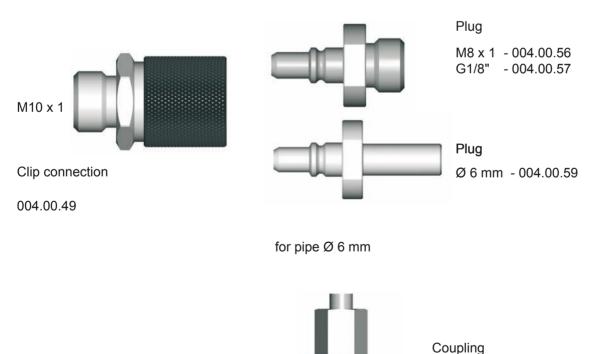


# GRAF

## Standard connection for through cooling



Clip connection for through cooling



M8 x 1 - 004.00.61 G1/8" - 004.00.16

for pipe Ø 6 mm

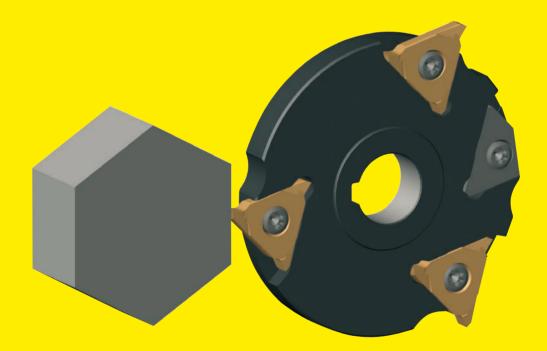


Δ

# **Polygon cutter**

For use on lathes with ability to machine polygon profiles

For further information, please see HORN catalog "CARBIDE MILLING TOOLS".





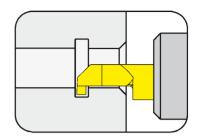
## **TOOLHOLDER Type**

VDI

with through coolant supply

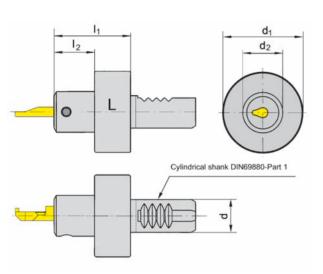
.008" (0.2 mm)

Bore Ø from



for use with Insert

Type 105 U105



L = left hand version shown

R = right hand version

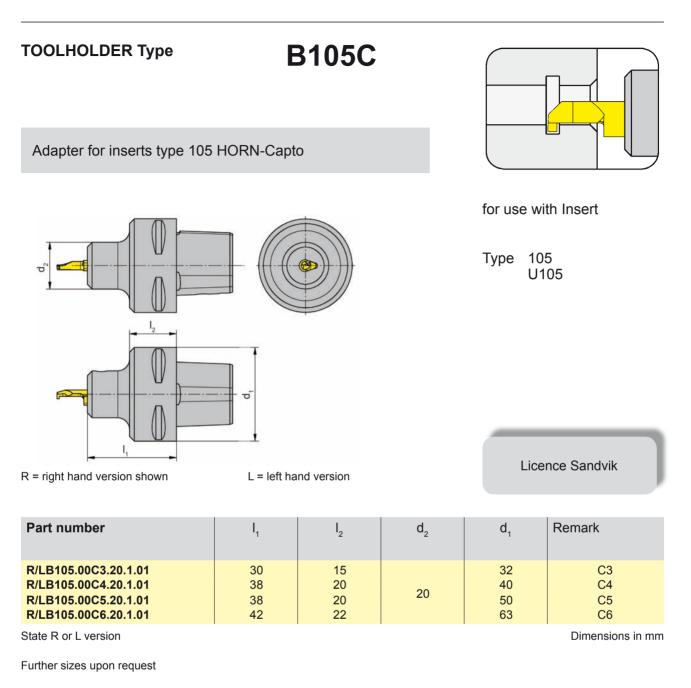
Part number	d	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	d <sub>1</sub>
VDI16.R/L105.20.01	16	38	20	20	40
VDI20.R/L105.20.01	20	38	20	20	50
VDI25.R/L105.20.01	25	38	20	20	58
VDI30.R/L105.20.01	30	38	20	20	68
VDI40.R/L105.20.01	40	38	20	20	83
State R or L version Dimensions in					

Further sizes upon request

Toolholder	Screw	TORX PLUS® Wrench
VDI	6.075T15P	T15PQ

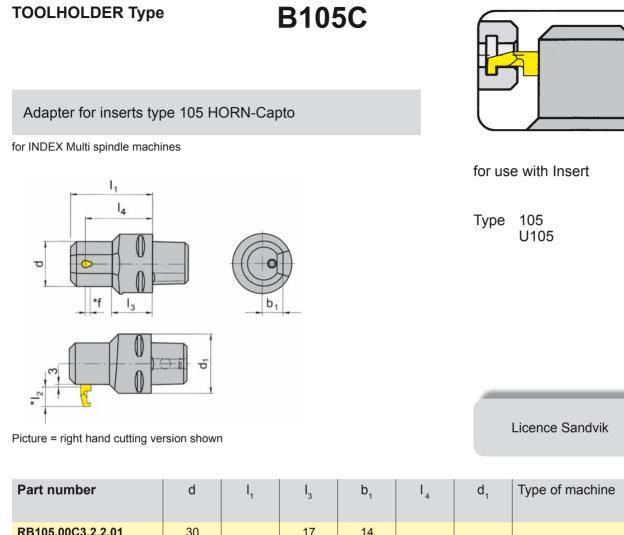
# **GROOVING and BORING**





Toolholder	Screw	TORX PLUS® Wrench
R/LB105.00C	6.075T15P	T15PQ





RB105.00C3.2.2.01 RB105.00C3.2.2.02	30 36	55	17 15	14 18	45	32	MS32
RB105.00C4.2.2.01 RB105.00C4.2.2.02	30 36	55	26 22	14 18	45	40	MS52
Further sizes upon request		Dimensions in mm					

Spare parts

Toolholder	Screw	TORX PLUS® Wrench
RB105.00C	6.075T15P	T15PQ

In the UNITED STATES call us toll free 1 - 888 - 818 HORN System KM16 Micro





Supermini<sup>®</sup> 105 from Ø .008″ (0.2 mm) MINI 108 from Ø.315″ (8.0 mm) Grooving system 264



External and internal machining - not only for Swiss Type Machines -



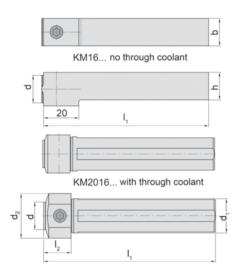


## BASIC TOOLHOLDER Type

**KM16** 



Basic toolholder for use with toolholder ...KM16...



System Kennametal KM16 Micro

Part number	d	d <sub>1</sub>	d <sub>2</sub>	I <sub>1</sub>	I <sub>2</sub>	h	b
KM16 NCM 1616 100	16	-	-	100	-	16	16
KM2016 NCM SS20 16 KM2016 NCM SS22 16	20	20 22	26 28	100	16	-	-

Dimensions in mm

Basic toolholder	Screw	TORX PLUS® Blade
KM16 NCM 1616 100 KM2016 NCM SS2		DT27PQ DT27PQ

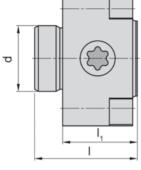
Α

## FLANGE Type

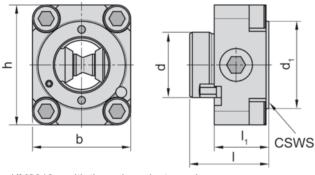
**KM16** 



Basic toolholder for use with toolholder ...KM16...



KM16... no through coolant supply

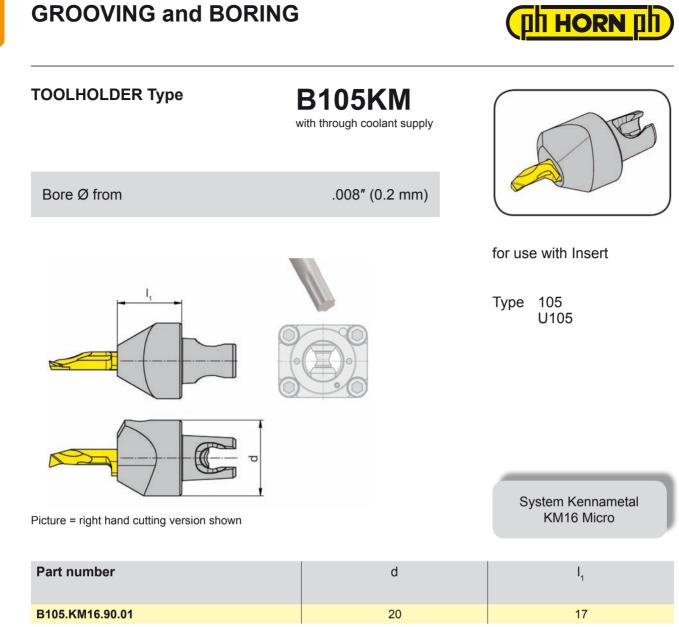


KM2016... with through coolant supply

System Kennametal KM16 Micro

Part number	I	d	d <sub>1</sub>	I <sub>1</sub>	h	b
KM16NCMSF1928	22	14	-	16	27.5	19
KM2016NCMSF2434	22	20	20	16	33.0	25

Flange	Screw	TORX PLUS <sup>®</sup> Blade
KM16NCMSF1928	KM16-NSPKG	DT27PQ
KM2016NCMSF2434	KM16-NAPKG	DT27PQ



Further sizes upon request

A

Dimensions in mm

Toolholder	Screw	TORX PLUS® Wrench
B105.KM16.90.01	6.075T15P	T15PQ

<b>GROOVING and BORI</b>	NG	<mark>(ph ногм ph</mark> )
TOOLHOLDER Type	B105KM with through coolant supply	
Bore Ø from	.008″ (0.2 mm)	
		for use with Insert Type 105 U105
Picture = right hand cutting version shown	U	System Kennametal KM16 Micro
Part number	d	I <sub>1</sub>
B105.KM16.01	20	17
Further sizes upon request		Dimensions in mm

## Spare parts

Toolholder	Screw	TORX PLUS® Wrench
B105.KM16.01	6.075T15P	T15PQ

GROOVING and B	ORING			(ph	HORN ph
TOOLHOLDER Type		<b>3105K</b> th through coolar			
Adapter for inserts type 105	System KM				
					5 05
R = right hand version shown	L = left ha	nd version		K	M-System
Part number	I <sub>1</sub>	I <sub>2</sub>	d <sub>2</sub>	d <sub>1</sub>	Remark
R/LB105.KM40.20.1.01	38	12	20	40	KM40
State R or L version					Dimensions in mr

A

Further sizes upon request

Toolholder	Screw	TORX PLUS® Wrench
R/LB105.KM40.20.1.01	6.075T15P	T15PQ



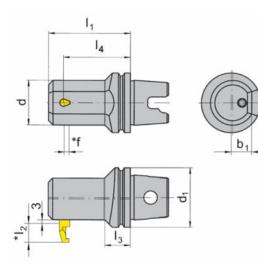
# A

# B105KM

## Adapter for inserts type 105 HORN-KM

for INDEX Multi spindle machines

**TOOLHOLDER Type** 



Picture = right hand cutting version shown

$\square$	

for use with Insert

Type 105 U105

Licence Kennametal

Part number	d	I <sub>1</sub>	I <sub>3</sub>	b <sub>1</sub>	I <sub>4</sub>	d <sub>1</sub>	Type of machine
RB105.KM40.2.2.01 RB105.KM40.2.2.02	36	55	17 14	14 18	45	40	MS32
RB105.KM50.2.2.01 RB105.KM50.2.2.02	36	55	26 22	14 18	45	50	MS52

Further sizes upon request

f,  $I_2$  see inserts type 105

Dimensions in mm

Toolholder	Screw	TORX PLUS® Wrench
RB105.KM	6.075T15P	T15PQ

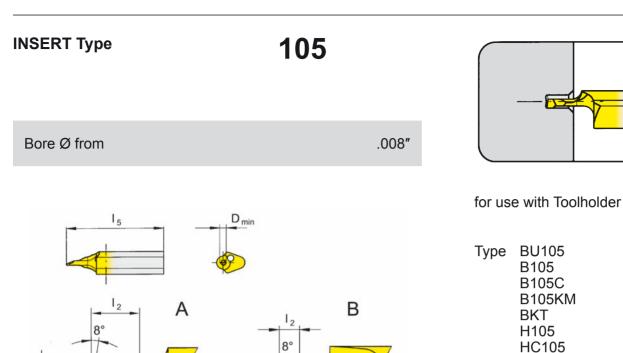


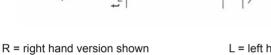
VDI

S

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Part number	f	а	I <sub>2</sub>	۱ <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	r	Form		MG12	TN35	TI25	TF45	TH35
R/L105.1802.0.02	.039	.007	.039	.906	.001	.008	.001	В		▲/▲				
R/L105.1802.0.03	.039	.010	.039	.906	.001	.012	.001	В		▲/▲				
R/L105.1802.0.05	.039	.016	.079	.906	.002	.020	.002	В		▲/▲				
R/L105.1803.0.07	.012	.024	.079	.906	.002	.028	.002	А		▲/▲				
▲ on stock ∆ 4 week	S								Ρ	0				
<ul> <li>main recommendation</li> </ul>	on								Μ	•				
o alternative recomme	ndation								K	•				

ommendation

uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version

Carbide grades

A

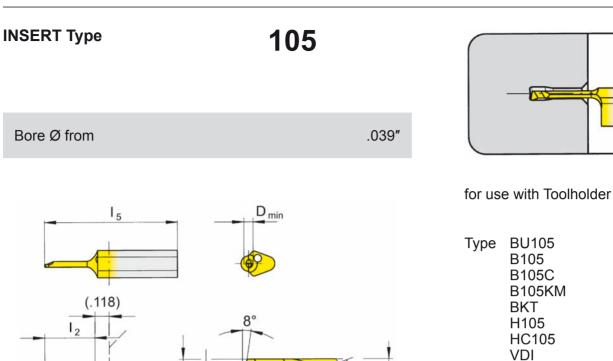
# BORING and PROFILING ≥ Ø .039"

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Α



R = right hand version shown

L = left hand version

max

Part number	f	а	d	l <sub>2</sub>	۱ <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	r	MG12	TN35	TI25	TF45	TH35
R/L105.1805.005.0.1 R/L105.1805.005.1.1 R/L105.1805.005.2.1	.020	.035	.026	.157 .236 .315	.984	.004	.039	.002				▲/▲ ▲/▲	
R/L105.1805.0.1 R/L105.1805.1.1 R/L105.1805.2.1	.020	.035	.026	.157 .236 .315	.984	.004	.039	.004	<b>▲</b> /∆	▲/▲			
R/L105.1813.005.0.15 R/L105.1813.005.1.15 R/L105.1813.005.2.15	.051	.055	.043	.236 .354 .472	.984 .984 1.181	.006	.059	.002				▲/▲ ▲/▲	
R/L105.1813.01.0.15 R/L105.1813.01.1.15 R/L105.1813.01.2.15	.051	.055	.043	.236 .354 .472	.984 .984 1.181	.006	.059	.004			▲/▲ ▲/▲ ▲/▲		▲/▲ ▲/▲ ▲/▲

A on stock Δ 4 weeks
main recommendation

o alternative recommendation

uncoated grades

coated grades brazed/Cermet

brazea/oermet

Dimensions in inch

State R or L version

Carbide grades

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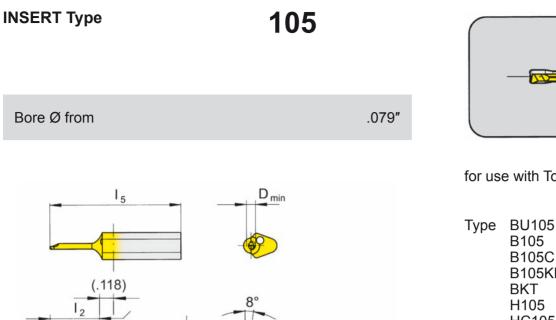
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for use with Toolholder

B105 B105C B105KM H105 HC105 VDI

R = right hand version shown

L = left hand version

max

Part number	f	а	d	l <sub>2</sub>	I <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	r		MG12	TN35	TI25	TF45	TH35
R/L105.1809.005.0.2 R/L105.1809.005.1.2 R/L105.1809.005.2.2	.039	.075	.063	.236 .354 .472	.984 .984 1.181	.006	.079	.002					▲/▲ ▲/▲ ▲/▲	
R/L105.1809.01.0.2 R/L105.1809.01.1.2 R/L105.1809.01.2.2	.039	.075	.063	.236 .354 .472	.984 .984 1.181	.006	.079	.004				▲/▲ ▲/▲ ▲/▲		▲/▲ ▲/▲
R/L105.1809.0.2 R/L105.1809.1.2 R/L105.1809.2.2	.039	.075	.063	.236 .354 .472	.984 .984 1.181	.006	.079	.006		▲/∆ ▲/∆ ▲/∆	▲/▲	<b>A</b> / <b>A</b>		▲/▲ ▲/▲
R/L105.1813.005.0.25 R/L105.1813.005.1.25 R/L105.1813.005.2.25 R/L105.1813.005.3.25	.051	.091	.077	.236 .354 .472 .630	.984 .984 1.181 1.378	.006	.098	.002					▲/▲ ▲/▲ ▲/	▲/▲
▲ on stock ∧ 4 weeks									Р	0	•	•	•	

▲ on stock ∆ 4 weeks

• main recommendation

o alternative recommendation

uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version

A58

Carbide grades

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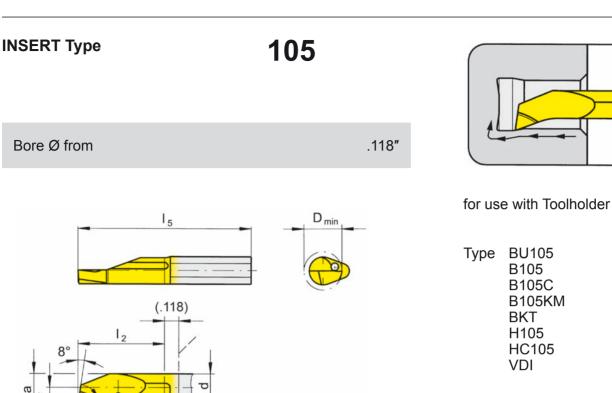
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# BORING and PROFILING ≥ Ø .118"



Α



R = right hand version shown

L = left hand version

Part number	f	а	d	I <sub>2</sub>	I <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	r	MG12	TN35	TI25	TF45	TH35
R/L105.1813.005.1.3 R/L105.1813.005.2.3 R/L105.1813.005.3.3	.051	.102	.091	.394 .591 .787	.984 1.181 1.378	.006	.118	.002				▲/▲ ▲/▲ ▲/▲	
R/L105.1813.01.1.3 R/L105.1813.01.2.3 R/L105.1813.01.3.3	.051	.102	.091	.394 .591 .787	.984 1.181 1.378	.006	.118	.004			▲/▲ ▲/▲ ▲/▲		
R/L105.1813.1.3 R/L105.1813.2.3 R/L105.1813.3.3	.051	.102	.091	.394 .591 .787	.984 1.181 1.378	.006	.118	.008	./▲ ./▲	▲/▲ ▲/▲ ▲/▲			
R/L105.1819.005.1.4 R/L105.1819.005.2.4 R/L105.1819.005.3.4	.075	.146	.114	.394 .591 .787	.984 1.181 1.378	.012	.157	.002				▲/▲ ▲/▲	
R/L105.1819.1.4 R/L105.1819.2.4 R/L105.1819.3.4	.075	.146	.114	.394 .591 .787	.984 1.181 1.378	.012	.157	.008	./▲ ./▲ ./▲	▲/▲ ▲/▲ ▲/▲	▲/▲		▲/▲ ▲/▲

 $\blacktriangle$  on stock  $\triangle$  4 weeks

• main recommendation

o alternative recommendation

uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version

Carbide grades

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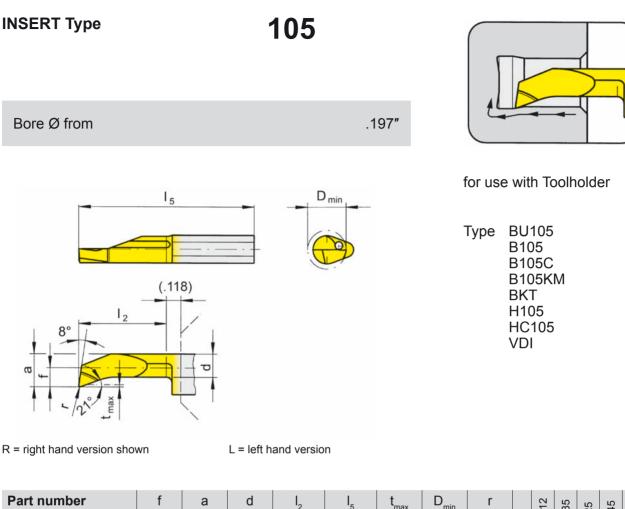
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## BORING and PROFILING ≥ Ø .197"





Part number	f	а	d	I <sub>2</sub>	I <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	r		MG12	TN35	TI25	TF45	TH35
R/L105.1823.005.1.5 R/L105.1823.005.2.5 R/L105.1823.005.3.5 R/L105.1823.005.4.5 R/L105.1823.005.5.5	.091	.185	.157	.394 .591 .787 .984 1.181	.984 1.181 1.378 1.575 1.772	.020	.197	.002					<pre> // // // // // // // // // // // // //</pre>	
R/L105.1823.1.5 R/L105.1823.2.5 R/L105.1823.3.5 R/L105.1823.4.5 R/L105.1823.5.5	.091	.185	.157	.394 .591 .787 .984 1.181	.984 1.181 1.378 1.575 1.772	.020	.197	.008		<pre> // // // // // // // // // // // // //</pre>	▲/▲ ▲/▲	<pre> // // // // // // // // // // // // //</pre>		▲/▲ ▲/▲ ▲/▲ ▲/▲
<ul> <li>▲ on stock Δ 4 weeks</li> <li>● main recommendation</li> </ul>									P M	0	•	•	•	•

o alternative recommendation

uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version

A60

Carbide grades

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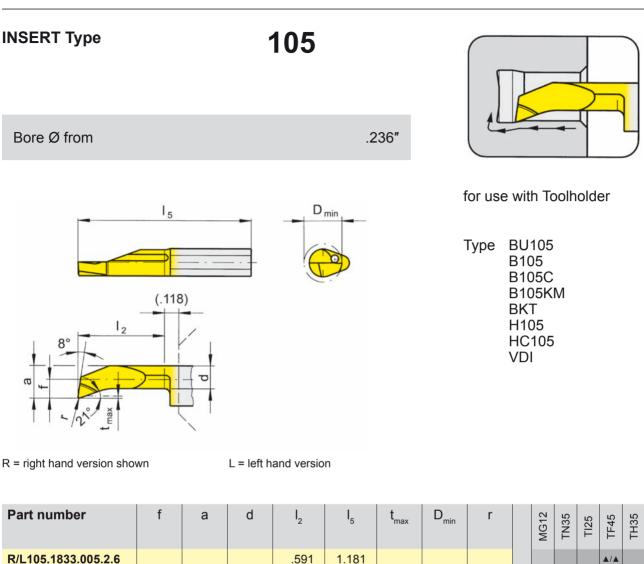
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# BORING and PROFILING $\geq \emptyset$ .236"



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R/L105.1833.005.2.6 R/L105.1833.005.3.6 R/L105.1833.005.4.6 R/L105.1833.005.5.6	.130	.224	.185	.591 .787 .984 1.181	1.181 1.378 1.575 1.772	.020	.236	.002			
R/L105.1833.2.6 R/L105.1833.3.6 R/L105.1833.4.6 R/L105.1833.5.6	.130	.224	.185	.591 .787 .984 1.181	1.181 1.378 1.575 1.772	.020	.236	.008	▲/ ▲/	/▲  . /▲  .	▲/▲ ▲/▲ ▲/▲
R/L105.1840.005.3.7 R/L105.1840.005.4.7 R/L105.1840.005.5.7	.157	.252	.205	.787 .984 1.181	1.378 1.575 1.772	.020	.268	.002			
R/L105.1840.3.7 R/L105.1840.4.7 R/L105.1840.5.7	.157	.252	.205	.787 .984 1.181	1.378 1.575 1.772	.020	.268	.008	▲/ ▲/		▲/▲ ▲/▲

▲ on stock  $\Delta 4$  weeks

• main recommendation

o alternative recommendation

uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version



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▲/▲ ▲/▲

▲/▲ ▲/▲ **A**/**A** 

**A**/**A** 

▲/▲

**A**/**A** 

**A**/**A** 

**A**/A

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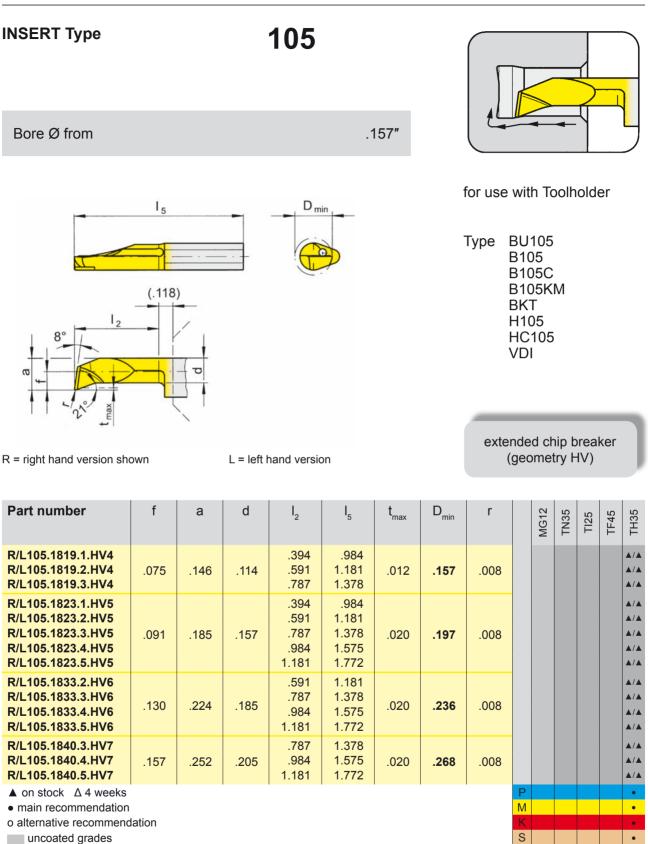
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# BORING and PROFILING ≥ Ø .157"





coated grades

brazed/Cermet

Dimensions in inch

State R or L version

Carbide grades

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# BORING and PROFILING ≥ Ø .157"



INSERT Type			1	05					K					
Bore Ø from					.1	57″					•	J		J
	ا 5			D <sub>min</sub>			f	or use	with	ı Tc	oolh	old	er	
											M	preal	kor	
R = right hand version shown	ו	L	. = left ha	nd versior	1				geor				Kei	J
Part number	f	а	d	I <sub>2</sub>	I <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	r		MG12	TN35	TI25	TF45	TH35
R/L105.1819.04.1.HV4 R/L105.1819.04.2.HV4 R/L105.1819.04.3.HV4	.075	.146	.114	.394 .591 .787	.984 1.181 1.378	.012	.157	.016						▲/▲ ▲/▲ ▲/▲
R/L105.1823.04.1.HV5 R/L105.1823.04.2.HV5 R/L105.1823.04.3.HV5 R/L105.1823.04.4.HV5 R/L105.1823.04.5.HV5	.091	.185	.157	.394 .591 .787 .984 1.181	.984 1.181 1.378 1.575 1.772	.020	.197	.016						<pre></pre>
R/L105.1833.04.2.HV6 R/L105.1833.04.3.HV6 R/L105.1833.04.4.HV6 R/L105.1833.04.5.HV6	.130	.224	.185	.591 .787 .984 1.181	1.181 1.378 1.575 1.772	.020	.236	.016						
R/L105.1840.04.2.HV7 R/L105.1840.04.3.HV7 R/L105.1840.04.4.HV7 R/L105.1840.04.5.HV7	.157	.252	.205	.591 .787 .984 1.181	1.181 1.378 1.575 1.772	.020	.268	.016						
<ul> <li>▲ on stock △ 4 weeks</li> <li>■ main recommendation</li> <li>o alternative recommendation</li> <li>uncoated grades</li> <li>coated grades</li> <li>brazed/Cermet</li> </ul>	on								P M K S N H					

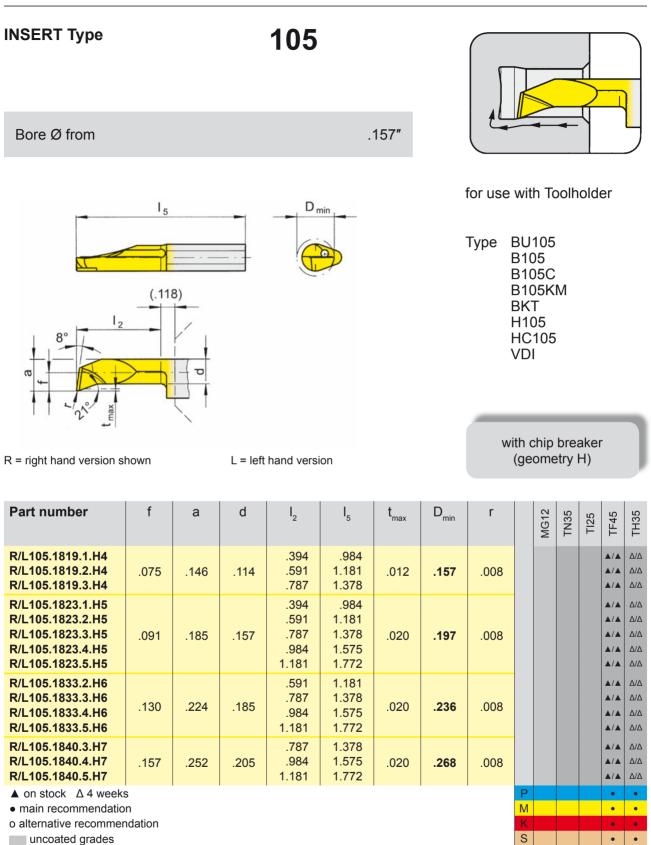
brazed/Cermet

State R or L version

Carbide grades

# BORING and PROFILING $\geq \emptyset$ .157"





uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version

A64

Carbide grades

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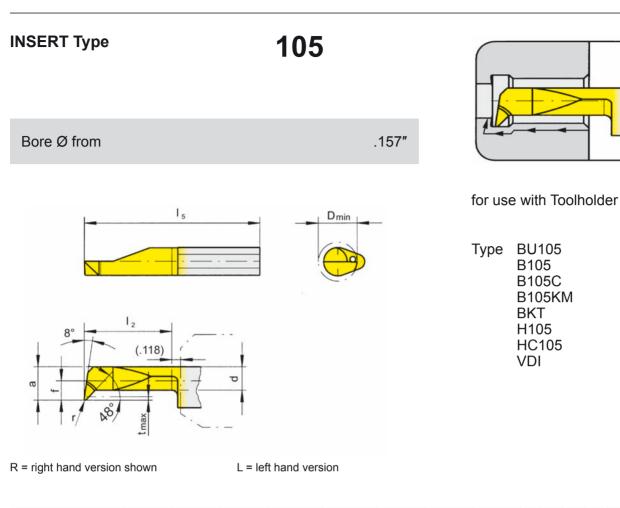
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Α

# BORING and PROFILING ≥ Ø .157"



A



Part number	f	а	d	I <sub>2</sub>	۱ <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	r		MG12	TN35	TI25	TF45	TH35
R/L105.4719.1.4 R/L105.4719.3.4	.075	.146	.114	.394 .787	.984 1.378	.024 .012	.157	.006			▲/▲	▲/▲		▲/▲ ▲/▲
R/L105.4723.2.5 R/L105.4723.4.5	.091	.185	.146	.591 .984	1.181 1.575	.031 .020	.197	.006			▲/▲	▲/▲		▲/▲ ▲/▲
R/L105.4733.3.6 R/L105.4733.5.6	.130	.224	.146	.787 1.181	1.378 1.772	.071	.236	.006			▲/▲	Δ/		▲/▲ ▲/▲
<ul> <li>A on stock Δ 4 wee</li> <li>main recommendat</li> <li>o alternative recommendat</li> </ul>	ion endation								P M K		•	•		•

uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

Carbide grades

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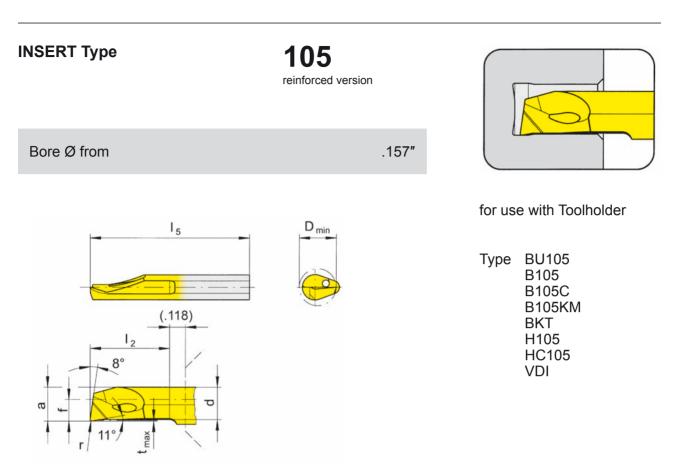
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State R or L version

# BORING and PROFILING ≥ Ø .157"





R = right hand version shown

L = left hand version

Part number	f	а	d	l <sub>2</sub>	I <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	r		MG12	TN35	TI25	TF45	TH35
R/L105.1019.005.1.4 R/L105.1019.005.2.4 R/L105.1019.005.3.4 R/L105.1019.005.4.4	.059	.146	.134	.394 .591 .787 .984	.984 1.181 1.378 1.575	.006	.157	.002						▲/▲ ▲/▲ ▲/▲
R/L105.1019.1.4 R/L105.1019.2.4 R/L105.1019.3.4 R/L105.1019.4.4	.059	.146	.134	.394 .591 .787 .984	.984 1.181 1.378 1.575	.006	.157	.008						▲/▲ ▲/▲ ▲/▲
<ul> <li>▲ on stock Δ 4 weeks</li> <li>● main recommendation</li> </ul>									P M					•

o alternative recommendation

uncoated grades

- coated grades
- brazed/Cermet

Dimensions in inch

Carbide grades

S

Ν

Н

State R or L version

A66

# BORING and PROFILING ≥ Ø .197"





A

## **INSERT** Type 105 reinforced version Bore Ø from .197" for use with Toolholder $I_5$ D <sub>min</sub> Type BU105 B105 B105C B105KM (.118)BKT H105 12 HC105 8° VDI đ L = left hand version

R = right hand	version	shown
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Part number	f	а	d	l <sub>2</sub>	1 <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	r		MGTZ	TN35	TI25	TF45	TH35
R/L105.1023.005.1.5 R/L105.1023.005.2.5 R/L105.1023.005.3.5 R/L105.1023.005.4.5 R/L105.1023.005.5.5 R/L105.1023.005.6.5	.110	.185	.173	.394 .591 .787 .984 1.181 1.378	.984 1.181 1.378 1.575 1.772 1.969	.006	.197	.002						<pre></pre>
R/L105.1023.1.5 R/L105.1023.2.5 R/L105.1023.3.5 R/L105.1023.4.5 R/L105.1023.5.5 R/L105.1023.6.5	.110	.185	.173	.394 .591 .787 .984 1.181 1.378	.984 1.181 1.378 1.575 1.772 1.969	.006	.197	.008	P					<pre></pre>

 $\blacktriangle$  on stock  $\Delta$  4 weeks

main recommendation

o alternative recommendation

uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version

Carbide grades

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S

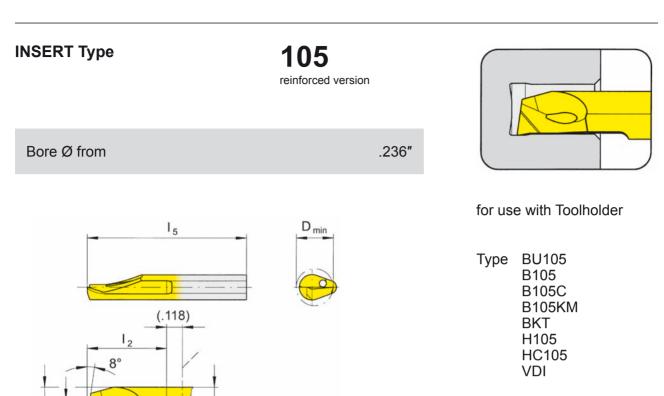
Ν

Н

# BORING and PROFILING ≥ Ø .236"

τ





R = right hand version shown

g

A

L = left hand version

Part number	f	а	d	l <sub>2</sub>	I <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	r		MG12	TN35	TI25	TF45	TH35
R/L105.1033.005.1.6 R/L105.1033.005.2.6 R/L105.1033.005.3.6 R/L105.1033.005.4.6 R/L105.1033.005.5.6 R/L105.1033.005.6.6	.130	.224	.213	.394 .591 .787 .984 1.181 1.378	.984 1.181 1.378 1.575 1.772 1.969	.006	.236	.002						▲/▲ ▲/▲ ▲/▲ ▲/▲ ▲/▲
R/L105.1033.1.6 R/L105.1033.2.6 R/L105.1033.3.6 R/L105.1033.4.6 R/L105.1033.5.6 R/L105.1033.6.6	.130	.224	.213	.394 .591 .787 .984 1.181 1.378	.984 1.181 1.378 1.575 1.772 1.969	.006	.236	.008						<pre>////&gt;///////////////////////////////</pre>
▲ on stock ∆ 4 weeks									Ρ					•

main recommendation

o alternative recommendation

uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version

Carbide grades

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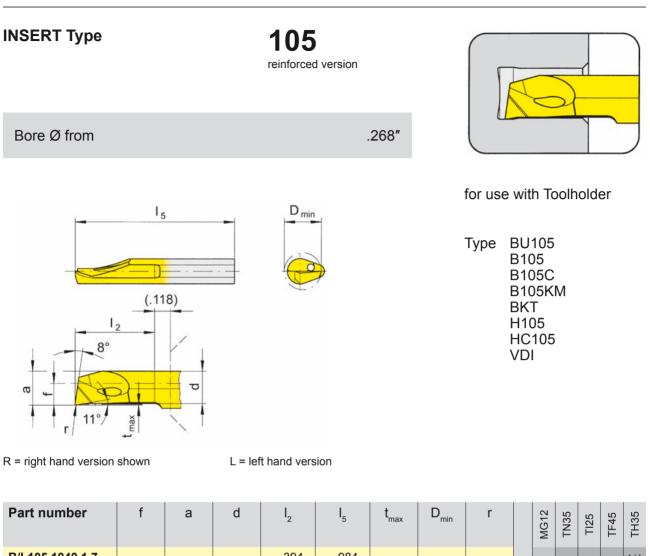
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# BORING and PROFILING ≥ Ø .268"



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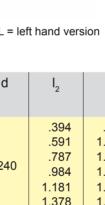


R/L105.1040.1.7 R/L105.1040.2.7 R/L105.1040.3.7 R/L105.1040.4.7 R/L105.1040.5.7 R/L105.1040.6.7	.157	.252	.240	.394 .591 .787 .984 1.181 1.378	.984 1.181 1.378 1.575 1.772 1.969	.006	.268	.008				▲/▲ ▲/▲ ▲/▲ ▲/▲ ▲/▲
▲ on stock △ 4 wee	ks								Ρ			•
<ul> <li>main recommendat</li> </ul>	ion								M			•
o alternative recomme	endation								K			•
uncoated grades									S			•
coated grades									Ν			•
brazed/Cermet									Н			
<u>.</u>										~		

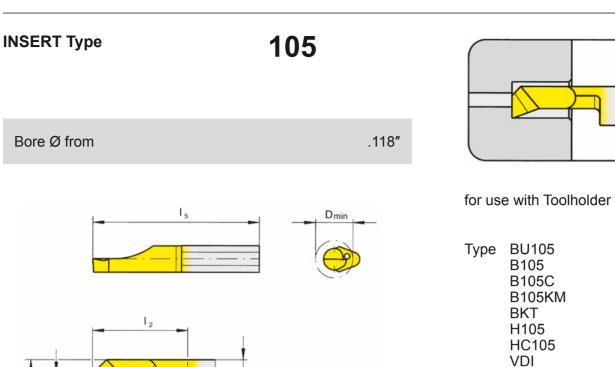
Dimensions in inch

State R or L version

Carbide grades







R = right hand version shown

max

B

L = left hand version

Part number	f	а	d	l <sub>2</sub>	I <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	r		MG12	TN35	TI25	TF45	TH35
R/L105.9013.01.1.3 R/L105.9013.01.2.3 R/L105.9013.1.3 R/L105.9013.2.3	.051	.102	.091	.394 .591 .394 .591	.984 1.181 .984 1.181	.006	.118	.004 .004 .008 .008			▲/▲ ▲/▲			▲/∆ ▲/∆
R/L105.9019.01.1.4 R/L105.9019.01.2.4 R/L105.9019.01.3.4 R/L105.9019.1.4 R/L105.9019.2.4	.075	.146	.114	.394 .591 .787 .394 .591	.984 1.181 1.378 .984 1.181	.012	.157	.004 .004 .004 .008 .008			▲/▲ ▲/▲			▲/∆ ▲/∆ ∆/∆
▲ on stock Δ 4 weeks • main recommendation									P M		•			•

o alternative recommendation

- uncoated grades
- coated grades
- brazed/Cermet

Dimensions in inch

State R or L version

A70

Carbide grades

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Ν

Н

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# BORING and PROFILING ≥ Ø .197"



B105 B105C B105KM BKT

H105 HC105 VDI

Μ

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Ν

Н

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# **INSERT** Type 105 Bore Ø from .197" for use with Toolholder $I_5$ Dmin Type BU105 12 B

R = right hand version shown

max

L = left hand version

Part number	f	а	d	I <sub>2</sub>	I <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	r		MG12	TN35	TI25	TF45	TH35
R/L105.9023.01.1.5 R/L105.9023.01.2.5 R/L105.9023.01.3.5 R/L105.9023.01.4.5 R/L105.9023.1.5 R/L105.9023.2.5 R/L105.9023.3.5	.091	.185	.157	.394 .591 .787 .984 .394 .591 .787	.984 1.181 1.378 1.575 .984 1.181 1.378	.020	.197	.004 .004 .004 .004 .008 .008			▲/▲ ▲/▲ ▲/▲			▲/△ ▲/△ ▲/△ ▲/
R/L105.9033.1.6 R/L105.9033.2.6 R/L105.9033.3.6 R/L105.9033.4.6 R/L105.9033.5.6	.130	.224	.185	.394 .591 .787 .984 1.181	.984 1.181 1.378 1.575 1.772	.020	.236	.008						Δ/ Δ/Δ Δ/Δ Δ/Δ Δ/Δ
A on stock Λ 4 weeks									Р		•			

▲ on stock ∆ 4 weeks

• main recommendation

o alternative recommendation

uncoated grades

coated grades brazed/Cermet

Dimensions in inch

State R or L version

Carbide grades

•

•

•

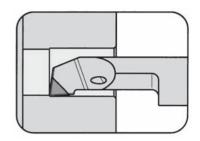
A



## **INSERT Type**

105

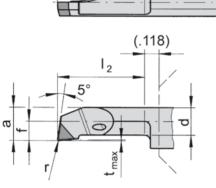
Bore Ø from



for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI

**CBN** tipped



 $I_5$ 

R = right hand version shown

Part number	f	а	d	I <sub>2</sub>	I <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	r	CB10
R105.0513.0.3.B	.051	.106	.098	.276	.984	.004	.118	.006	
R105.0519.1.4.B	.059	.146	.134	.394	.984	.004	.157	.008	
R105.0523.2.5.B	.091	.185	.173	.591	1.181	.004	.197	.008	
R105.0533.2.6.B R105.0533.3.6.B	.130	.224	.209	.591 .787	1.181 1.378	.006	.236	.008	Δ
R105.0540.2.7.B	.157	.252	.236	.591	1.181	.006	.268	.008	

▲ on stock  $\Delta 4$  weeks

main recommendation

o alternative recommendation

uncoated grades

coated grades brazed/Cermet

Dimensions in inch

H • Carbide grades

P M

S

Ν

D<sub>min</sub>

.118"

# **BACKBORING** (internal)



B105C B105KM

BKT H105 HC105 VDI

Μ

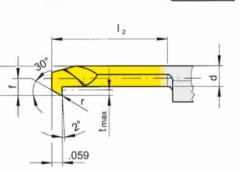
S

Ν

Н

A

# INSERT Type 105 Bore Ø from .118" Inser Ø from .118" Inser Ø from .118 Inser Ø from .118 Inser Ø from .118 Inser Ø from .118



R = right hand version shown

L = left hand version

Part number	f	а	d	I <sub>2</sub>	I <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	r	MG12	TN35	TI25	TF45	TH35
R/L105.3013.2.3 R/L105.3013.3.3	.051	.102	.075	.591 .787	1.181 1.378	.020	.118	.004			▲/▲ ▲/∆		
R/L105.3019.2.4 R/L105.3019.4.4	.075	.146	.106	.591 .984	1.181 1.575	.031	.157	.006			▲/▲ ▲/∆		
R/L105.3023.3.5 R/L105.3023.5.5	.091	.185	.138	.787 1.181	1.378 1.772	.039	.197	.008			▲/▲ ▲/∆		
R/L105.3033.3.6 R/L105.3033.5.6	.130	.224	.146	.787 1.181	1.378 1.772	.071	.236	.008			▲/▲ ▲/∆		
R/L105.3040.3.7 R/L105.3040.5.7	.157	.252	.146	.787 1.181	1.378 1.772	.098	.268	.008			▲/▲ ▲/▲		

▲ on stock ∆ 4 weeks

• main recommendation

o alternative recommendation

uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version

Carbide grades

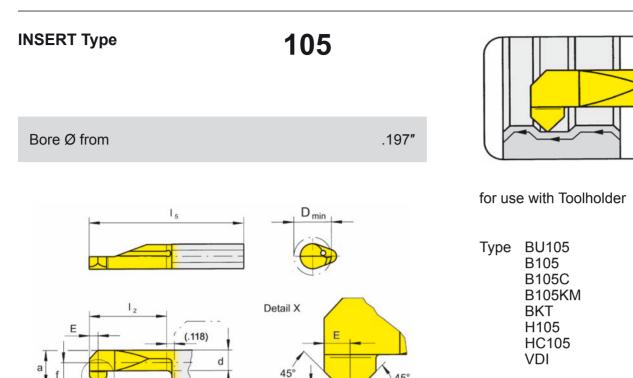
•

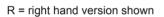
•

•









A

L = left hand version

max

Part number	E	f	а	d	l <sub>2</sub>	۱ <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	r		MG12	TN35	TI25	TF45	TH35
R/L105.4545.2.5	.039	.091	.185	.138	.591	1.181	.028	.197	.008			▲/▲			
R/L105.4545.3.7	.039	.157	.252	.185	.787	1.378	.028	.276	.008			▲/▲			
▲ on stock △ 4 weeks												•			
main recommendation												•			

o alternative recommendation

uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version

Carbide grades

S

Ν

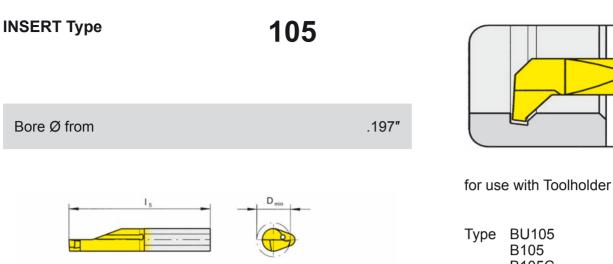
Н

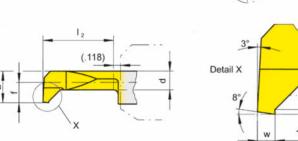
•

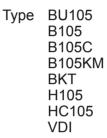
.

# **PREGROOVING and CHAMFERING**









R = right hand version shown

L = left hand version

Part number	W	f	а	d	l <sub>2</sub>	۱ <sub>5</sub>	t <sub>1</sub>	t <sub>max</sub>	D <sub>min</sub>		MG12	TN35	TI25	TF45	TH35
R/L105.0810.2.5 R/L105.0810.3.5 R/L105.0810.4.5	.039	.091	.185	.138	.591 .787 .984	1.181 1.378 1.575	.008	.028	.197		▲/▲	▲/▲ ▲/▲ ▲/▲	▲/∆ ▲/∆		
<ul> <li>▲ on stock Δ 4 wee</li> <li>● main recommendaries</li> <li>o alternative recommendaries</li> <li>uncoated grades</li> </ul>	tion endation	I								P M K S	0 • •	• • • •	• • • •		
coated grades brazed/Cermet Dimensions in inch										N H	•	• Ca	• arbid	e gra	ades

45°



### **INSERT** Type

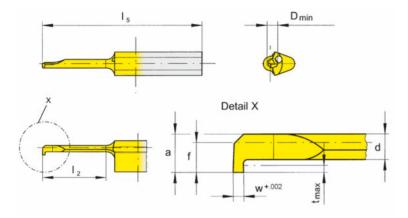
A

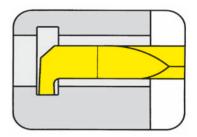


.079"

.016"

Bore Ø from Depth of groove up to





for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI

R = right hand version shown

L = left hand version

Part number	w	f	а	d	I <sub>2</sub>	۱ <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>		MG12	TN35	TI25	TF45	TH35
R/L105.0050.0.2 R/L105.0050.1.2 R/L105.0050.2.2	.020	.055	.071	.047	.236 .354 .472	.984 .984 1.181	.016	.079				▲/▲ ▲/▲ ▲/△		
<ul> <li>▲ on stock △ 4 wee</li> <li>● main recommendation</li> <li>○ alternative recommendation</li> </ul>	ion								P M K			•		
uncoated grades coated grades									S N			•		
brazed/Cermet									Н		C	arbid	e ara	ades

# GROOVING (internal) ≥ Ø .118"



### **INSERT** Type

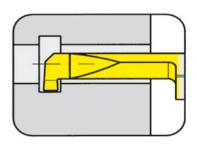


.118"

.024"

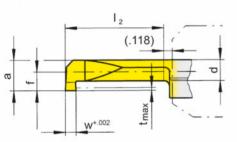
Bore Ø from Depth of groove up to

> Dmin ۱,



for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI



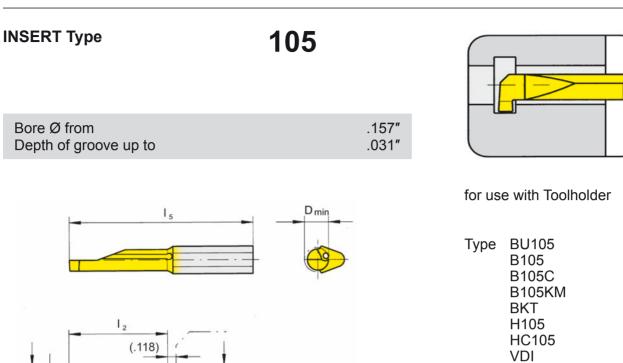
R = right hand version shown

L = left hand version

Part number	w	f	а	d	I <sub>2</sub>	۱ <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>		MG12	TN35	TI25	TF45	TH35
R/L105.0070.1.3 R/L105.0070.2.3 R/L105.0070.3.3	.028	.055	.106	.075	.315 .472 .630	.984 1.181 1.378	.024	.118				▲/▲ ▲/▲ ▲/▲		
<ul> <li>▲ on stock △ 4 wee</li> <li>● main recommendat</li> <li>o alternative recommendat</li> </ul>	ion								P M K			•		
uncoated grades coated grades brazed/Cermet									S N H			•		
Dimensions in inch											C	arbid	e gra	ades

Α





R = right hand version shown

L = left hand version

Part number	w	f	а	d	I <sub>2</sub>	I <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>		MG12	TN35	TI25	TF45	TH35
R/L105.0100.1.4 R/L105.0100.2.4 R/L105.0100.3.4	.039	.075	.146	.106	.394 .591 .787	.984 1.181 1.378	.031	.157		▲/▲ ▲/▲ ▲/△	▲/▲			
<ul> <li>▲ on stock ∆ 4 wee</li> <li>● main recommendat</li> </ul>	ion								P M K	0	•			
o alternative recomme uncoated grades coated grades	endation								S N H	•	• •			
brazed/Cermet Dimensions in inch									п		Ca	arbid	e gra	ades

# GROOVING (internal) ≥ Ø .157"



Α

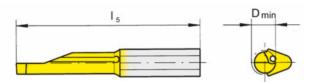
### **INSERT** Type

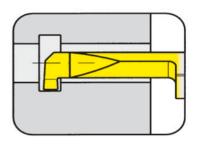


.157"

.031"

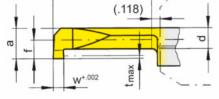
Bore Ø from Depth of groove up to





for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI



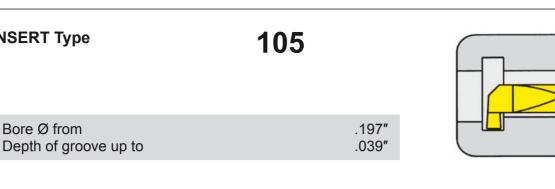
 $|_2$ 

R = right hand version shown

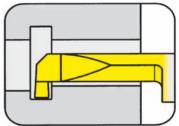
L = left hand version

Part number	w	f	а	d	I <sub>2</sub>	۱ <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>		MG12	TN35	TI25	TF45	TH35
R/LU105.0031.1.4 R/LU105.0031.2.4 R/LU105.0031.3.4	.031	.075	.146	.106	.394 .591 .787	.984 1.181 1.378	.031	.157		<b>▲</b> /	▲/▲ ▲/▲ ▲/▲			▲/ ▲/
<ul> <li>A on stock Δ 4 weeks</li> <li>main recommendation</li> <li>o alternative recommendation</li> <li>uncoated grades</li> <li>coated grades</li> <li>brazed/Cermet</li> </ul>	n								P M K S N H	0	• • • • • • • • • • • • • • • • • • • •			• • • • • • • • • • • • • • • • • • • •
Dimensions in inch											C	arbid	e gra	ades



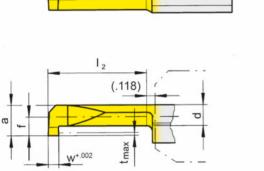


Dmin



for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI



15

R = right hand version shown

**INSERT** Type

Bore Ø from

L = left hand version

Part number	W	f	а	d	I <sub>2</sub>	I <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	MG10	TN35	TI25	TF45	TH35
R/L105.0100.1.5 R/L105.0150.1.5 R/L105.0200.1.5	.039 .059 .079	.091	.185	.138	.394	.984	.039	.197	▲/ ▲/				▲/▲ ▲/▲
R/L105.0100.2.5 R/L105.0150.2.5 R/L105.0200.2.5	.039 .059 .079	.091	.185	.138	.591	1.181	.039	.197	▲/				▲/▲ ▲/▲
R/L105.0100.3.5 R/L105.0150.3.5 R/L105.0200.3.5	.039 .059 .079	.091	.185	.138	.787	1.378	.039	.197					▲/▲ ▲/▲
R/L105.0100.4.5 R/L105.0150.4.5 R/L105.0200.4.5	.039 .059 .079	.091	.185	.138	.984	1.575	.039	.197		▲/∆ ▲/▲			▲/▲ ▲/▲
R/L105.0100.5.5 R/L105.0150.5.5 R/L105.0200.5.5	.039 .059 .079	.091	.185	.138	1.181	1.772	.039	.197		▲/▲ ▲/▲			▲/▲ ▲/▲

 $\blacktriangle$  on stock  $\triangle$  4 weeks

• main recommendation o alternative recommendation

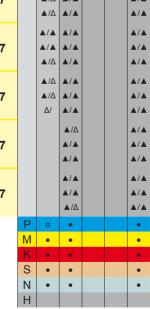
uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version



Carbide grades

# GROOVING (internal) ≥ Ø .197"

15



### **INSERT** Type

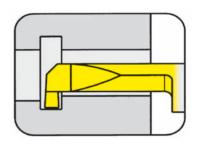


Dmin

.197"

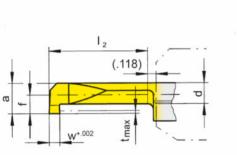
.039"

Bore Ø from Depth of groove up to



for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI



R = right hand version shown

L = left hand version

Part number	W	f	а	d	I <sub>2</sub>	I <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>		MG12	TN35	TI25	TF45	TH35
R/LU105.0031.1.5 R/LU105.0046.1.5 R/LU105.0062.1.5 R/LU105.0078.1.5	.031 .046 .062 .078	.091	.185	.138	.394	.984	.039	.197			▲/▲ ▲/▲ ▲/▲	Δ/		▲/ ▲/ ▲/ ▲/
R/LU105.0031.2.5 R/LU105.0046.2.5 R/LU105.0062.2.5 R/LU105.0078.2.5	.031 .046 .062 .078	.091	.185	.138	.591	1.181	.039	.197			▲/▲ ▲/▲ ▲/▲			▲/ ▲/ ▲/ ▲/
R/LU105.0031.3.5 R/LU105.0046.3.5 R/LU105.0062.3.5 R/LU105.0078.3.5	.031 .046 .062 .078	.091	.185	.138	.787	1.378	.039	.197			▲/▲ ▲/▲ ▲/▲			▲/ ▲/ ▲/ ▲/
R/LU105.0031.4.5 R/LU105.0046.4.5 R/LU105.0062.4.5 R/LU105.0078.4.5	.031 .046 .062 .078	.091	.185	.138	.984	1.575	.039	.197			▲/▲ ▲/▲ ▲/▲			▲/ ▲/ ▲/ ▲/
R/LU105.0031.5.5 R/LU105.0046.5.5 R/LU105.0062.5.5 R/LU105.0078.5.5	.031 .046 .062 .078	.091	.185	.138	1.181	1.772	.039	.197			▲/▲ ▲/▲ ▲/▲			▲/ ▲/ ▲/
▲ on stock ∆ 4 weeks	5			State F	R or L versi	on			Р		•	•		•

• main recommendation

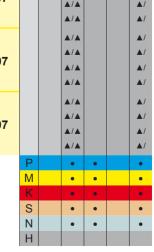
o alternative recommendation

uncoated grades

coated grades

brazed/Cermet

Dimensions in inch



A



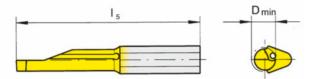
### **INSERT** Type

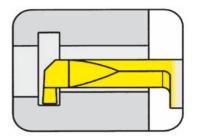


.236"

.071"

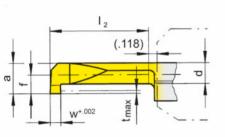
Bore Ø from Depth of groove up to





for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI



R = right hand version shown

L = left hand version

Part number	w	f	а	d	I <sub>2</sub>	І <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	MG12	TN35	TI25	TF45	TH35
R/L105.0100.1.6 R/L105.0150.1.6 R/L105.0200.1.6	.039 .059 .079	.130	.224	.146	.394	.984	.071	.236	▲/▲				▲/▲ ▲/▲
R/L105.0100.2.6 R/L105.0150.2.6 R/L105.0200.2.6	.039 .059 .079	.130	.224	.146	.591	1.181	.071	.236	<b>A</b> / <b>A</b>				▲/▲ ▲/▲
R/L105.0100.3.6 R/L105.0150.3.6 R/L105.0200.3.6	.039 .059 .079	.130	.224	.146	.787	1.378	.071	.236	▲/▲				▲/▲ ▲/▲
R/L105.0100.4.6 R/L105.0150.4.6 R/L105.0200.4.6	.039 .059 .079	.130	.224	.146	.984	1.575	.071	.236		▲/△ ▲/▲			▲/▲ ▲/▲
R/L105.0100.5.6 R/L105.0150.5.6 R/L105.0200.5.6	.039 .059 .079	.130	.224	.146	1.181	1.772	.071	.236		▲/△ ▲/△ ▲/▲			▲/▲ ▲/▲ /▲

 $\blacktriangle$  on stock  $\triangle$  4 weeks

• main recommendation

o alternative recommendation

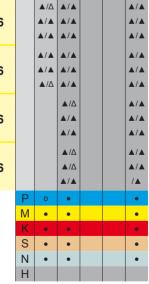
uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version



Carbide grades

# GROOVING (internal) ≥ Ø .236"

15



### **INSERT** Type



Dmin

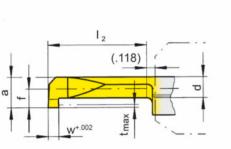
.236"

.071"

Bore Ø from Depth of groove up to

for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI



R = right hand version shown

L = left hand version

Part number	W	f	а	d	I <sub>2</sub>	۱ <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>		MG12	TN35	TI25	TF45	TH35
R/LU105.0031.1.6 R/LU105.0046.1.6 R/LU105.0062.1.6 R/LU105.0078.1.6	.031 .046 .062 .078	.130	.224	.146	.394	.984	.071	.236		▲/ ▲/	▲/▲ ▲/▲ ▲/▲			▲/ ▲/ ▲/ ▲/
R/LU105.0031.2.6 R/LU105.0046.2.6 R/LU105.0062.2.6 R/LU105.0078.2.6	.031 .046 .062 .078	.130	.224	.146	.591	1.181	.071	.236		<b>▲</b> /	▲/▲ ▲/▲ ▲/▲			▲/ ▲/ ▲/ ▲/
R/LU105.0031.3.6 R/LU105.0046.3.6 R/LU105.0062.3.6 R/LU105.0078.3.6	.031 .046 .062 .078	.130	.224	.146	.787	1.378	.071	.236		▲/ ▲/	▲/▲ ▲/▲ ▲/▲			▲/ ▲/ ▲/ ▲/
R/LU105.0031.4.6 R/LU105.0046.4.6 R/LU105.0062.4.6 R/LU105.0078.4.6	.031 .046 .062 .078	.130	.224	.146	.984	1.575	.071	.236		<b>▲</b> /	▲/▲ ▲/▲ ▲/▲	Δ/		▲/ ▲/ ▲/ ▲/
▲ on stock ∆ 4 weeks	S								Ρ	0	•	•		•

 $\blacktriangle$  on stock  $\triangle$  4 weeks

• main recommendation

o alternative recommendation

uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version

Carbide grades

Μ

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Н

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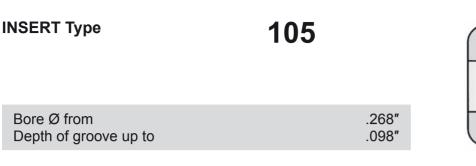
•

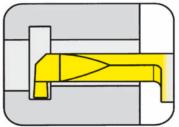
•

# GROOVING (internal) ≥ Ø .268"

15

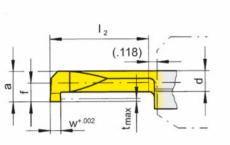






for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI



R = right hand version shown

L = left hand version

Dmin

Part number	w	f	а	d	I <sub>2</sub>	I <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	MG12	TN35	TI25	TF45	TH35
R/L105.0100.1.7 R/L105.0150.1.7 R/L105.0200.1.7	.039 .059 .079	.157	.252	.146	.394	.984	.098	.268	<b>A</b> / <b>A</b>				▲/▲ ▲/▲
R/L105.0100.2.7 R/L105.0150.2.7 R/L105.0200.2.7	.039 .059 .079	.157	.252	.146	.591	1.181	.098	.268	▲/▲				▲/▲ ▲/▲
R/L105.0100.3.7 R/L105.0150.3.7 R/L105.0200.3.7	.039 .059 .079	.157	.252	.146	.787	1.378	.098	.268	▲/▲				▲/▲ ▲/▲
R/L105.0100.4.7 R/L105.0150.4.7 R/L105.0200.4.7	.039 .059 .079	.157	.252	.146	.984	1.575	.098	.268		▲/∆ ▲/▲			▲/▲ ▲/▲
R/L105.0100.5.7 R/L105.0150.5.7 R/L105.0200.5.7	.039 .059 .079	.157	.252	.146	1.181	1.772	.098	.268		▲/▲ ▲/▲			▲/▲ ▲/▲

 $\blacktriangle$  on stock  $\triangle$  4 weeks

• main recommendation

o alternative recommendation

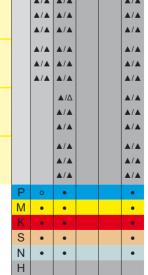
uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version



A

# GROOVING (internal) ≥ Ø .268"

15



A

### **INSERT** Type

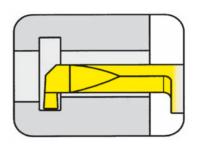


Dmin

.268"

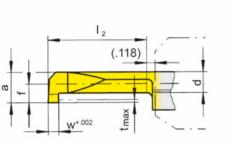
.098"

Bore Ø from Depth of groove up to



for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI



R = right hand version shown

L = left hand version

Part number	W	f	а	d	I <sub>2</sub>	I <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>		MG12	TN35	TI25	TF45	TH35
R/LU105.0031.1.7 R/LU105.0046.1.7 R/LU105.0062.1.7 R/LU105.0078.1.7	.031 .046 .062 .078	.157	.252	.146	.394	.984	.098	.268		▲/ ▲/	▲/▲ ▲/▲ ▲/▲ ▲/▲	Δ/		▲/ ▲/ ▲/ ▲/
R/LU105.0031.2.7 R/LU105.0046.2.7 R/LU105.0062.2.7 R/LU105.0078.2.7	.031 .046 .062 .078	.157	.252	.146	.591	1.181	.098	.268		▲/ ▲/	▲/▲ ▲/▲ ▲/▲			▲/ ▲/ ▲/
R/LU105.0031.3.7 R/LU105.0046.3.7 R/LU105.0062.3.7 R/LU105.0078.3.7	.031 .046 .062 .078	.157	.252	.146	.787	1.378	.098	.268		▲/ ▲/	▲/▲ ▲/▲ ▲/▲ ▲/▲			▲/ ▲/ ▲/ ▲/
R/LU105.0031.4.7 R/LU105.0046.4.7 R/LU105.0062.4.7 R/LU105.0078.4.7	.031 .046 .062 .078	.157	.252	.146	.984	1.575	.098	.268			▲/▲ ▲/△ ▲/▲ ▲/▲			▲/ ▲/ ▲/ ▲/
R/LU105.0031.5.7 R/LU105.0046.5.7 R/LU105.0062.5.7 R/LU105.0078.5.7	.031 .046 .062 .078	.157	.252	.146	1.181	1.772	.098	.268			▲/ ▲/▲ ▲/▲ △/△			▲/ ▲/ ▲/
▲ on stock ∆ 4 weeks	S			Sta	ite R or L v	ersion			Р	0	•	•		•

• main recommendation

o alternative recommendation

uncoated grades

coated grades

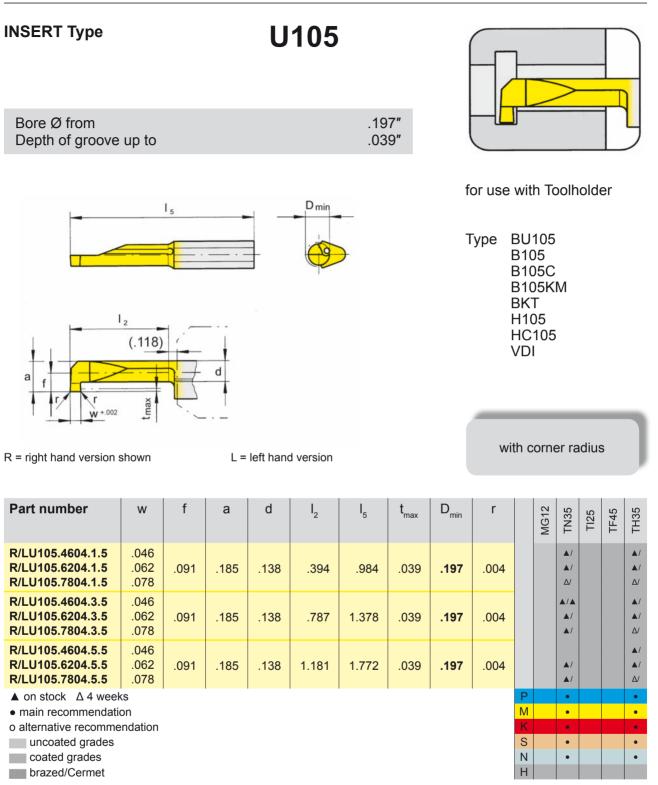
brazed/Cermet

Dimensions in inch

Μ • • • • S • Ν • • • • Н

Carbide grades





Dimensions in inch

State R or L version

A86

Carbide grades

Α

# GROOVING (internal) ≥ Ø .236"



Α

#### **U105 INSERT** Type Bore Ø from .236" Depth of groove up to .071" for use with Toolholder Dmin 15 Type BU105 B105 B105C B105KM BKT $|_2$ H105 HC105 (.118)VDI d а f tmax 002 with corner radius R = right hand version shown L = left hand version D<sub>min</sub> Part number MG12 W f а d 1<sub>2</sub> **I**<sub>5</sub> TH35 t<sub>max</sub> r TN35 TF45 TI25 R/LU105.4604.1.6 .046 **▲**/ **A**/A R/LU105.6204.1.6 .062 .130 .224 .146 .394 .984 .071 .236 .004 **A**/ ▲/ R/LU105.7804.1.6 .078 ▲/ **A**/ R/LU105.4604.3.6 .046 ▲/ ▲/ R/LU105.6204.3.6 .062 **A**/ .130 .224 .146 .787 1.378 .071 .236 .004 **A**/ R/LU105.7804.3.6 .078 **▲**/∆ ▲/ R/LU105.4604.5.6 .046 .004 ▲/ **A**/ R/LU105.6204.5.6 .004 .062 ▲/ ▲/ .130 .224 .146 1.181 1.772 .071 .236 R/LU105.7804.5.6 .078 .004 ▲/

 $\blacktriangle$  on stock  $\triangle$  4 weeks

R/LU105.7808.5.6

• main recommendation

o alternative recommendation

.078

uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version

Carbide grades

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# GROOVING (internal) ≥ Ø .268"

A



INSERT Type				<b>U</b> 1	05									
Bore Ø from Depth of groove	up to					.268″ .098″								y
	2 (.118)		d	•	Dmin			for u	use with B10 B10 B10 BK1 H10 HC <sup>2</sup> VDI	105 5 5C 5K	M	old	er	
R = right hand version s	shown W	f	L = le	eft hand v	version	I <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	with co	orne	MG12 MG12	adius 2N35	TI25 00	TH35
R/LU105.4604.1.7 R/LU105.4608.1.7 R/LU105.6204.1.7 R/LU105.6208.1.7 R/LU105.4604.2.7	.046 .046 .062 .062 .046	.157	.252	.146	.394	.984	.098	.268	.004 .008 .004 .008 .004		2			
R/LU105.4608.2.7 R/LU105.6204.2.7 R/LU105.6208.2.7	.046 .062 .062	.157	.252	.146	.591	1.181	.098	.268	.008 .004 .008			▲/ ▲/ ▲/		▲/ ▲/ ▲/
R/LU105.4604.3.7 R/LU105.4608.3.7 R/LU105.6204.3.7 R/LU105.6208.3.7	.046 .046 .062 .062	.157	.252	.146	.787	1.378	.098	.268	.004 .008 .004 .008		∆/	▲/▲ ▲/ ▲/ ▲/		▲/ ▲/ ▲/ ▲/
R/LU105.4604.4.7 R/LU105.4608.4.7 R/LU105.6204.4.7 R/LU105.6208.4.7	.046 .046 .062 .062	.157	.252	.146	.984	1.575	.098	.268	.004 .008 .004 .008			▲/ ▲/ ▲/ ▲/		▲/ ▲/ ▲/ ▲/
R/LU105.4604.5.7 R/LU105.4608.5.7 R/LU105.6204.5.7 R/LU105.6208.5.7	.046 .046 .062 .062	.157	.252	.146	1.181	1.772	.098	.268	.004 .008 .004 .008			▲/ ▲/ ▲/ ▲/		▲/ ▲/ ▲/
▲ on stock ∆ 4 week				ę	State R or	L version				Р	0	•		•
• main recommendation	on									Μ	•	•		•

o alternative recommendation

uncoated grades

coated grades brazed/Cermet

Dimensions in inch

Carbide grades

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# GROOVING (internal) ≥ Ø .268"



Α

### **INSERT** Type **U105** Bore Ø from .268" Depth of groove up to .098" for use with Toolholder Dmin 15 Туре BU105 B105 B105C B105KM BKT H105 12 HC105 (.118)VDI d а tmax 000 with corner radius R = right hand version shown L = left hand version MG12 TN35 TF45 TI25 4 **A**/ 8 ▲/ 4 **A**/

Part number	W	f	а	d	I <sub>2</sub>	I <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	r
R/LU105.7804.1.7 R/LU105.7808.1.7	.078	.157	.252	.146	.394	.984	.098	.268	.004 .008
R/LU105.7804.2.7 R/LU105.7808.2.7	.078	.157	.252	.146	.591	1.181	.098	.268	.004 .008
R/LU105.7804.3.7 R/LU105.7808.3.7	.078	.157	.252	.146	.787	1.378	.098	.268	.004 .008
R/LU105.7804.4.7 R/LU105.7808.4.7	.078	.157	.252	.146	.984	1.575	.098	.268	.004 .008
R/LU105.7804.5.7 R/LU105.7808.5.7	.078	.157	.252	.146	1.181	1.772	.098	.268	.004 .008

 $\blacktriangle$  on stock  $\Delta$  4 weeks

• main recommendation

o alternative recommendation

uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version

Carbide grades

TH35

**▲**/

**▲**/

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**A**/

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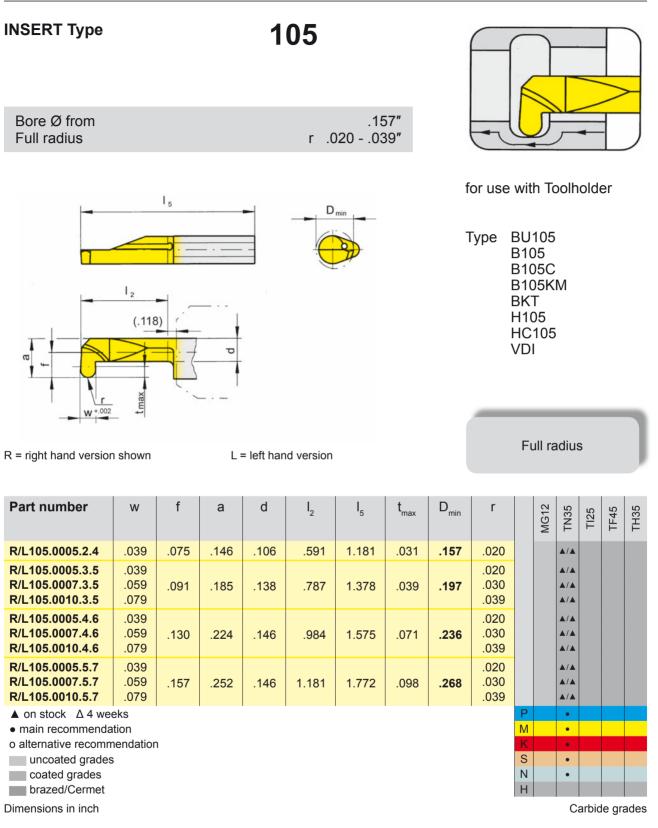
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1-000-010 HUKN





# BORING and PROFILING ≥ Ø .157"

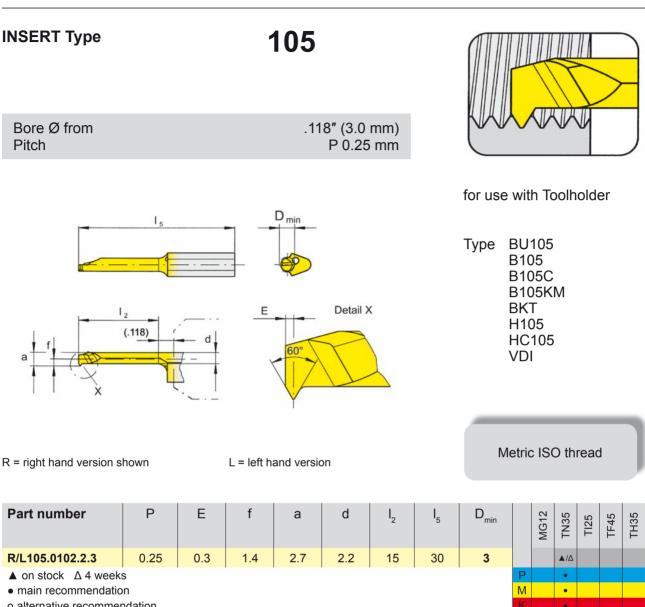


Α

NSERT Type		U105									]				
Bore Ø from Full radius	.157" r .023039"														
for use with Too Type BU105 B105 B105C B105KM BKT H105 HC105 VDI									M	old	er				
	13	_													
e right hand version	shown		L =	left hand	d version					Fu	ıll ra	adius	6		
= right hand version		f	L=	left hand	d version	I <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	r	Fu	MG12 MG12	adius 1N35	TI25	TF45	TH35
= right hand version Part number	shown	f .075				ا <sub>5</sub> 1.181	t <sub>max</sub>	D <sub>min</sub> .157	r .023	Fu				TF45	TH35
= right hand version Part number R/LU105.2346.2.4 R/LU105.2346.3.5 R/LU105.3162.3.5	shown		а	d	I <sub>2</sub>					Fu		TN35		TF45	۸. ۸.
= right hand version Part number R/LU105.2346.2.4 R/LU105.2346.3.5 R/LU105.3162.3.5 R/LU105.3978.3.5 R/LU105.2346.4.6 R/LU105.3162.4.6	shown W .046 .046 .062	.075	a .146	d .106	l <sub>2</sub> .591	1.181	.031	.157	.023 .023 .031	Fu		/ LN35	TI25	TF45	
= right hand version Part number R/LU105.2346.2.4 R/LU105.2346.3.5 R/LU105.3162.3.5 R/LU105.3978.3.5 R/LU105.2346.4.6 R/LU105.3978.4.6 R/LU105.2346.5.7 R/LU105.3162.5.7	w .046 .046 .062 .078 .046 .062	.075 .091	a .146 .185	d .106 .138	I <sub>2</sub> .591 .787	1.181 1.378	.031 .039	.157 .197	.023 .023 .031 .039 .023 .031	Fu		TN35	TI25	TF45	
<ul> <li>right hand version</li> <li>Part number</li> <li>R/LU105.2346.2.4</li> <li>R/LU105.2346.3.5</li> <li>R/LU105.3162.3.5</li> <li>R/LU105.3978.3.5</li> <li>R/LU105.3162.4.6</li> <li>R/LU105.3978.4.6</li> <li>R/LU105.3162.5.7</li> <li>R/LU105.3162.5.7</li> <li>R/LU105.3978.5.7</li> <li>on stock Δ4 week</li> </ul>	w .046 .046 .062 .078 .046 .062 .078 .046 .062 .078	.075 .091 .130	a .146 .185 .224	d .106 .138 .146	l <sub>2</sub> .591 .787 .984	1.181 1.378 1.575	.031 .039 .071	.157 .197 .236	.023 .023 .031 .039 .023 .031 .039 .023 .031	Ρ		1N32 1A 1A 1A 1A 1A 1A 1A 1A 1A 1A	• TI25	TF45	
<ul> <li>right hand version</li> <li>Part number</li> <li>R/LU105.2346.2.4</li> <li>R/LU105.2346.3.5</li> <li>R/LU105.3162.3.5</li> <li>R/LU105.3978.3.5</li> <li>R/LU105.3162.4.6</li> <li>R/LU105.3978.4.6</li> <li>R/LU105.3978.5.7</li> <li>A on stock Δ4 weel</li> <li>main recommendati</li> </ul>	w .046 .046 .046 .062 .078 .046 .062 .078 .046 .062 .078 ks	.075 .091 .130	a .146 .185 .224	d .106 .138 .146	l <sub>2</sub> .591 .787 .984	1.181 1.378 1.575	.031 .039 .071	.157 .197 .236	.023 .023 .031 .039 .023 .031 .039 .023 .031	P		1N35 1×1 1×1 1×1 1×1 1×1 1×1 1×1 1×	• •	TF45	
	w .046 .046 .046 .062 .078 .046 .062 .078 .046 .062 .078 ks	.075 .091 .130	a .146 .185 .224	d .106 .138 .146	l <sub>2</sub> .591 .787 .984	1.181 1.378 1.575	.031 .039 .071	.157 .197 .236	.023 .023 .031 .039 .023 .031 .039 .023 .031	Ρ		1N32 1A 1A 1A 1A 1A 1A 1A 1A 1A 1A	• TI25	TF45	
<ul> <li>right hand version</li> <li>Part number</li> <li>R/LU105.2346.2.4</li> <li>R/LU105.2346.3.5</li> <li>R/LU105.3162.3.5</li> <li>R/LU105.3978.3.5</li> <li>R/LU105.2346.4.6</li> <li>R/LU105.3978.4.6</li> <li>R/LU105.3978.5.7</li> <li>A on stock Δ4 weel</li> <li>main recommendation of the alternative recommendation of the altern</li></ul>	w .046 .046 .046 .062 .078 .046 .062 .078 .046 .062 .078 ks	.075 .091 .130	a .146 .185 .224	d .106 .138 .146	l <sub>2</sub> .591 .787 .984	1.181 1.378 1.575	.031 .039 .071	.157 .197 .236	.023 .023 .031 .039 .023 .031 .039 .023 .031	P M K		LN32	• •	TF45	

Α





o alternative recommendation

uncoated grades

coated grades

brazed/Cermet

Dimensions in mm

State R or L version

Carbide grades

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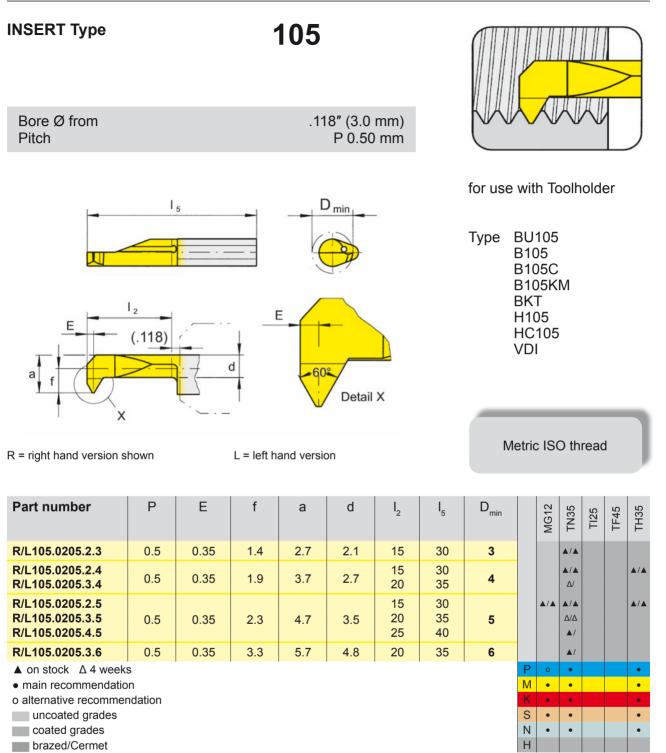
# **THREADING** (internal) Partial profile



Α

#### 105 **INSERT** Type .118" (3.0 mm) Bore Ø from Pitch P 0.35 mm for use with Toolholder $|_{5}$ D<sub>min</sub> Type BU105 B105 B105C B105KM BKT 12 Е H105 E HC105 (.118)VDI d -60° а f Detail X Х Metric ISO thread R = right hand version shown L = left hand version D<sub>min</sub> Part number Ρ Е MG12 f а d 1<sub>2</sub> I<sub>5</sub> TN35 TH35 TF45 TI25 R/L105.0203.1.3 0.35 10 25 3 **A**/**A** 0.3 1.4 2.7 2.1 30 5 R/L105.0203.2.5 0.35 0.3 2.3 4.7 3.5 15 $\blacktriangle$ on stock $\triangle$ 4 weeks Ρ • Μ • • main recommendation o alternative recommendation S uncoated grades ٠ Ν coated grades • Н brazed/Cermet Dimensions in mm Carbide grades State R or L version





Dimensions in mm

State R or L version

Carbide grades

# **THREADING (internal) Partial profile**

# ph HORN ph

### **INSERT** Type

105

.118" (3.0 mm)

P 0.50 - 0.75 mm

D<sub>min</sub>

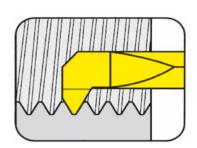
Bore Ø from		
Pitch		

 $|_2$ 

Х

(.118)

۱<sub>5</sub>



for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI



E

а

L = left hand version

60°

Detail X

Е

d

Metric ISO thread

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Part number	Р	P <sub>max</sub>	E	f	а	d	I <sub>2</sub>	۱ <sub>5</sub>	D <sub>min</sub>	MG12	TN35	TI25	TF45	TH35
R/L105.0407.2.3	0.5	0.75	0.45	1.4	2.7	2.0	15	30	3		▲/			
R/L105.0407.1.4 R/L105.0407.2.4 R/L105.0407.3.4	0.5	0.75	0.45	1.9	3.7	2.7	10 15 20	25 30 35	4		▲/∆ ▲/∆ ▲/∆			
R/L105.0407.2.5 R/L105.0407.3.5 R/L105.0407.4.5	0.5	0.75	0.45	2.3	4.7	3.5	15 20 25	30 35 40	5		▲/▲ △/△ ▲/△			▲/▲
R/L105.0407.3.6	0.5	0.75	0.45	3.3	5.7	4.7	20	35	6		▲/			

 $\blacktriangle$  on stock  $\Delta$  4 weeks

• main recommendation

o alternative recommendation

uncoated grades

- coated grades brazed/Cermet
- Dimensions in mm

State R or L version

Carbide grades

•

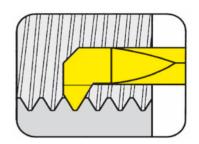
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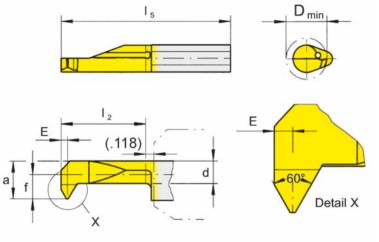
# INSERT Type

105

Bore Ø from	.189″ (4.8 mm)
Pitch	P 1.00 - 1.50 mm



for use with Toolholder



Type BU105 B105 B105C B105KM BKT H105 HC105 VDI

R = right hand version shown

L = left hand version

Metric ISO thread

Part number	Р	E	f	а	d	I <sub>2</sub>	۱ <sub>5</sub>	D <sub>min</sub>	MG12	TN35	TI25	TF45	TH35
R/L105.0510.2.5 R/L105.0510.3.5 R/L105.0510.4.5	1.00	0.55	2.1	4.5	3.5	15 20 25	30 35 40	4.8	▲/△	▲/▲ ▲/△ ▲/▲			▲/▲
R/L105.0510.2.6 R/L105.0510.3.6 R/L105.0510.4.6 R/L105.0612.2.6 R/L105.0612.3.6 R/L105.0612.4.6	1.00 1.00 1.25 1.25 1.25 1.25	0.55 0.55 0.65 0.65 0.65 0.65	3.3	5.7	3.7	15 20 25 15 20 25	30 35 40 30 35 40	6.0	Δ/Δ	▲/▲ ▲/△ ▲/△ ▲/△ ▲/△			▲/▲ ▲/▲
R/L105.0815.2.7 R/L105.0815.3.7 R/L105.0815.4.7	1.50	0.75	4.0	6.4	3.7	15 20 25	30 35 40	7.0		▲/▲ ▲/△ ▲/△			▲/▲

▲ on stock ∆ 4 weeks

main recommendation

o alternative recommendation

uncoated grades

coated grades

brazed/Cermet

Dimensions in mm

State R or L version

A96

Carbide grades

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# **THREADING** (internal) Partial profile

# ph HORN ph

#### **INSERT** Type 105 .157" Bore Ø from Threads per inch 16 - 40 for use with Toolholder ۱, D<sub>min</sub> Type BU105 B105 B105C B105KM BKT $|_2$ Ε H105 E HC105 (.118)VDI d 60° а f Detail X Х Thread UN L = left hand version Threads per Inch Е MG12 f а d ١, 1<sub>5</sub> D TN35 TI25 32 - 40 .018 .075 .146 .106 .591 1.181 .157 **A**/**A**

R = right hand version shown

Part number TH35 TF45 R/L105.3240.2.4  $\Delta / \Delta$ R/L105.2428.2.5 .022 24 - 28 **A**/ .091 .185 .138 .591 1.181 .197 R/L105.3240.2.5 .018  $\blacktriangle / \Delta$ **\**/ **▲**/∆ 32 - 40 R/L105.1620.2.5 .591 1.181 16 - 20 .028 .130 .224 .146 .197 R/L105.1620.3.5 .787 1.378 R/L105.1620.2.6 .591 1.181 **A**/**A** R/L105.1620.3.6 .787 1.378 16 - 20 .028 .130 .224 .146 .236 Δ/ R/L105.1620.4.6 .984 1.575 Δ/ R/L105.2428.2.6 .591 1.181 ▲/▲ ▲/ R/L105.2428.3.6 24 - 28 .022 .130 .224 .146 .787 1.378 .236 Δ/ R/L105.2428.4.6 .984 1.575

 $\blacktriangle$  on stock  $\Delta$  4 weeks

• main recommendation

o alternative recommendation

uncoated grades

coated grades brazed/Cermet

Dimensions in inch

State R or L version

Carbide grades

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Ρ

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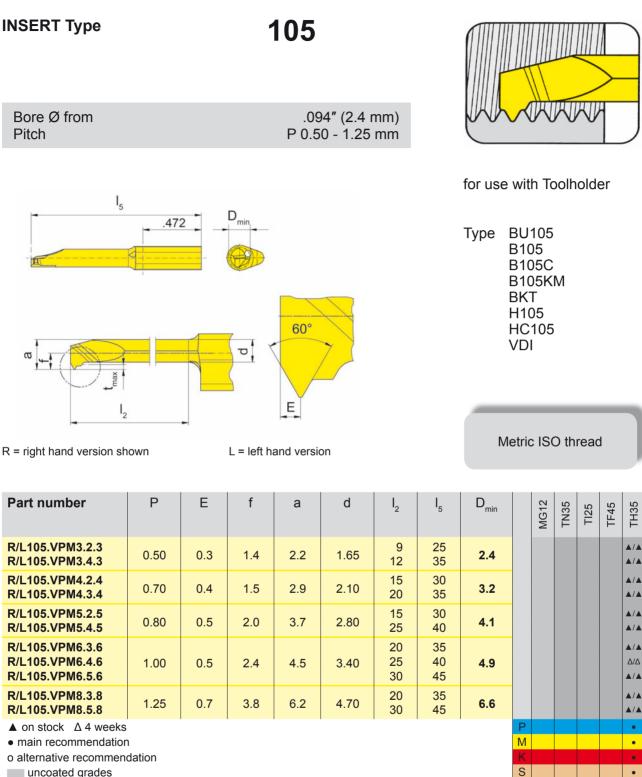
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uncoated grades

coated grades

brazed/Cermet

Dimensions in mm

State R or L version

A98

Carbide grades

Ν

Н

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# **THREADING** (internal) Partial profile

# ph **HORN** ph

#### **INSERT** Type 105 Bore Ø from .236" Threads per inch 18 - 27 for use with Toolholder D<sub>min</sub> ۱<sub>5</sub> Туре BU105 B105 B105C B105KM BKT $|_2$ Е H105 Е HC105 (.118)VDI d 60° а f Detail X Х Thread NPT R = right hand version shown L = left hand version D<sub>min</sub> Part number Threads per Inch Е f MG12 а d 1<sub>2</sub> 1<sub>5</sub> TH35 TN35 TF45 TI25 R/L105.NP18.2.6 .039 18 .591 1.181 **A**/**A** R/L105.NP18.3.6 18 .039 .787 1.378 $\Delta / \Delta$ R/L105.NP18.4.6 18 .039 .984 1.575 $\Delta / \Delta$ .130 .224 .146 .236 R/L105.NP27.2.6 27 .031 .591 1.181 $\blacktriangle / \Delta$ R/L105.NP27.3.6 27 .031 .787 1.378 $\Delta / \Delta$ R/L105.NP27.4.6 27 .031 .984 1.575 $\Delta / \Delta$ $\blacktriangle$ on stock $\triangle$ 4 weeks Ρ • Μ • • main recommendation o alternative recommendation S uncoated grades • coated grades Ν . Н brazed/Cermet Dimensions in inch Carbide grades

# THREADING (internal) Full profile

۱,5

12

(.118)

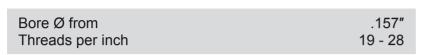


### **INSERT** Type

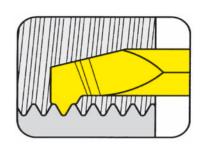


D<sub>min</sub>

Whitworth thread



d



for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI

R = right hand version shown

а

D<sub>min</sub> Part number Threads per Inch Е MG12 f а d ١, 1<sub>5</sub> TN35 TI25 R105.5520.2.4 20 .039 .075 .146 .098 .591 1.181 .157 Δ R105.5519.3.6 19 .039 R105.5522.3.6 22 .039 Δ 24 R105.5524.3.6 .031 .130 .224 .146 .787 1.378 .236 Δ R105.5526.3.6 26 .031 Δ R105.5528.3.6 28 .031 Δ

▲ on stock ∆4 weeks

• main recommendation

o alternative recommendation

- uncoated grades
- coated grades
- brazed/Cermet

Dimensions in inch

A100

Carbide grades

TH35

TF45

E 55° Detail X

Thread BSW/BSF

Ρ

Μ

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# THREADING (internal) Full profile

15



### **INSERT Type**

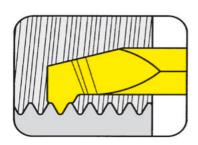


.197"

19 - 28

D<sub>min</sub>

Bore Ø from Threads per inch



for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI

Thread BSW/BSF

Μ

S

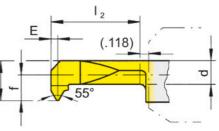
Ν

Н

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R = right hand version shown

5

L = left hand version

Part number	Threads per Inch	E	f	а	d	I <sub>2</sub>	۱ <sub>5</sub>	D <sub>min</sub>	MG12	TN35	T125	TF45	TH35
R/L105.5524.2.5 R/L105.5526.2.5 R/L105.5528.2.5	24 26 28	.031	.091	.185	.138	.591	1.181	.197		∆/∆ ▲/∆ ▲/∆			
R/L105.5524.2.6 R/L105.5526.2.6 R/L105.5528.2.6	24 26 28	.031	.130	.224	.146	.591	1.181	.236		▲/∆ ▲/ ▲/∆			
R/L105.5519.2.6 R/L105.5520.2.6 R/L105.5522.2.6	19 20 22	.039	.130	.224	.146	.591	1.181	.236		▲/▲ ▲/△ △/△			

▲ on stock  $\Delta$  4 weeks

main recommendation

o alternative recommendation

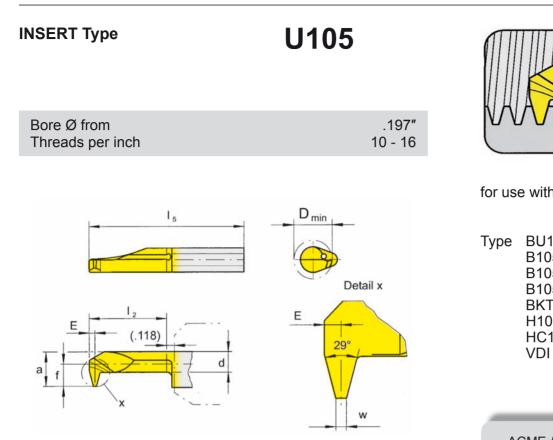
- uncoated grades
- coated grades
- brazed/Cermet
- Dimensions in inch

State R or L version

Carbide grades







BU105 B105 B105C B105KM BKT H105 HC105

R = right hand version shown

L = left hand version

D<sub>min</sub> Part number Threads per Inch Е f MG12 а d ١, 1<sub>5</sub> TN35 TF45 TI25 R/LU105.AC16.2.5 .591 1.181 **A**/ .028 .079 .173 16 .122 .197 R/LU105.AC16.4.5 .984 1.575 **A**/ R/LU105.AC14.2.6 .591 1.181 **A**/ 14 .035 .130 .224 .169 .236 R/LU105.AC14.4.6 .984 1.575 ▲/ R/LU105.AC12.3.7 .787 1.378 **A**/ 12 .039 .157 .252 .189 .276 R/LU105.AC12.5.7 1.181 1.772 ▲/ R/LU105.AC10.3.7 10 .039 .157 .252 .173 .787 1.378 .276 ▲/

 $\blacktriangle$  on stock  $\Delta$  4 weeks

• main recommendation

o alternative recommendation

uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version

A102

Carbide grades

TH35

**▲**/

**A**/

▲/

**A**/

▲/

**A**/

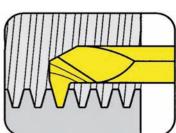
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for use with Toolholder

ACME / Stub ACME thread

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# **THREADING (internal) Partial profile**

# ph **HORN** ph

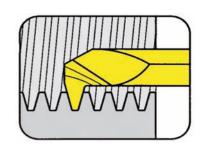
### **INSERT Type**

Bore Ø from Threads per inch

d

 $I_5$ 

(.118)



for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI

R = right hand version shown

F

а

L = left hand version

Part number	Threads per Inch	E	f	а	d	l <sub>2</sub>	Ι <sub>5</sub>	D <sub>min</sub>	MG12	TN35	TI25	TF45	TH35
R/LU105.SA16.2.5 R/LU105.SA16.4.5	16	.028	.091	.185	.142	.591 .984	1.181 1.575	.197		▲/ ▲/			▲/ ▲/
R/LU105.SA14.2.6 R/LU105.SA14.4.6	14	.035	.131	.224	.177	.591 .984	1.181 1.575	.236		▲/ ▲/			▲/ ▲/
R/LU105.SA12.3.7 R/LU105.SA12.5.7	12	.039	.157	.252	.201	.787 1.181	1.378 1.772	.276		▲/ ▲/	Δ/		▲/ ▲/
R/LU105.SA10.3.7	10	.039	.157	.252	.193	.787	1.378	.276		Δ/			▲/

▲ on stock  $\Delta 4$  weeks

• main recommendation

o alternative recommendation

uncoated grades

coated grades

brazed/Cermet

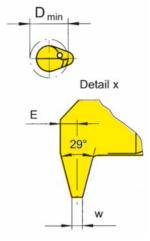
Dimensions in inch

State R or L version

Carbide grades

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**U105** 

.197"

10 - 16

ACME / Stub ACME thread

Μ

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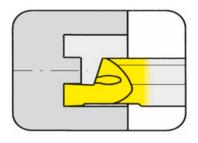
# INSERT Type

A

1	05
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from outer groove Ø	.197″
Depth of groove up to	.197″
Width of groove up to	.079″

 $|_{5}$ 



for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI

M

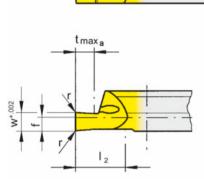
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Damin

R = right hand version shown

L = left hand version

Part number	W	f	I <sub>2</sub>	I <sub>5</sub>	t <sub>max a</sub>	D <sub>a min</sub>	r		MG12	TN35	TI25	TF45	TH35
R/L105.0510.1.8 R/L105.0515.1.8 R/L105.0520.1.8	.039 .059 .079	.079	.394	.984	.079 .118 .197	.197	.002		<ul> <li>▲/△</li> <li>▲/△</li> <li>▲/△</li> </ul>		▲/▲ ▲/▲ ▲/▲		
R/L105.0510.2.8 R/L105.0515.2.8 R/L105.0520.2.8	.039 .059 .079	.079	.591	1.378	.079 .118 .197	.197	.002		∆/∆ ∆/∆ ▲/▲		▲/▲ ▲/▲ ▲/▲		
▲ on stock △ 4 week	s							Ρ	о		•		

main recommendation

o alternative recommendation

- uncoated grades
- coated grades
- brazed/Cermet

Dimensions in inch

State R or L version

Carbide grades

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# FACE GROOVING



A

### INSERT Type

Width of groove up to

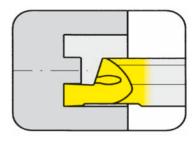
from outer groove Ø	.236″
Depth of groove up to	.197″

 $|_{5}$ 

105

.079"

Damin



for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI

M

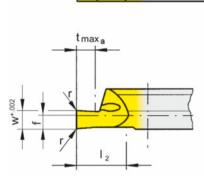
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R = right hand version shown

L = left hand version

Part number	W	f	I <sub>2</sub>	I <sub>5</sub>	t <sub>max a</sub>	D <sub>a min</sub>	r		MG12	TN35	TI25	TF45	TH35
R/L105.0610.1.8 R/L105.0615.1.8 R/L105.0620.1.8	.039 .059 .079	.079	.394	.984	.079 .118 .197	.236	.002		▲ / ▲ △/△ ▲ /△		▲/▲ ▲/▲ ▲/▲		
R/L105.0610.2.8 R/L105.0615.2.8 R/L105.0620.2.8	.039 .059 .079	.079	.591	1.378	.079 .118 .197	.236	.002		Δ/Δ Δ/ Δ/Δ		∆/▲ ▲/∆ ▲/▲		
▲ on stock ∆ 4 week	s							Ρ	о		•		

main recommendation

o alternative recommendation

- uncoated grades
- coated grades
- brazed/Cermet

Dimensions in inch

State R or L version

Carbide grades

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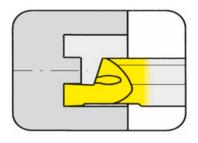
# **INSERT** Type

A

	1	05
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from outer groove Ø	.315″
Depth of groove up to	.236″
Width of groove up to	.118″

 $|_{5}$ 



for use with Toolholder

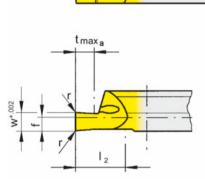
Type BU105 B105 B105C B105KM BKT H105 HC105 VDI

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R = right hand version shown

L = left hand version

Part number	w	f	I <sub>2</sub>	I <sub>5</sub>	t <sub>max a</sub>	D <sub>a min</sub>	r	MG12	TN35	TI25	TF45	TH35
R/L105.0810.1.8 R/L105.0815.1.8 R/L105.0820.1.8 R/L105.0825.1.8 R/L105.0830.1.8	.039 .059 .079 .098 .118	.079	.394	.984	.079 .118 .157 .197 .236	.315	.006			<pre></pre>		
R/L105.0810.2.8 R/L105.0815.2.8 R/L105.0820.2.8 R/L105.0825.2.8 R/L105.0830.2.8	.039 .059 .079 .098 .118	.079	.591	1.378	.079 .118 .157 .197 .236	.315	.006			<pre> // // // // // // // // // // // // //</pre>		
▲ on stock Δ 4 week	s							P		•		

• main recommendation

o alternative recommendation uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version

Carbide grades

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# FACE GROOVING



A

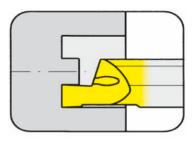
### **INSERT Type**

U105

Damin

from outer groove Ø	.315″
Depth of groove up to	.236″
Width of groove up to	.125″

 $|_{5}$ 



for use with Toolholder

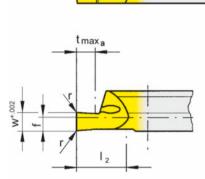
Type BU105 B105 B105C B105KM BKT H105 HC105 VDI

Μ

S

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Н



R = right hand version shown

L = left hand version

Part number	W	f	I <sub>2</sub>	۱ <sub>5</sub>	t <sub>max a</sub>	D <sub>a min</sub>	r		MG12	TN35	TI25	TF45	TH35
R/LU105.0846.1.8 R/LU105.0862.1.8 R/LU105.0878.1.8 R/LU105.0894.1.8 R/LU105.0812.1.8	.046 .062 .078 .094 .125	.079	.394	.984	.098 .118 .157 .197 .236	.315	.006				▲/▲ ▲/▲ ▲/▲ ▲/▲		▲/ ▲/ ▲/ ▲/
R/LU105.0846.2.8 R/LU105.0862.2.8 R/LU105.0878.2.8 R/LU105.0894.2.8 R/LU105.0812.2.8	.046 .062 .078 .094 .125	.079	.591	1.378	.098 .118 .157 .197 .236	.315	.006				▲/▲ ▲/▲ ▲/▲ ▲/▲		▲/ ▲/ ▲/ ▲/
▲ on stock ∆ 4 weeks								Ρ			•		•

▲ ON STOCK Δ4 WEEKS

• main recommendation

o alternative recommendation uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version

Carbide grades

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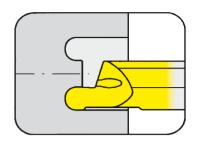
# **INSERT** Type

A

<b>U1</b>	05
•	

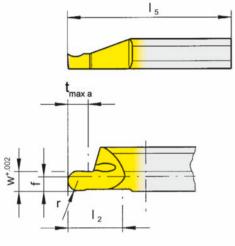
D<sub>a min</sub>

from outer groove Ø	.315″
Depth of groove up to	.236″
Width of groove up to	.125″



for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI



R = right hand version shown

L = left hand version

R/LU105.FF46.1.8       .046       .046       .062       .079       .394       .984       .118       .018       .023       .031	Part number	w	f	I <sub>2</sub>	I <sub>5</sub>	t <sub>max a</sub>	D <sub>a min</sub>	r	71.9M	TN35	TI25	TF45	TH35
R/LU105.FF62.2.8       .062         R/LU105.FF78.2.8       .078         .078       .079         .591       1.378         .118       .031         .031       .031         .031       .031         .031       .031         .031       .031         .031       .031         .031       .031         .031       .031         .031       .031         .031       .031         .031       .031         .031       .031         .031       .031         .031       .031         .031       .031	R/LU105.FF62.1.8 R/LU105.FF78.1.8 R/LU105.FF94.1.8	.062 .078 .094	.079	.394	.984	.118 .157 .197	.315	.031 .039 .047			▲/▲ ▲/▲ ▲/		▲/ ▲/ ▲/
	R/LU105.FF62.2.8 R/LU105.FF78.2.8 R/LU105.FF94.2.8	.062 .078 .094	.079	.591	1.378	.118 .157 .197	.315	.031 .039 .047			▲/ ▲/ ▲/		▲/ ▲/ ▲/

 $\blacktriangle$  on stock  $\triangle$  4 weeks

• main recommendation

o alternative recommendation

uncoated grades

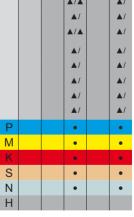
coated grades

brazed/Cermet

Dimensions in inch

State R or L version

Full radius



Carbide grades

# FACE GROOVING



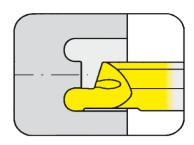
### **INSERT** Type

from outer groove Ø	.315″
Depth of groove up to	.236″
Width of groove up to	.118″

 $|_{5}$ 

105

D<sub>a min</sub>



for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI

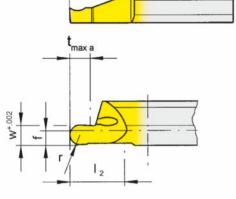
Full radius

Μ

S

Ν

Н



R = right hand version shown

L = left hand version

R/L105.8V10.1.8       .039       .039       .079       .079       .079       .018       .031       .031	Part number	W	f	I <sub>2</sub>	I <sub>5</sub>	t <sub>max a</sub>	D <sub>a min</sub>	r	MG12	TN35	TI25	TF45	TH35
R/L105.8V16.2.8       .063         R/L105.8V20.2.8       .079         .079       .591         1.378       .157         .315       .039         .049	R/L105.8V16.1.8 R/L105.8V20.1.8 R/L105.8V25.1.8	.063 .079 .098	.079	.394	.984	.118 .157 .197	.315	.031 .039 .049			▲/▲ ▲/▲ ▲/▲		
	R/L105.8V16.2.8 R/L105.8V20.2.8 R/L105.8V25.2.8	.063 .079 .098	.079	.591	1.378	.118 .157 .197	.315	.031 .039 .049			▲/▲ ▲/▲ ▲/△		

▲ on stock  $\Delta 4$  weeks

main recommendation

o alternative recommendation

uncoated grades

coated grades

brazed/Cermet

Dimensions in inch

State R or L version

Carbide grades

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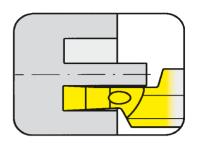
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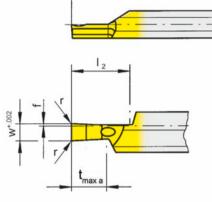
A

from outer groove Ø	.315″
Depth of groove up to	.236″
Width of groove up to	.118″



for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI



R = right hand version shown

15

L = left hand version

Part number	W	f	I <sub>2</sub>	I <sub>5</sub>	t <sub>max a</sub>	D <sub>a min</sub>	r		MG12	TN35	TI25	TF45	TH35
R/L105.0810.1.9 R/L105.0815.1.9 R/L105.0820.1.9 R/L105.0825.1.9 R/L105.0830.1.9	.039 .059 .079 .098 .118	.016	.394	.984	.079 .118 .157 .197 .236	.315	.006				▲/▲ ▲/▲ ▲/▲ ▲/▲		
<ul> <li>A on stock Δ 4 weeks</li> <li>main recommendation</li> <li>o alternative recommendation</li> <li>uncoated grades</li> <li>coated grades</li> <li>brazed/Cermet</li> </ul>							P M K S N H			• • • • • • • • • • • • • • • • • • • •			

D

Dimensions in inch

State R or L version

Carbide grades

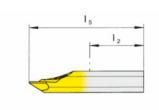
# CHAMFERING



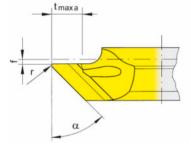
### **INSERT** Type

105

Angle of chamfer	45°/ 60°
Width of chamfer up to	.157″









for use with Toolholder

Type BU105 B105 B105C B105KM BKT H105 HC105 VDI

L = left hand version

Part number	α	f	I <sub>2</sub>	۱ <sub>5</sub>	t <sub>max a</sub>	D <sub>min</sub>	r		MG12	TN35	TI25	TF45	TH35
R/L105.0045.0.1 R/L105.0045.1.1	45°	.020	.472	.787 .984	.138	.039	.008			▲/▲		/▲ ▲/▲	
R/L105.0060.0.1 R/L105.0060.1.1	60°	.020	.472	.787 .984	.157	.039	.008					/▲ ▲/▲	
o alternative recommendation uncoated grades							P M K S		• • •		•		
coated grades brazed/Cermet								N H		•		•	

Dimensions in inch

State R or L version

Carbide grades



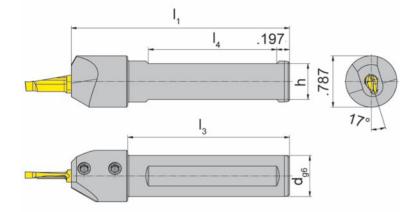
### **TOOLHOLDER Type**

BU105

with through coolant supply

from outer groove Ø	.394″
Depth of groove up to	.591″
Width of groove up to	.118″

Clamping length 22 mm



for use with Insert

Type A105

only usable for inserts with extended clamping length

Dimensions in inch

Part number	d	l <sub>1</sub>	h	l <sub>3</sub>	۱ <sub>4</sub>
R/LBU105.0625.12.2	.625	3.347	.546	2.480	1.969
R/LBU105.0750.12.2 R/LBU105.1000.12.2	.750 1.000	3.937	.671 .921	-	2.165

R = right hand version

State R or L version

Further sizes upon request

L = left hand version shown

Toolholder	Screw	TORX PLUS® Wrench
R/LBU105	6.075T15P	T15PQ

# **FACE GROOVING**



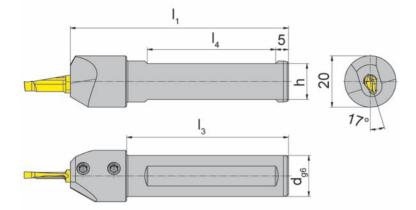
# **TOOLHOLDER Type**

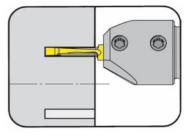
**B105** with through coolant supply

> .394" (10.0 mm) .591" (15.0 mm) .118" (3.0 mm)

from outer groove Ø
Depth of groove up to
Width of groove up to

Clamping length 22 mm





for use with Insert

Type A105

L = left hand version shown

R = right hand version

only usable for inserts with extended clamping length

Part number	d	l <sub>1</sub>	h	I <sub>3</sub>	Ι <sub>4</sub>
R/LB105.0016.12.2	16	85	14	63	50
R/LB105.0020.12.2	20	100	18	-	55
State R or L version					Dimensions in mm

State R or L version

Further sizes upon request

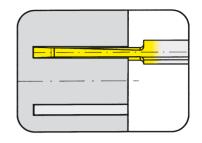
Toolholder	Screw	TORX PLUS® Wrench
R/LB105.00	6.075T15P	T15PQ



### **INSERT** Type

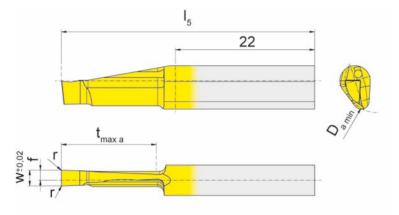
from outer groove Ø	.394″
Depth of groove up to	.591″
Width of aroove up to	118″

A105



for use with Toolholder

Type BU105...12.2 B105...12.2



L = left hand version shown

R = right hand version

Part number	W	f	I <sub>5</sub>	t <sub>max a</sub>	D <sub>a min</sub>	r		MG12	TN35	TI25	TF45	TH35
R/LA105.1020.2.2 R/LA105.1025.2.2 R/LA105.1030.2.2	.079 .098 .118	.055 .063 .075	1.575	.591	.394	.004				▲/▲ ▲/▲ ▲/▲		
<ul> <li>▲ on stock Δ 4 weeks</li> <li>■ main recommendation</li> <li>□ uncoated grades</li> <li>■ coated grades</li> <li>■ brazed/Cermet</li> </ul>										• • • • • • • • • • • • • • • • • • • •		
Dimensions in inch										arbid	e gra	ades

State R or L version

#### Note:

Use insert RA105 in toolholder RB105 Use insert LA105 in toolholder LB105

Face grooving with full width of the full depth only possible between  $\rm D_{amin}$  .394" - 1.575"!

Α

GROOVE MILLING by circular interpolation

# Groove milling with System 275 from Cutting edge Ø

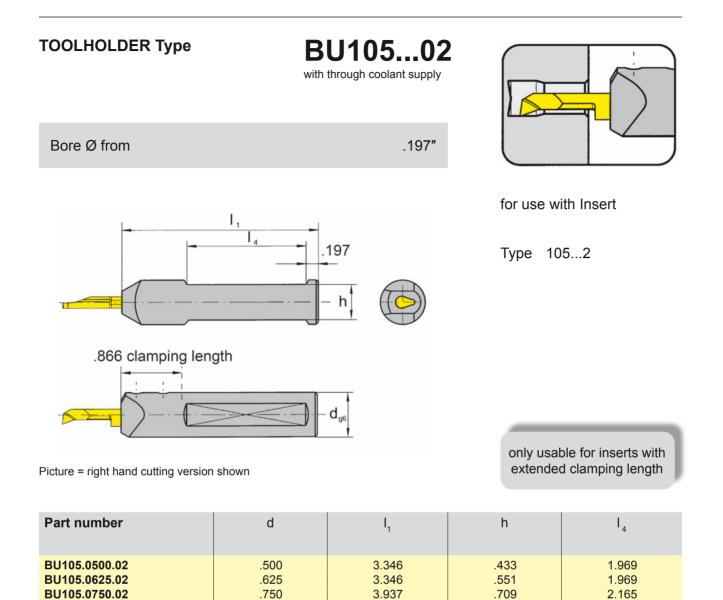
# Ø 1.221" (31.0 mm)

Example: Milling cutter M275.0078.A32.14 Cutting edge Ø 3.071″ (78.0 mm)



For further information, please see HORN catalog "CARBIDE MILLING TOOLS".





Further sizes upon request

Dimensions in inch

Toolholder	Screw	TORX PLUS® Wrench
BU105.0	6.075T15P	T15PQ

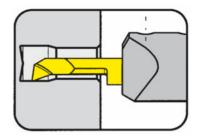


### **TOOLHOLDER Type**

B105...02 with through coolant supply

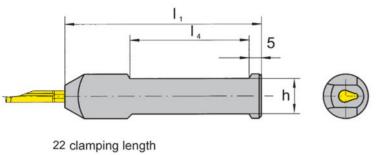
Bore Ø from





for use with Insert

Type 105...2



Picture = right hand cutting version shown

only usable for inserts with extended clamping length

Dimensions in mm

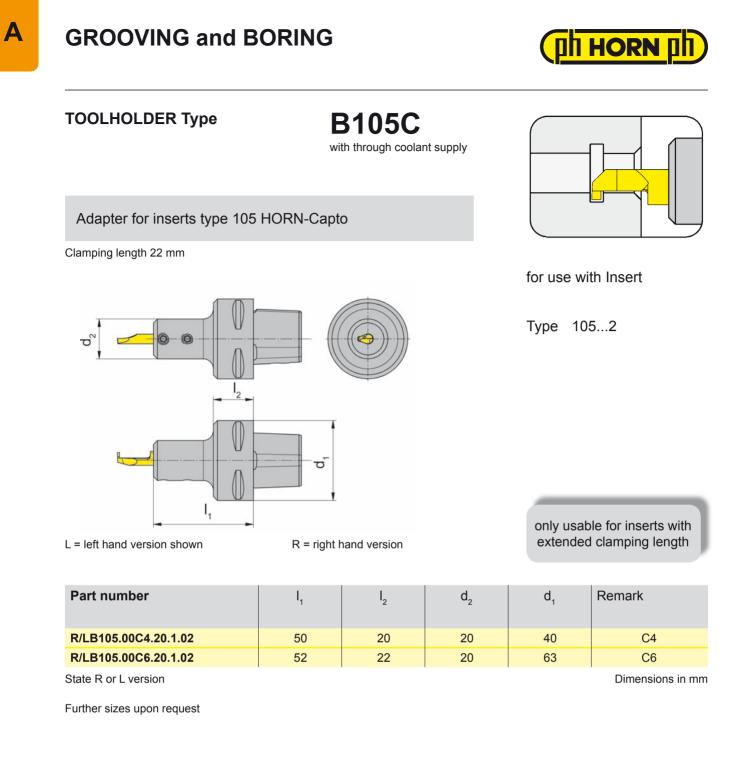
Part number	d	I <sub>1</sub>	h	I <sub>4</sub>
B105.0012.02	12	85	11	50
B105.0016.02	16	85	14	50
B105.0020.02	20	100	18	55
B105.0022.02	22	100	20	55

Further sizes upon request

### Ordering note:

Toolholders can be used with right and left hand inserts.

Toolholder	Screw	TORX PLUS® Wrench
B105.00	6.075T15P	T15PQ



Toolholder	Screw	TORX PLUS® Wrench
R/LB105.00C	6.075T15P	T15PQ

# **BORING and PROFILING**



# Α

# 105 Bore Ø from .197" for use with Toolholder $I_5$ Dmin .866 Type BU105...02 B105...02 B105C...02 (.118) I L = left hand version \_\_\_\_

### **INSERT** Type

Clamping length 22 mm

R = right hand version shown

with extended clamping length

Μ

S

Ν

Н

Part number	f	а	d	I <sub>2</sub>	1 <sub>5</sub>	t <sub>max</sub>	D <sub>min</sub>	r	α		MG12	TN35	TI25	TF45	TH35	
R/L105.1823.4.5.2 R/L105.1823.5.5.2	001	.185	.165	.984 1.181	1.969 2.165	.012	.197	.004	20°				▲/▲ ▲/▲		▲/▲ ▲/▲	
R/L105.1833.4.6.2 R/L105.1833.5.6.2	120	.224	.193	.984 1.181	1.969 2.165	.012	.236	.004	20°				▲/▲ ▲/▲		▲/▲ ▲/▲	
R/L105.1840.4.7.2 R/L105.1840.5.7.2 R/L105.1840.7.7.2	.157	.252	.213	.984 1.181 1.575	1.969 2.165 2.559	.012	.268	.004	20°				▲/▲ ▲/▲ ▲/		▲/▲ ▲/▲	
R/L105.4733.5.6.2	.130	.224	.146	1.181	2.165	.071	.236	.004	47°				▲/▲		▲/▲	
▲ on stock Δ4 we	eks									Р			•		•	

on stock  $\Delta 4$  weeks

• main recommendation

o alternative recommendation

- uncoated grades coated grades
- brazed/Cermet
- Dimensions in inch

State R or L version

Carbide grades

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