## Bore Ø

<table>
<thead>
<tr>
<th>Groove depth ≤ (inch)</th>
<th>0.098”</th>
<th>0.179”</th>
<th>0.099”</th>
<th>0.118”</th>
<th>0.091”</th>
<th>0.138”</th>
<th>0.256”</th>
<th>0.169”</th>
<th>0.315”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groove depth ≤ (mm)</td>
<td>2.5</td>
<td>4.0</td>
<td>1.0</td>
<td>3.0</td>
<td>2.3</td>
<td>3.5</td>
<td>6.5</td>
<td>4.3</td>
<td>8.0</td>
</tr>
<tr>
<td>Width of groove inch</td>
<td>0.020”-0.079”</td>
<td>0.039”-0.250”</td>
<td>0.029”-0.079”</td>
<td>0.039”-0.118”</td>
<td>0.029”-0.125”</td>
<td>0.039”-0.118”</td>
<td>0.029”-0.125”</td>
<td>0.029”-0.157”</td>
<td>0.071”-0.118”</td>
</tr>
<tr>
<td>Width of groove mm</td>
<td>0.5 - 2.0</td>
<td>1.0 - 6.35</td>
<td>0.74 - 2.0</td>
<td>1.0 - 3.0</td>
<td>0.74 - 3.18</td>
<td>1.0 - 3.0</td>
<td>0.74 - 3.18</td>
<td>0.74 - 4.0</td>
<td>1.8 - 3.0</td>
</tr>
</tbody>
</table>

## Application

| Grooving | • | • | • | • | • | • | • | • | • |
| Boring   | • | • | • | • | • | • | • | • | • |
| Threading| • | • | • | • | • | • | • | • | • |
| Chamfering| • | • | • | • | • | • | • | • | • |
| Face Grooving| • | • | • | • | • | • | • | • | • |
| Hard turning| • | • | • | • | • | • | • | • | • |

## Special tools upon request
SUMMARY

MINI CARBIDE GROOVING TOOLS

Toolholder  
BU108 / B108  
Page C2-C5  
Page C6-C7

Inserts  
U108 / 108 / S108  
≥ Ø .315” (8.0 mm)  
Page C8-C9  
Page C10-C14  
Page C15  
Page C16-C17

Page C18-C20  
Page C21  
Page C23  
Page C24

Page C25  
Page C26-C27  
Page C28-C29

Technical Instructions  Page L1 - L9
GROOVING and BORING

TOOLHOLDER Type

BU108
with through coolant supply

Bore Ø from 0.315"
Depth of groove up to 0.039"
Width of groove up to 0.079"

Material of shank: Carbide - Giving a good vibration resistance

Picture = right hand cutting version shown

Part number d l₁ l₂ h l₄ d₁ Remark
BU108.ST05.00 0.500 2.756 0.492 0.460 1.570 0.236 * Steel Toolholder
BU108.0500.01 0.500 3.150 0.827
BU108.0500.02 0.500 3.543 1.181 0.460 1.770 0.236
BU108.0500.03 0.500 3.937 1.654

Further sizes upon request w, a, tₘₐₓ and f see inserts

Dimensions in inch

Ordering note:
Toolholders can be used in right and left hand inserts.
Toolholders with damaged seating can be repaired by HORN.

* Steel toolholder is not repairable.

Spare parts

<table>
<thead>
<tr>
<th>Toolholder</th>
<th>Screw</th>
<th>TORX PLUS® Wrench</th>
</tr>
</thead>
<tbody>
<tr>
<td>BU108....</td>
<td>2.6ST8EP</td>
<td>T8PL</td>
</tr>
</tbody>
</table>

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

TOOLHOLDER Type B108
with through coolant supply

<table>
<thead>
<tr>
<th>Part number</th>
<th>d</th>
<th>l₁</th>
<th>l₂</th>
<th>h</th>
<th>l₄</th>
<th>d₁</th>
</tr>
</thead>
<tbody>
<tr>
<td>B108.0008.00</td>
<td>8</td>
<td>60</td>
<td>12.5</td>
<td>7</td>
<td>35</td>
<td>6</td>
</tr>
<tr>
<td>B108.0008.01</td>
<td>70</td>
<td>70</td>
<td>21.0</td>
<td>40</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>B108.0012.00</td>
<td>12</td>
<td>70</td>
<td>12.5</td>
<td>40</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>B108.0012.01</td>
<td>80</td>
<td>80</td>
<td>21.0</td>
<td>45</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>B108.0012.02</td>
<td>90</td>
<td>90</td>
<td>30.0</td>
<td>45</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>B108.0012.03</td>
<td>100</td>
<td>100</td>
<td>42.0</td>
<td>45</td>
<td>45</td>
<td></td>
</tr>
</tbody>
</table>

Further sizes upon request w, a, f see inserts

Dimensions in mm

Ordering note:
Toolholders can be used in right and left hand inserts.
Toolholders with damaged seating can be repaired by HORN.

Spare parts

<table>
<thead>
<tr>
<th>Toolholder</th>
<th>Screw</th>
<th>TORX PLUS® Wrench</th>
</tr>
</thead>
<tbody>
<tr>
<td>B108.00...</td>
<td>2.6ST8EP</td>
<td>T8PL</td>
</tr>
</tbody>
</table>

In the UNITED STATES call us toll free1 - 888 - 818 HORN
GROOVING and BORING

TOOLHOLDER Type

B108
with through coolant supply

| Bore Ø from | .315" (8.0 mm) |
| Depth of groove up to | .039" (1.0 mm) |
| Width of groove up to | .079" (2.0 mm) |

Material of shank: Carbide - Giving a good vibration resistance

Type 108
S108
U108

Picture = right hand cutting version shown

Part number | d | l₁
---|---|---
B108.0006.01A | 6 | 65

Further sizes upon request: w, a, t_max and f see inserts
Dimensions in mm

Ordering note:
Toolholders can be used in right and left hand inserts.
Toolholders with damaged seating can be repaired by HORN.

Spare parts

<table>
<thead>
<tr>
<th>Toolholder</th>
<th>Screw</th>
<th>TORX PLUS® Wrench</th>
</tr>
</thead>
<tbody>
<tr>
<td>B108.0006.01A</td>
<td>2.6.5T8EP</td>
<td>T8PL</td>
</tr>
</tbody>
</table>
GROOVING and BORING

TOOLHOLDER Type

B108
with through coolant supply

Bore Ø from .315" (8.0 mm)
Depth of groove up to .039" (1.0 mm)
Width of groove up to .079" (2.0 mm)

Material of shank: Carbide - Giving a good vibration resistance

for use with Insert

Type 108
S108
U108

Picture = right hand cutting version shown

Part number d l₁ l₂ d₁

| B108.0012.00S | 12 | 48.7 | 12.5 | 6 |
| B108.0012.01S | 12 | 56.7 | 21.0 |
| B108.0012.02S | 12 | 65.7 | 30.0 |
| B108.0012.03S | 12 | 77.7 | 42.0 |

Further sizes upon request w, a, t_max and f see inserts
Dimensions in mm

Ordering note:
Toolholders can be used in right and left hand inserts.
Toolholders with damaged seating can be repaired by HORN.

Example of assembly System „W&F“

Spare parts

<table>
<thead>
<tr>
<th>Toolholder</th>
<th>Screw</th>
<th>TORX PLUS® Wrench</th>
</tr>
</thead>
<tbody>
<tr>
<td>B108.0012.0...</td>
<td>2.6.5T8EP</td>
<td>T8PL</td>
</tr>
</tbody>
</table>

In the UNITED STATES call us toll free 1 - 888 - 818 HORN
**GROOVING and BORING**

**TOOLHOLDER Type**

**B108KM**

with through coolant supply

Bore Ø from .315” (8.0 mm)

Further sizes upon request w, a, t<sub>max</sub> and f see inserts

Dimensions in mm

<table>
<thead>
<tr>
<th>Part number</th>
<th>d</th>
<th>l&lt;sub&gt;1&lt;/sub&gt;</th>
<th>l&lt;sub&gt;2&lt;/sub&gt;</th>
<th>d&lt;sub&gt;1&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>B108.KM16.01</td>
<td>20</td>
<td>21</td>
<td>30</td>
<td>6</td>
</tr>
<tr>
<td>B108.KM16.02</td>
<td>26</td>
<td>35</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Further sizes upon request w, a, t<sub>max</sub> and f see inserts

For use with Insert

Type 108

S108

U108

System Kennametal KM16 Micro

**Spare parts**

<table>
<thead>
<tr>
<th>Toolholder</th>
<th>Screw</th>
<th>TORX PLUS® Wrench</th>
</tr>
</thead>
<tbody>
<tr>
<td>B108.KM16.0...</td>
<td>2.6.5T8EP</td>
<td>T8PL</td>
</tr>
</tbody>
</table>

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

**B108KM**

with through coolant supply

<table>
<thead>
<tr>
<th>Part number</th>
<th>d</th>
<th>l₁</th>
<th>l₂</th>
<th>d₁</th>
</tr>
</thead>
<tbody>
<tr>
<td>B108.KM16.90.01</td>
<td>20</td>
<td>21</td>
<td>30</td>
<td>6</td>
</tr>
<tr>
<td>B108.KM16.90.02</td>
<td>26</td>
<td></td>
<td>35</td>
<td></td>
</tr>
</tbody>
</table>

Further sizes upon request w, a, \( t_{\text{max}} \) and f see inserts

Dimensions in mm

### Spare parts

<table>
<thead>
<tr>
<th>Toolholder</th>
<th>Screw</th>
<th>TORX PLUS® Wrench</th>
</tr>
</thead>
<tbody>
<tr>
<td>B108.KM16.90.0...</td>
<td>2.6ST8EP</td>
<td>T8PL</td>
</tr>
</tbody>
</table>
**GROOVING (internal) ≥ Ø .315”**

**INSERT Type**

**U108**

| Bore Ø from | .315” |
| Depth of groove up to | .039” |
| Width of groove | .031 - .039” |

**R = right hand version**  
**L = left hand version**

**Part number**

<table>
<thead>
<tr>
<th>Part number</th>
<th>w</th>
<th>s₁</th>
<th>s</th>
<th>f</th>
<th>a</th>
<th>d</th>
<th>t max</th>
<th>D min</th>
<th>MG12</th>
<th>TN35</th>
<th>Ti23</th>
<th>TF45</th>
<th>TH35</th>
</tr>
</thead>
<tbody>
<tr>
<td>R/LU108.0031.00</td>
<td>.031</td>
<td>.039</td>
<td>.126</td>
<td>.142</td>
<td>.189</td>
<td>.307</td>
<td>.236</td>
<td>.039</td>
<td>.315</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R/LU108.0039.00</td>
<td>.039</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

▲ on stock  
Δ 4 weeks  
● main recommendation  
ο alternative recommendation  

- uncoated grades  
- coated grades  
- brazed/Cermet

Dimensions in inch

State R or L version

**for use with Toolholder**

**Type**

- B108  
- B108KM  
- BU108

not face cutting, limited depth of cut

In the UNITED STATES call us toll free  
1 - 888 - 818 HORN
GROOVING (internal) ≥ Ø .315”

INSERT Type 108

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

<table>
<thead>
<tr>
<th>Part number</th>
<th>Nw</th>
<th>w</th>
<th>s₁</th>
<th>s</th>
<th>f</th>
<th>a</th>
<th>d</th>
<th>t_max</th>
<th>D_min</th>
</tr>
</thead>
<tbody>
<tr>
<td>R/L108.0070.00</td>
<td>.028</td>
<td>.029</td>
<td>.126</td>
<td>.189</td>
<td>.307</td>
<td>.236</td>
<td>.039</td>
<td>.315</td>
<td></td>
</tr>
<tr>
<td>R/L108.0080.00</td>
<td>.031</td>
<td>.033</td>
<td>.142</td>
<td>.192</td>
<td>.317</td>
<td>.246</td>
<td>.046</td>
<td>.315</td>
<td></td>
</tr>
<tr>
<td>R/L108.0090.00</td>
<td>.035</td>
<td>.037</td>
<td>.142</td>
<td>.189</td>
<td>.307</td>
<td>.236</td>
<td>.039</td>
<td>.315</td>
<td></td>
</tr>
</tbody>
</table>

Type B108 B108KM BU108

Dimensions in inch

State R or L version

for use with Toolholder

R = right hand version shown L = left hand version

not face cutting, limited depth of cut

Carbide grades

○ main recommendation
● alternative recommendation
▲ on stock △ 4 weeks

Dimensions in inch

State R or L version

In the UNITED STATES call us toll free 1 - 888 - 818 HORN
GROOVING (external) ≥ Ø .315”

INSERT Type

U108

Bore Ø from .315”
Depth of groove up to .039”
Width of groove .031 - .078”

for use with Toolholder

Type B108
B108KM
BU108

R = right hand version shown  L = left hand version

<table>
<thead>
<tr>
<th>Part number</th>
<th>w</th>
<th>r</th>
<th>s</th>
<th>f</th>
<th>a</th>
<th>d</th>
<th>t_max</th>
<th>D_min</th>
</tr>
</thead>
<tbody>
<tr>
<td>R/LU108.0031.08</td>
<td>.031</td>
<td>.008</td>
<td>.126</td>
<td>.189</td>
<td>.307</td>
<td>.236</td>
<td>.039</td>
<td>.315</td>
</tr>
<tr>
<td>R/LU108.0046.08</td>
<td>.046</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R/LU108.0062.08</td>
<td>.062</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R/LU108.0078.08</td>
<td>.078</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

▲ on stock  Δ 4 weeks
● main recommendation
○ alternative recommendation

uncoated grades
coated grades
brazed/Cermet

Dimensions in inch
State R or L version

IN the UNITED STATES call us toll free
1 - 888 - 818 HORN
NC-PROFILING (internal) ≥ Ø .315”

INSERT Type 108

Bore Ø from .315”
Depth of groove up to .039”
Width of groove .059”

R = right hand version shown  
L = left hand version

Type B108  
B108KM  
BU108

for use with Toolholder

Part number | w | r | s | f | a | d | t max | D min | MG12 | TN35 | Ti25 | TF45 | TH35
---|---|---|---|---|---|---|---|---|---|---|---|---|---
R/L108.0150.02 | .059 | .008 | .126 | .189 | .307 | .236 | .039 | .315 | ▲ | ▲ | ▲ | ▲ | ▲

▲ on stock  
△ 4 weeks

* main recommendation  
* alternative recommendation

uncoated grades  
coated grades  
brazed/Cermet

Dimensions in inch

State R or L version

In the UNITED STATES call us toll free  
1 - 888 - 818 HORN
GROOVING (internal) ≥ Ø 0.315”

**INSERT Type**

**U108**

<table>
<thead>
<tr>
<th>Part number</th>
<th>w</th>
<th>s</th>
<th>f</th>
<th>a</th>
<th>d</th>
<th>t_max</th>
<th>D_min</th>
</tr>
</thead>
<tbody>
<tr>
<td>R/LU108.0046.00</td>
<td>.046</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R/LU108.0056.00</td>
<td>.056</td>
<td>.126</td>
<td>.189</td>
<td>.307</td>
<td>.236</td>
<td>.039</td>
<td>.315</td>
</tr>
<tr>
<td>R/LU108.0062.00</td>
<td>.062</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R/LU108.0078.00</td>
<td>.078</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

▲ on stock  △ 4 weeks
● main recommendation
ο alternative recommendation

<table>
<thead>
<tr>
<th>Carbide grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>uncoated grades</td>
</tr>
<tr>
<td>coated grades</td>
</tr>
<tr>
<td>brazed/Cermet</td>
</tr>
</tbody>
</table>

Dimensions in inch

State R or L version

For use with Toolholder

Type B108
B108KM
BU108

R = right hand version shown  L = left hand version
GROOVING (internal) ≥ Ø .315"

**INSERT Type 108**

Bore Ø from .315”
Depth of groove up to .039”
Width of circlip Nw .043 - .063"

Widths for circlip grooves DIN 471/472

<table>
<thead>
<tr>
<th>Part number</th>
<th>Nw</th>
<th>w</th>
<th>s</th>
<th>f</th>
<th>a</th>
<th>d</th>
<th>t_max</th>
<th>D_max</th>
</tr>
</thead>
<tbody>
<tr>
<td>R/L108.0110.00</td>
<td>.043</td>
<td>.047</td>
<td>.039</td>
<td>.043</td>
<td>.051</td>
<td>.055</td>
<td>.126</td>
<td>.189</td>
</tr>
<tr>
<td>R/L108.0130.00</td>
<td>.051</td>
<td>.055</td>
<td>.051</td>
<td>.051</td>
<td>.051</td>
<td>.051</td>
<td>.126</td>
<td>.189</td>
</tr>
<tr>
<td>R/L108.0160.00</td>
<td>.063</td>
<td>.067</td>
<td>.063</td>
<td>.063</td>
<td>.063</td>
<td>.063</td>
<td>.126</td>
<td>.189</td>
</tr>
</tbody>
</table>

▲ on stock  Δ 4 weeks
● main recommendation
◦ alternative recommendation

- uncoated grades
- coated grades
- brazed/Cermet

Dimensions in inch
State R or L version

for use with Toolholder

Type B108
B108KM
BU108

In the UNITED STATES call us toll free 1 - 888 - 818 HORN
**GROOVING (internal) ≥ Ø .315"**

**INSERT Type 108**

<table>
<thead>
<tr>
<th>Bore Ø from</th>
<th>.315*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth of groove up to</td>
<td>.039*</td>
</tr>
<tr>
<td>Width of groove</td>
<td>.059 - .079</td>
</tr>
</tbody>
</table>

**for use with Toolholder**

- Type: B108, B108KM, BU108

**Part number**

<table>
<thead>
<tr>
<th>Part number</th>
<th>w</th>
<th>s</th>
<th>f</th>
<th>a</th>
<th>d</th>
<th>t(_{max})</th>
<th>D(_{min})</th>
<th>MG12</th>
<th>TN35</th>
<th>Ti25</th>
<th>TF45</th>
<th>TH35</th>
</tr>
</thead>
<tbody>
<tr>
<td>R/L108.0150.00</td>
<td>.059</td>
<td></td>
<td>.126</td>
<td>.189</td>
<td>.307</td>
<td>.236</td>
<td>.039</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R/L108.0200.00</td>
<td>.079</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

▲ on stock  △ 4 weeks
● main recommendation
○ alternative recommendation

- uncoated grades
- coated grades
- brazed/Cermet

Dimensions in inch

State R or L version

**Carbide grades**

In the UNITED STATES call us toll free 1 - 888 - 818 HORN
GROOVING (internal) ≥ Ø .315”

INSERT Type S108

Bore Ø from .315”
Depth of groove up to .039”
Width of groove .039 - .079

for use with Toolholder

Type B108
B108KM
BU108

Geometry .D

R = right hand version shown
L = left hand version

Part number | w | r  | s  | f  | a  | d  | t_max | D_min | MG12 | TN35 | Ti25 | TF45 | TH35 |
--- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
R/LS108.0100.D1 | .039 | .004 | .039 | .315 |
R/LS108.0150.D1 | .059 | .004 | .126 | .189 | .307 | .236 | .039 | .315 |
R/LS108.0200.D2 | .079 | .008 | .039 | .315 |

▲ on stock ▲ 4 weeks
● main recommendation
○ alternative recommendation

uncoated grades
coated grades
brazed/Cermet

Dimensions in inch

State R or L version

In the UNITED STATES call us toll free
1 - 888 - 818 HORN
GROOVING (internal) ≥ Ø .315”

INSERT Type

U108

Bore Ø from Depth of groove up to Width of groove

0.315* 0.039* 0.031 -.078*

for use with Toolholder

Type

B108
B108KM
BU108

R = right hand version shown  L = left hand version

Part number

<table>
<thead>
<tr>
<th>Part number</th>
<th>w</th>
<th>r</th>
<th>s</th>
<th>f</th>
<th>a</th>
<th>d</th>
<th>t_max</th>
<th>D_min</th>
</tr>
</thead>
<tbody>
<tr>
<td>R/LU108.0015.31</td>
<td>.031</td>
<td>.015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R/LU108.0023.46</td>
<td>.046</td>
<td>.023</td>
<td>.126</td>
<td>.189</td>
<td>.307</td>
<td>.236</td>
<td>.039</td>
<td>.315</td>
</tr>
<tr>
<td>R/LU108.0031.62</td>
<td>.062</td>
<td>.031</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R/LU108.0039.78</td>
<td>.078</td>
<td>.039</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

▲ on stock  Δ 4 weeks
● main recommendation
ο alternative recommendation

Carbide grades

Dimensions in inch

State R or L version

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

**108**

<table>
<thead>
<tr>
<th>Part number</th>
<th>w</th>
<th>r</th>
<th>s</th>
<th>f</th>
<th>a</th>
<th>d</th>
<th>t_max</th>
<th>D_min</th>
<th>MG12</th>
<th>TN35</th>
<th>Ti25</th>
<th>TF45</th>
<th>TH35</th>
</tr>
</thead>
<tbody>
<tr>
<td>R/L108.0004.08</td>
<td>.031</td>
<td>.016</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A/A</td>
<td>A/A</td>
<td>A/A</td>
<td>A/A</td>
<td>A/A</td>
</tr>
<tr>
<td>R/L108.0006.12</td>
<td>.047</td>
<td>.024</td>
<td>.126</td>
<td>.189</td>
<td>.307</td>
<td>.236</td>
<td>.039</td>
<td>.315</td>
<td>A/A</td>
<td>A/A</td>
<td>A/A</td>
<td>A/A</td>
<td>A/A</td>
</tr>
<tr>
<td>R/L108.0009.18</td>
<td>.071</td>
<td>.035</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A/A</td>
<td>A/A</td>
<td>A/A</td>
<td>A/A</td>
<td>A/A</td>
</tr>
</tbody>
</table>

▲ 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**

In the UNITED STATES call us toll free
1 - 888 - 818 HORN
**BORING and PROFILING \( \geq \varnothing \) .307”**

**INSERT Type 108**

<table>
<thead>
<tr>
<th>R/L108.1846.02</th>
<th>r</th>
<th>s</th>
<th>f</th>
<th>a</th>
<th>d</th>
<th>( D_{\text{min}} )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.008</td>
<td>.134</td>
<td>.183</td>
<td>.301</td>
<td>.236</td>
<td>.307</td>
</tr>
</tbody>
</table>

*\( \Delta \) on stock  \( \triangle \) 4 weeks*

- main recommendation
- o alternative recommendation
- uncoated grades
- coated grades
- brazed/Cermet

**Dimensions in inch**

State R or L version

The modified geometry allows boring of bores \( \geq \varnothing \).307” and profiling of reliefs as per DIN 509 form E and F.

**Carbide grades**

**Type**

- B108
- B108KM
- BU108

**In the UNITED STATES call us toll free**

1 - 888 - 818 HORN
The modified geometry allows boring of bores ≥ Ø .307” and profiling of reliefs as per DIN 509 form E and F.
BORING and PROFILING ≥ Ø .307”

INSERT Type 108

Bore Ø from .307”
Depth of undercut up to .047"

for use with Toolholder

Type B108
B108KM
BU108

R = right hand version shown
L = left hand version

<table>
<thead>
<tr>
<th>Part number</th>
<th>r</th>
<th>s</th>
<th>f</th>
<th>a</th>
<th>d</th>
<th>t_max</th>
<th>D_min</th>
</tr>
</thead>
<tbody>
<tr>
<td>R/L108.4748.01</td>
<td>.004</td>
<td>.008</td>
<td>.126</td>
<td>.183</td>
<td>.301</td>
<td>.236</td>
<td>.047</td>
</tr>
<tr>
<td>R/L108.4748.02</td>
<td>.008</td>
<td>.008</td>
<td>.126</td>
<td>.183</td>
<td>.301</td>
<td>.236</td>
<td>.047</td>
</tr>
</tbody>
</table>

▲ on stock  △ 4 weeks
● main recommendation
○ alternative recommendation

uncoated grades
coated grades
brazed/Cermet

Dimensions in inch

State R or L version

The modified geometry allows boring of bores ≥ Ø .307” and profiling of reliefs as per DIN 509 form E.
### HARD BORING

**INSERT Type 108**

Bore Ø from 0.307"  

for use with Toolholder

Type B108  
B108KM  
BU108

R = right hand version shown

CBN tipped

<table>
<thead>
<tr>
<th>Part number</th>
<th>r</th>
<th>s</th>
<th>f</th>
<th>a</th>
<th>d</th>
<th>Dmin</th>
</tr>
</thead>
<tbody>
<tr>
<td>R108.0547.03.B</td>
<td>.012</td>
<td>.138</td>
<td>.183</td>
<td>.301</td>
<td>.236</td>
<td>.307</td>
</tr>
</tbody>
</table>

▲ on stock  Δ 4 weeks  
● main recommendation  
○ alternative recommendation

- uncoated grades  
- coated grades  
- brazed/Cermet

Dimensions in inch

Carbide grades
BROACHING on CNC lathes

BROACHING TOOLS TYPE SB105/SB110 and SH117

KEYWAYS ACCORDING DIN138 and DIN6885

For further information please see HORN catalog "CARBIDE GROOVING TOOLS".
**BACKBORING (internal)**

**INSERT Type**

**108**

<table>
<thead>
<tr>
<th>Part number</th>
<th>r</th>
<th>s₁</th>
<th>s</th>
<th>f</th>
<th>a</th>
<th>d</th>
<th>tₘₐₓ</th>
<th>Dₘᵢₙ</th>
<th>MG12</th>
<th>TN35</th>
<th>Ti25</th>
<th>TF45</th>
<th>TH35</th>
</tr>
</thead>
<tbody>
<tr>
<td>R/L108.3046.02</td>
<td>.008</td>
<td>.031</td>
<td>.142</td>
<td>.183</td>
<td>.301</td>
<td>.236</td>
<td>.051</td>
<td>.307</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- ▲ on stock
- ▲▲ 4 weeks
- ● main recommendation
- ○ alternative recommendation

- uncoated grades
- coated grades
- brazed/Cermet

Dimensions in inch

State R or L version

for use with Toolholder

**Type**

- B108
- B108KM
- BU108

R = right hand version shown  
L = left hand version

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

C23
CHAMFERING and BACKBORING (internal)

INSERT Type

108

for use with Toolholder

R = right hand version shown  L = left hand version

<table>
<thead>
<tr>
<th>Part number</th>
<th>E</th>
<th>r</th>
<th>s</th>
<th>f</th>
<th>a</th>
<th>d</th>
<th>t_max</th>
<th>D_min</th>
<th>MG12</th>
<th>TN35</th>
<th>Ti25</th>
<th>TA45</th>
<th>TH35</th>
</tr>
</thead>
<tbody>
<tr>
<td>R/L108.4545.02</td>
<td>.071</td>
<td>.008</td>
<td>.142</td>
<td>.183</td>
<td>.301</td>
<td>.236</td>
<td>.055</td>
<td>.307</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

^ on stock  △ 4 weeks
• main recommendation
ο alternative recommendation

- uncoated grades
- coated grades
- brazed/Cermet

Dimensions in inch

State R or L version

Bore Ø from .307"
PREGROOVING and CHAMFERING (int.)

INSERT Type 108

Bore Ø from .315" for use with Toolholder

R = right hand version shown   L = left hand version

<table>
<thead>
<tr>
<th>Part number</th>
<th>w</th>
<th>s</th>
<th>f</th>
<th>a</th>
<th>d</th>
<th>t₁</th>
<th>tₘₙₙ</th>
<th>Dₘₙₙ</th>
<th>MG12</th>
<th>TN35</th>
<th>Ti25</th>
<th>TF45</th>
<th>TH35</th>
</tr>
</thead>
<tbody>
<tr>
<td>R/L108.0810.45</td>
<td>.039</td>
<td>.126</td>
<td>.189</td>
<td>.307</td>
<td>.236</td>
<td>.008</td>
<td>.059</td>
<td>.315</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- ▲ on stock  Δ 4 weeks
- ● main recommendation
- ○ alternative recommendation
- ▼ uncoated grades
- ▼ coated grades
- ▼ brazed/Cermet

Dimensions in inch

State R or L version

Carbide grades

In the UNITED STATES call us toll free 1 - 888 - 818 HORN
THREADING (internal) Partial profile

**INSERT Type**

**108**

<table>
<thead>
<tr>
<th>Part number</th>
<th>P</th>
<th>P&lt;sub&gt;max&lt;/sub&gt;</th>
<th>E</th>
<th>s</th>
<th>f</th>
<th>a</th>
<th>d</th>
<th>D&lt;sub&gt;min&lt;/sub&gt;</th>
<th>MG12</th>
<th>TN35</th>
<th>Ti25</th>
<th>TF45</th>
<th>TH35</th>
</tr>
</thead>
<tbody>
<tr>
<td>R/L108.0815.01</td>
<td>1.5</td>
<td>1.75</td>
<td>2.6</td>
<td>3.6</td>
<td>4.8</td>
<td>7.8</td>
<td>6</td>
<td>8</td>
<td>▲</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- ▲ on stock
- ▲ 4 weeks
- ● main recommendation
- ○ alternative recommendation

- Carbons
- ▲ uncoated grades
- ▲ coated grades
- ▲ brazed/Cermet

Dimensions in mm

State R or L version

**Type**

- B108
- B108KM
- BU108

Metric ISO standard thread

for use with Toolholder

**Bore Ø from**

- 0.315" (8.0 mm)

**Pitch**

- 1.50 - 1.75

**Carbide grades**

C26
**THREADING (internal) Partial profile**

**INSERT Type**

<table>
<thead>
<tr>
<th>Part number</th>
<th>P</th>
<th>P&lt;sub&gt;max&lt;/sub&gt;</th>
<th>E</th>
<th>s</th>
<th>f</th>
<th>a</th>
<th>d</th>
<th>D&lt;sub&gt;min&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>R/L108.0205.01</td>
<td>0.5</td>
<td>0.75</td>
<td>2.8</td>
<td>3.6</td>
<td>4.8</td>
<td>7.8</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>R/L108.0510.01</td>
<td>1.0</td>
<td>1.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- ▲ on stock  
- ▄ on alternative recommendation  
- Red coatings  
- Yellow coated grades  
- Blue uncoated grades  
- White brazed/Cermet  
- Carbide grades

Dimensions in mm  

State R or L version

---

**Bore Ø from**  
0.315" (8.0 mm)

**Pitch**  
0.50 - 1.25 mm

---

**Type**  
B108  
B108KM  
BU108

---

**Metric ISO fine thread**

---

**for use with Toolholder**

---

**In the UNITED STATES call us toll free**  
1 - 888 - 818 HORN
**INSERT Type 108**

**Threads per inch**

<table>
<thead>
<tr>
<th>Part number</th>
<th>Threads per Inch</th>
<th>E</th>
<th>s</th>
<th>f</th>
<th>a</th>
<th>d</th>
<th>D_{min}</th>
<th>MG12</th>
<th>TiN35</th>
<th>Ti25</th>
<th>Ti45</th>
<th>TH35</th>
</tr>
</thead>
<tbody>
<tr>
<td>R108.NP14.02</td>
<td>14</td>
<td>.075</td>
<td>.142</td>
<td>.189</td>
<td>.307</td>
<td>.236</td>
<td>.315</td>
<td>▲</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R108.NP18.02</td>
<td>18</td>
<td>.075</td>
<td>.142</td>
<td>.189</td>
<td>.307</td>
<td>.236</td>
<td>.315</td>
<td>▲</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R108.NP27.02</td>
<td>27</td>
<td>.075</td>
<td>.142</td>
<td>.189</td>
<td>.307</td>
<td>.236</td>
<td>.315</td>
<td>▲</td>
<td>△</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

▲ on stock  △ 4 weeks
● main recommendation
○ alternative recommendation

- uncoated grades
- coated grades
- brazed/Cermet

Dimensions in inch

**Carbide grades**

- MG12
- TiN35
- Ti25
- Ti45
- TH35

R = right hand version shown

**for use with Toolholder**

Type B108 BU108

Thread NPT
INSERT Type 108

Threads per inch 18 / 20

for use with Toolholder

Type B108 BU108

Dimensions in inch

<table>
<thead>
<tr>
<th>Part number</th>
<th>Threads per Inch</th>
<th>E</th>
<th>s</th>
<th>f</th>
<th>a</th>
<th>d</th>
<th>D_min</th>
</tr>
</thead>
<tbody>
<tr>
<td>R108.PG18.02</td>
<td>18</td>
<td>.075</td>
<td>.142</td>
<td>.189</td>
<td>.307</td>
<td>.236</td>
<td>.315</td>
</tr>
<tr>
<td>R108.PG20.02</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

▲ on stock  △ 4 weeks
● main recommendation
○ alternative recommendation

uncoated grades
coated grades
brasied/Cermet

Carbide grades