



**SCHOTT**  
Diamantwerkzeuge GmbH

# Diamond Tools

for Processing Glass and Ceramics



TÜV certified under DIN EN ISO 9001:2000

# Why We Are the Adequate Partner for You:

**Company history:** As a grandson of the well-known Dr. Otto Schott (the inventor of the heat-resistant borosilicate glass 1887 or better known as "Jenaer Glas") Klaus Schott already had a familiar relationship with the glass industry. His father, his brothers and he were working for the internationally well-known SCHOTT Glaswerke AG.

In 1975 Klaus Schott set up his own business and delivered diamond tools for the glass industry. Besides dealing with products of the application in the glass industry, Klaus Schott started manufacturing his own diamond tools in order to meet more adequately the requirements of his national customers and the glass industry.

After many years of working for the company, Burghard Lein became owner and managing director in 2000.

**Competences:** The company SCHOTT Diamantwerkzeuge GmbH provides only state-of-the-art quality products manufactured according to its customers' specific requirements for processing of glass, ceramics, stone, metal and synthetic materials as well as for the optical industry.

Besides the series production of standard tools the main competence is focussed on producing individually electroplated and sintered diamond tools for conventional and ultrasonic-based application.

The company's main focus and strength is the area of research and development of innovative technologies for developing tools and their application. Especially in the field of manufacturing and testing diamond tools, which qualify for ultrasonic application, SCHOTT Diamantwerkzeuge is one of the leading companies.

**Orientation:** The continuous increase of international customers made SCHOTT Diamantwerkzeuge GmbH set up local service centers for customer support. Prestigious selling agencies were put up in Bulgaria, Siberia, USA and Asia. Establishment of other agencies is in progress in order to be able to react to the growing requirements of the global market.

**Guarantee:** The company SCHOTT offers state-of-the-art-quality at a favorable price within the shortest delivery time possible.

***You can take us up on that!***

***Yours faithfully,***

Burghard Lein  
Managing Director





Custom-built tools:  
delivery time upon request

# Product Range



## Diamond Hollow Drills Corebits

drilling

M Ø 3 – 598 mm  
full coating and segmented  
GVD Ø 0,5 – 75 mm



## Chamfering Tools

counter-  
sinking and  
bordering

M SB 0,1 – 125 mm  
GVB SB 0,1 – 150 mm



## Combined Diamond Tools

drilling and  
countersink

M Ø 3 – 150 mm



## Milling Cutters

milling  
grinding

M Ø 10 – 22 mm  
GVB Ø 5 – 40 mm  
full coating, sintered, profiled  
according to FEPA, with/  
without integrated cooling



## Grinding Wheels

pre-cut  
mid-cut  
fine cut

M Ø 24 – 200 mm  
GVB Ø 24 – 250 mm  
full coating, sintered, profiled  
according to FEPA, with/  
without integrated cooling



## Cutting Wheels

cutting

M, GVB, GVD  
Ø 50 – 800 mm  
full coating and segmented



## Accessories

cooling  
grinding  
custom-  
made tools

various editions



## Ultrasonic Tools

drilling  
milling  
grinding

M, GVD, GVB, KSI, MN  
ultrasonic proofed

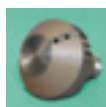
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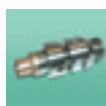
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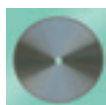
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- sintered



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The max time of delivery for these tools is 7 working days.

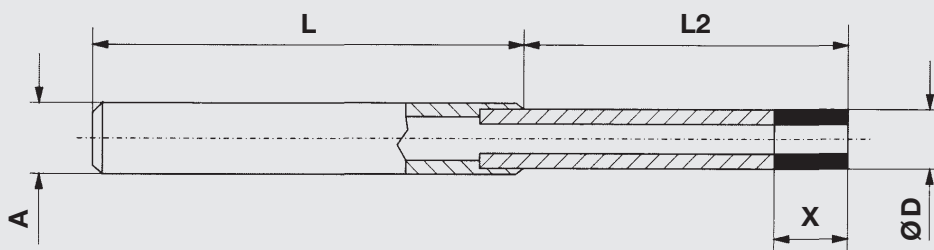


The max time of delivery for these tools is 14 working days.

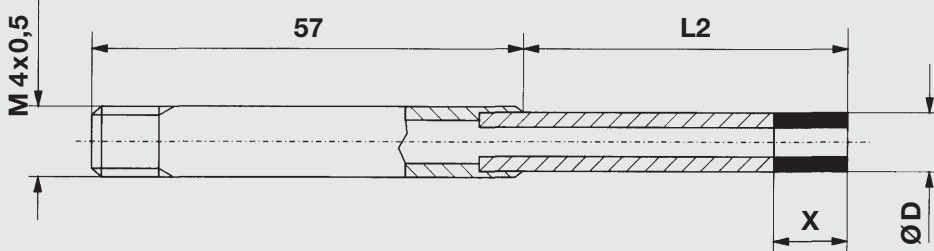


You can reach us 24/7, all year!

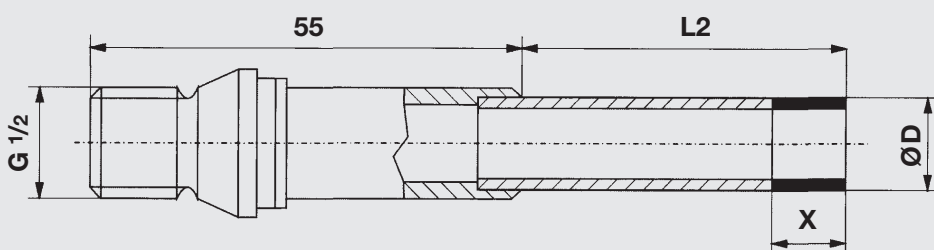
## Connectors and Tips



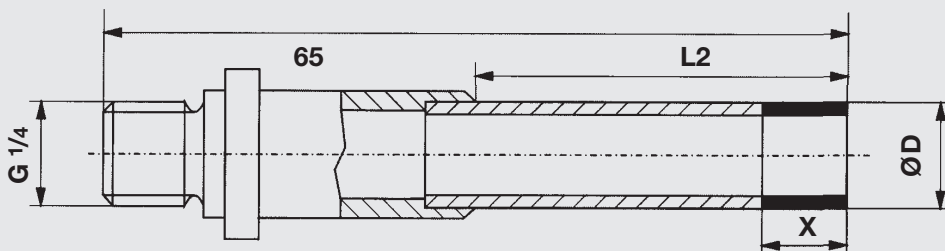
### tip no. 1



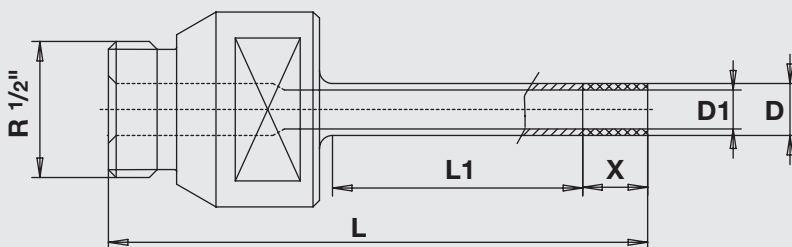
**tip no. 2**



### tip no. 3



### tip no. 4



### tip no. 5

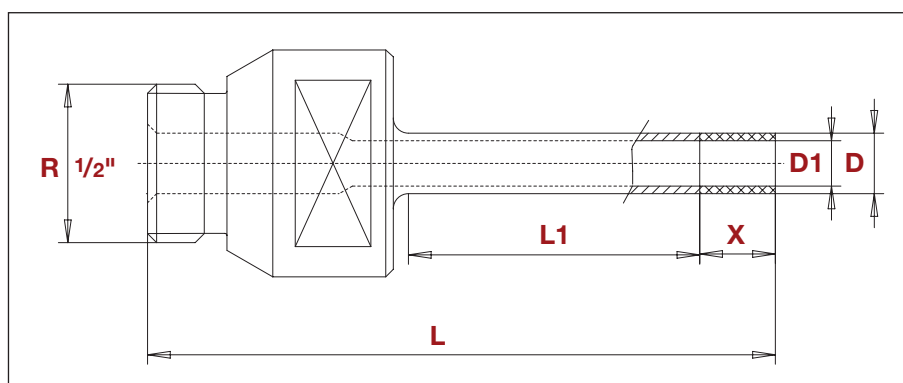
### Your individual requirements:

# Diamond Hollow Drills



**No. S0101M**

sintered

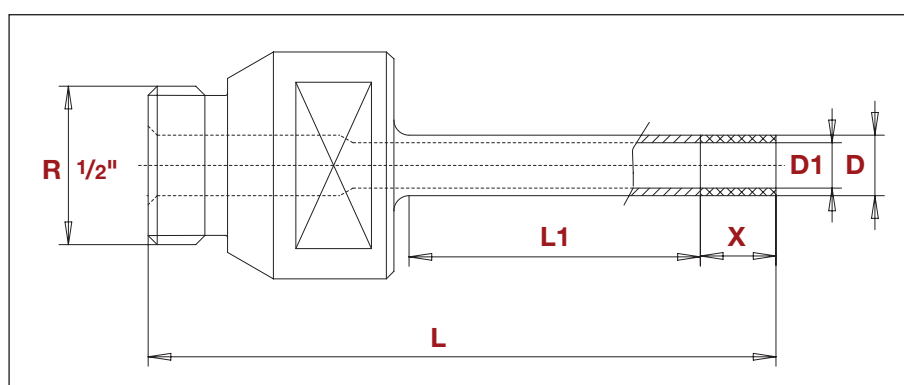
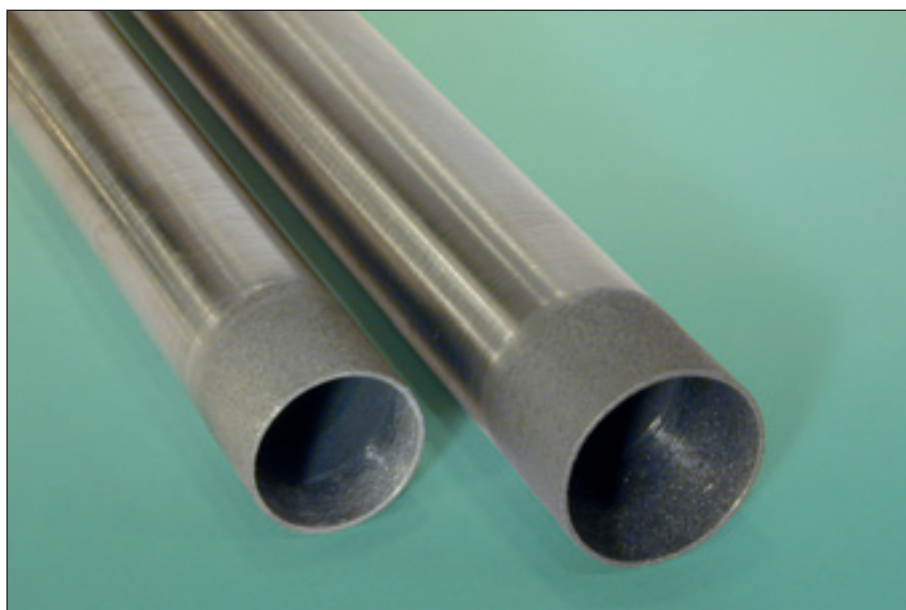


|                 |        |        | <b>A</b><br>connec-<br>tor/body | <b>L</b><br>total<br>length<br>mm | <b>L1</b><br>drilling<br>depth<br>mm | <b>X</b><br>depth of<br>diamond<br>section mm | <b>Ø D1</b><br>inside<br>mm | <b>Ø D</b><br>outside<br>mm |
|-----------------|--------|--------|---------------------------------|-----------------------------------|--------------------------------------|---|-----------------------------|-----------------------------|
| power           | type 1 | type 2 |                                 |                                   |                                      |   |                             |                             |
| section         | light  | normal |                                 |                                   |                                      |   |                             |                             |
| fit for service | normal | high   | 1-6                             | 50-250                            | 3-200                                | 10  | 1,5-350                     | 3-350                       |

# Diamond Hollow Drills

electroplated

No. S0101E 

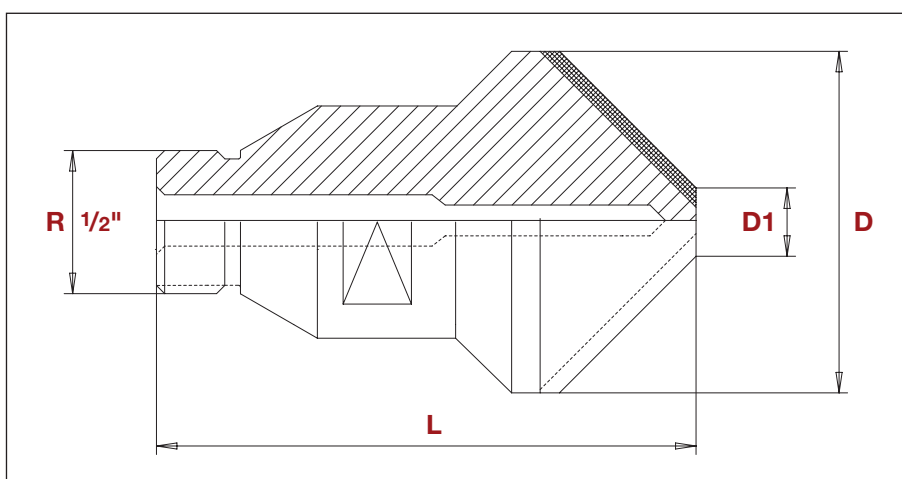


| A<br>connec-<br>tor/body | L<br>total<br>length<br>mm | L1<br>drilling<br>depth<br>mm | X<br>depth of<br>diamond<br>section mm | Ø D1<br>inside<br>mm | Ø D<br>outside<br>mm |
|--------------------------|----------------------------|-------------------------------|--|----------------------|----------------------|
| 1 – 6                    | 25 – 250                   | 3 – 200                       | 10                                     | 0,3 – 75             | 0,5 – 75             |

# Chamfering Tools

 **No. S0102M**

sintered

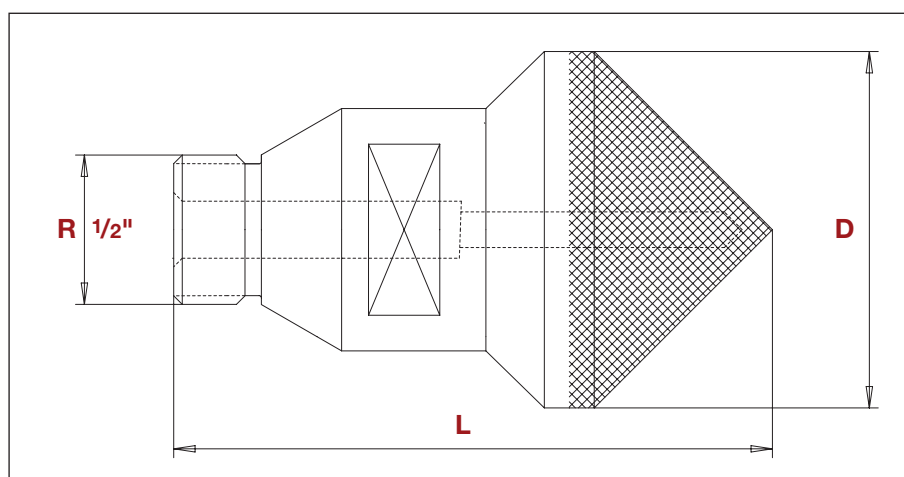
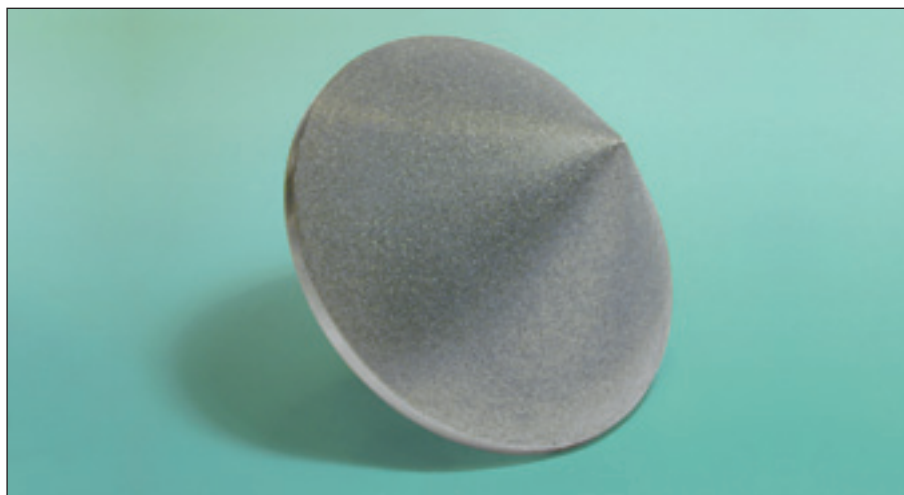


| <b>A</b><br>connector/<br>body | <b>coating</b>  | <b>L</b><br>total length<br>mm | <b>range of<br/>countersinking<br/>mm</b> | <b>angle<br/>°</b> |
|--------------------------------|---|--------------------------------|---|--------------------|
| R 1/2"<br>+<br>6               | <ul style="list-style-type: none"> <li>– closed</li> <li>– grooved</li> <li>– foraminal</li> <li>– closed + foraminal</li> <li>– segmented</li> </ul> | 25 – 125                       | 0,1 – 125                                 | 1° – 180°          |

# Chamfering Tools

electroplated

No. S0102E 



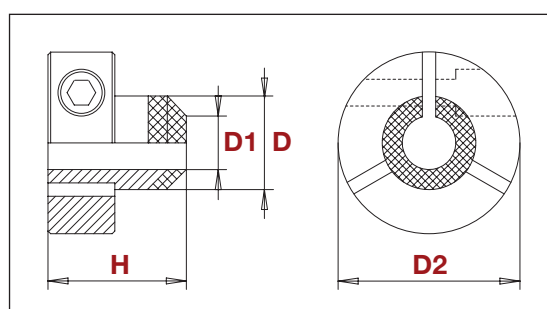
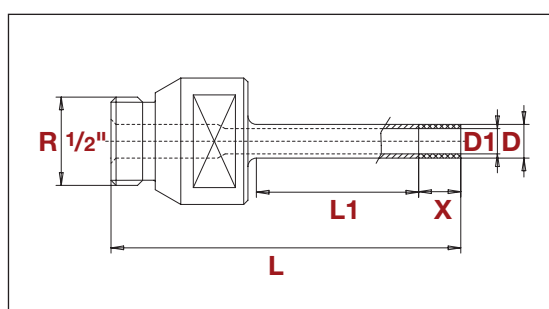
| A<br>connector/<br>body | coating   | L<br>total length<br>mm | range of<br>countersinking<br>mm | angle<br>° |
|-------------------------|---|-------------------------|----------------------------------|------------|
| R 1/2"<br>+<br>6        | <ul style="list-style-type: none"> <li>– closed</li> <li>– grooved</li> <li>– foraminal</li> <li>– closed + foraminal</li> <li>– segmented</li> </ul> | 25 – 125                | 0,1 – 150                        | 1° – 180°  |

# Combined Diamond Tools



**No. S0103M**

**Limiting Countersink** sintered



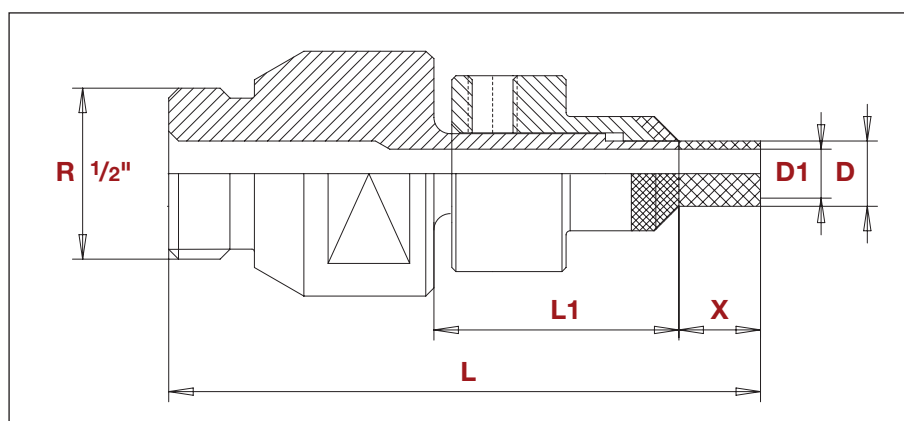
| <b>A</b><br>connector/<br>body | <b>coating</b> | <b>angle</b><br>° | <b>L</b><br>total length<br>mm | <b>L1</b><br>drilling<br>depth mm | <b>D1</b><br>small Ø<br>mm | <b>D</b><br>big Ø<br>mm |
|--------------------------------|----------------|-------------------|--------------------------------|-----------------------------------|----------------------------|-------------------------|
| R 1/2"                         | – closed       | 1° – 180°         | 55 – 125                       | 3 – 50                            | ab 3                       | bis 150                 |
| +                              | – segmented    |                   |                                |                                   |                            |                         |
| 6                              | – grooved      |                   |                                |                                   |                            |                         |

# Combined Diamond Tools

## Clamping Countersink with Inner Hexahedral Bolt

sintered

No. S0103M 



| <b>A</b><br>connector/<br>body | coating                              | angle<br>° | <b>L</b><br>total<br>length mm | <b>L1</b><br>drilling<br>depth mm | <b>D1</b><br>small Ø<br>mm | <b>D</b><br>big Ø<br>mm |
|--------------------------------|--------------------------------------|------------|--------------------------------|-----------------------------------|----------------------------|-------------------------|
| R 1/2"<br>+<br>6               | – closed<br>– segmented<br>– grooved | 1° – 180°  | 55 – 125                       | 3 – 50                            | ab 3                       | bis 150                 |

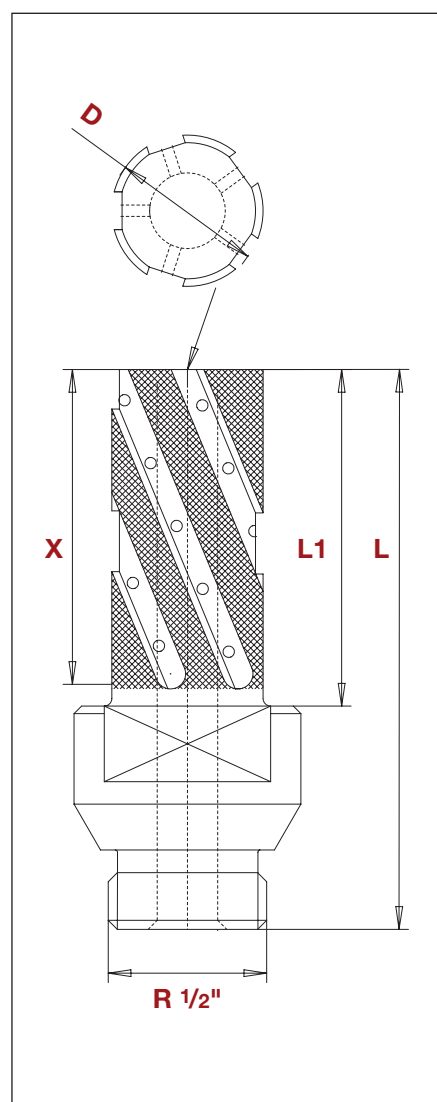
# Milling Cutters



**No. S0104M**

**for Edge Processing – Preliminary Grinding**

finger milling cutters · sintered



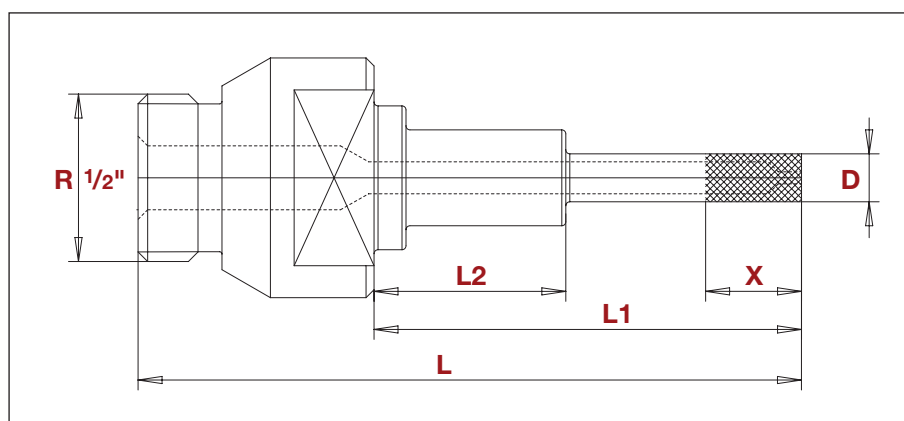
| <b>A</b><br>connector/body | segments | Ø mm | breadth mm |
|----------------------------|----------|------|------------|
| R 1/2"                     | 3        | 10   | 28         |
| + 6                        | 4        | 12   | 28         |
|                            | 4        | 16   | 41         |
|                            | 5        | 20   | 41         |
|                            | 4        | 22   | 34         |

# Milling Cutters

## for Edge Processing – Preliminary Grinding

finger milling cutters · electroplated

No. S0104E 



| <b>A</b><br>connector/<br>body | segments | Ø<br>mm | breadth<br>mm | type   | profile               |
|--------------------------------|----------|---------|---------------|--|-----------------------|
| R 1/2"<br>+<br>6               | 1 – 3    | 4 – 10  | 5 – 40        | grooved opening<br>and stopper<br>for cooler media | pellet<br>cone<br>pin |

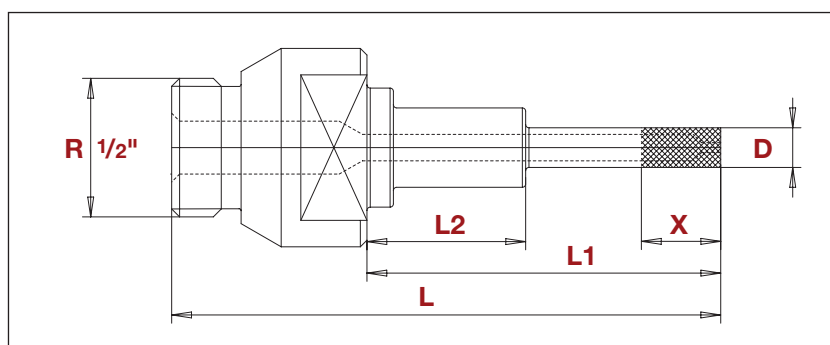
# Milling Cutters



**No. S0104M**

**for Edge Processing – Precision Grinding**

sintered



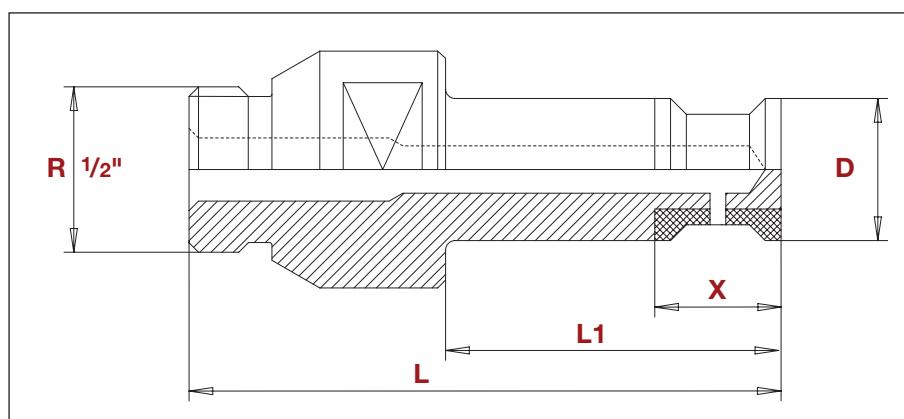
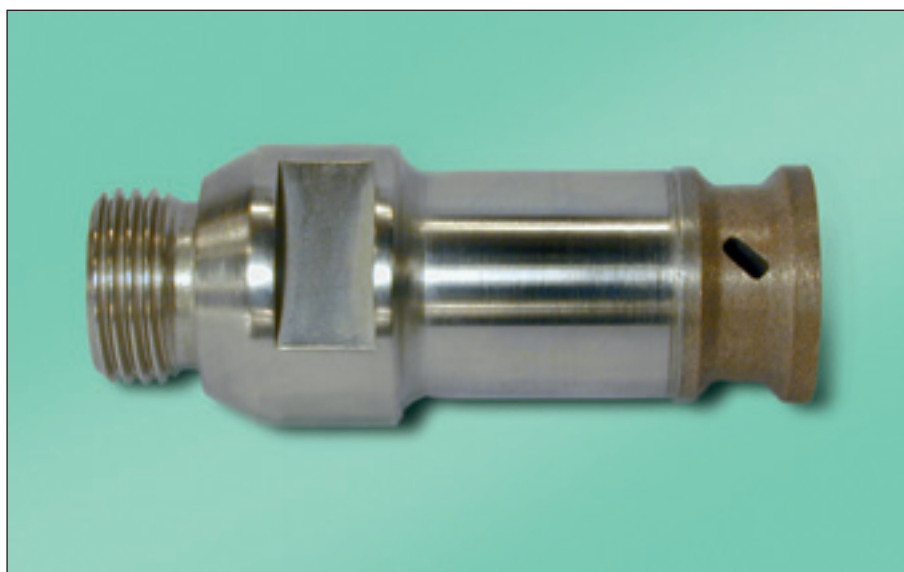
| <b>A</b><br>connector/body | glass strength<br>mm | profile       | Ø<br>mm | breadth<br>mm |
|----------------------------|----------------------|---------------|---------|---------------|
| R 1/2"                     | 6                    | straight edge | 18      | 16            |
| +                          | 10                   |               | 18      | 16            |
| 4                          | 4                    |               | 25      | 12            |
| 6                          | 6                    |               | 25      | 16            |
|                            | 10                   |               | 25      | 16            |

# Milling Cutters

for Edge Processing – Precision Grinding

sintered

No. S0104M 



| <b>A</b><br>connector/body | glass strength<br>mm | profile               | Ø<br>mm | breadth<br>mm |
|----------------------------|----------------------|-----------------------|---------|---------------|
| R 1/2"                     | 6                    |                       | 18      | 16            |
|                            | 10                   | – with C-shaped       | 18      | 16            |
| +                          | 4                    | edge                  | 25      | 12            |
| 6                          | 6                    | – trapezoidal profile | 25      | 16            |
|                            | 10                   |                       | 25      | 16            |

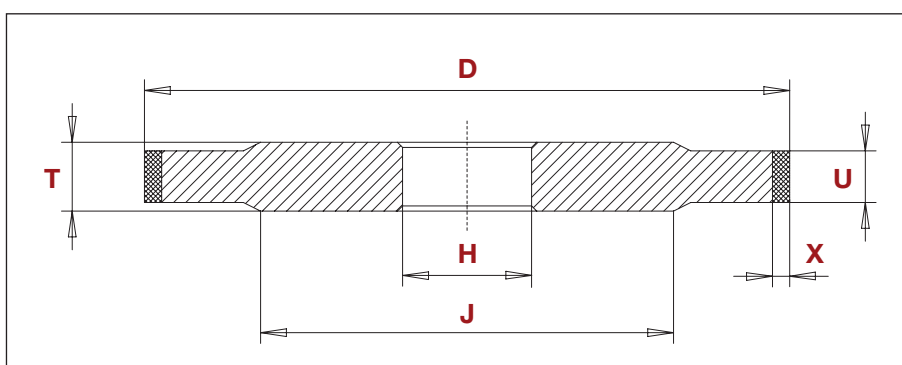
# Grinding Wheels



**No. S0105M**

**for Edge Processing – Preliminary Grinding**

sintered



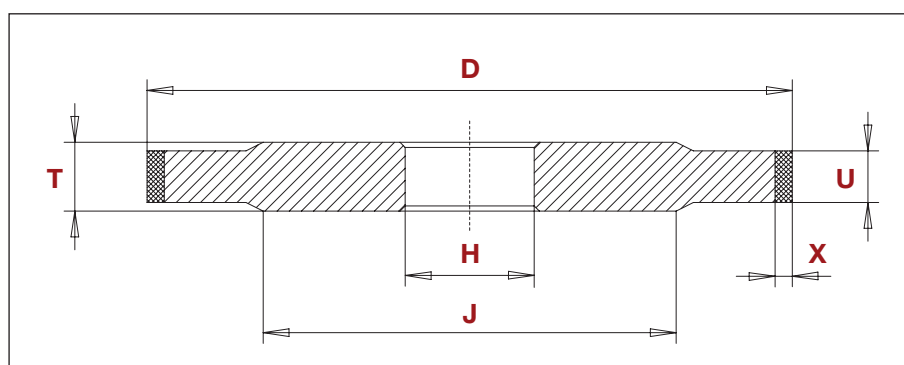
| socket | glass strength<br>mm | profile       | Ø<br>mm | breadth<br>mm |
|--------|----------------------|---------------|---------|---------------|
| 22     | ≤ 6                  | straight edge | 100     | 8             |
|        | ≤ 8                  |               |         | 10            |
|        | ≤10                  |               |         | 12            |
|        | ≤12                  |               |         | 15            |
|        | ≤15                  |               |         | 18            |
|        | ≤19                  |               |         | 22            |

# Grinding Wheels

for Edge Processing – Precision Grinding

sintered

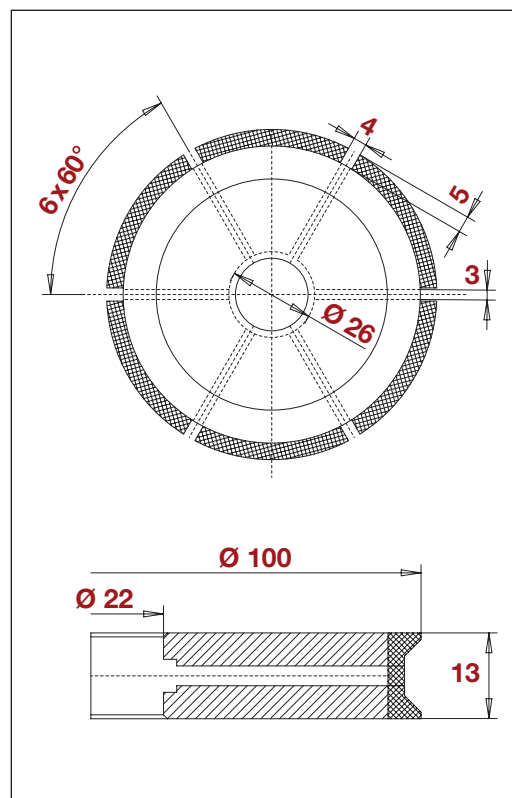
No. S0105M 



| socket | glass strength<br>mm | profile               | Ø<br>mm   | breadth<br>mm |
|--------|----------------------|-----------------------|-----------|---------------|
| 22     | ≤ 8                  | – straight edge       | 100 – 175 | 10            |
|        | ≤ 12                 | – with C-shaped       |           | 13            |
|        | ≤ 15                 | edge                  |           | 16            |
|        | ≤ 19                 | – trapezoidal profile |           | 20            |

# Grinding Wheels

 **No. S0105M** for Edge Processing · with Internal Cooling  
sintered



| socket | glass strength<br>mm | profile | Ø<br>mm   | breadth<br>mm |
|--------|----------------------|---------|-----------|---------------|
| 22     | 4                    | PE      | 100 – 175 | 10            |
|        | 5                    | PE      |           | 10            |
|        | 6                    | PE      |           | 10            |
|        | 8                    | PE      |           | 13            |
|        | 5                    | FA      |           | 10            |
|        | 6                    | FA      |           | 10            |
|        | 8                    | FA      |           | 13            |
|        | 10                   | FA      |           | 16            |
|        | 12                   | FA      |           | 16            |
|        | 15                   | FA      |           | 19            |

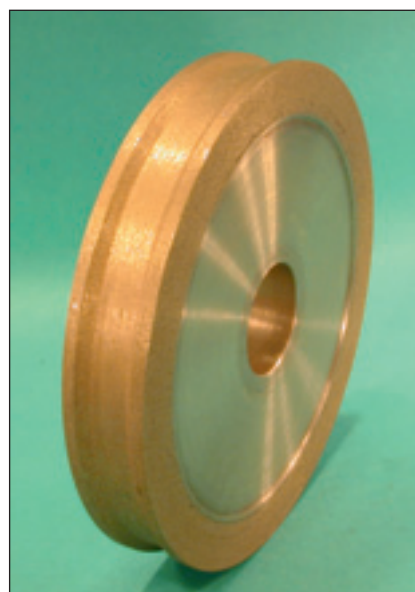
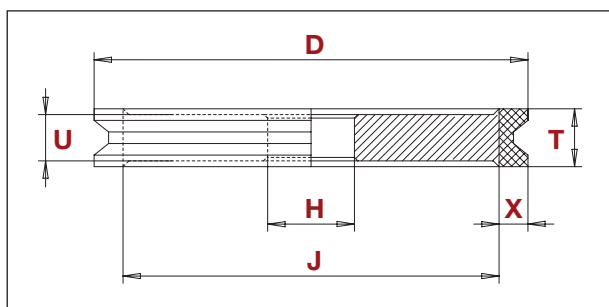
PE = Pencil Edging · FA = Facet Edging

# Grinding Wheels

for Edge Processing · without Internal Cooling

sintered

No. S0105M 



| socket | glass strength<br>mm | profile          | Ø<br>mm   | breadth<br>mm |
|--------|----------------------|------------------|-----------|---------------|
| 22     | 4                    | PE single-groove | 100 – 175 | 10            |
|        | 4                    | PE double-groove |           | 20            |
|        | 6                    | PE single-groove |           | 10            |
|        | 6                    | PE double-groove |           | 20            |
|        | 8                    | PE single-groove |           | 13            |
|        | 4                    | PE single-groove |           | 10            |
|        | 4                    | FA double-groove |           | 20            |
|        | 5                    | FA single-groove |           | 10            |
|        | 5                    | FA double-groove |           | 20            |
|        | 6                    | FA single-groove |           | 10            |
|        | 6                    | FA double-groove |           | 20            |
|        | 8                    | FA single-groove |           | 13            |
|        | 10                   | FA single-groove |           | 16            |
|        | 12                   | FA single-groove |           | 16            |
|        | 15                   | FA single-groove |           | 20            |

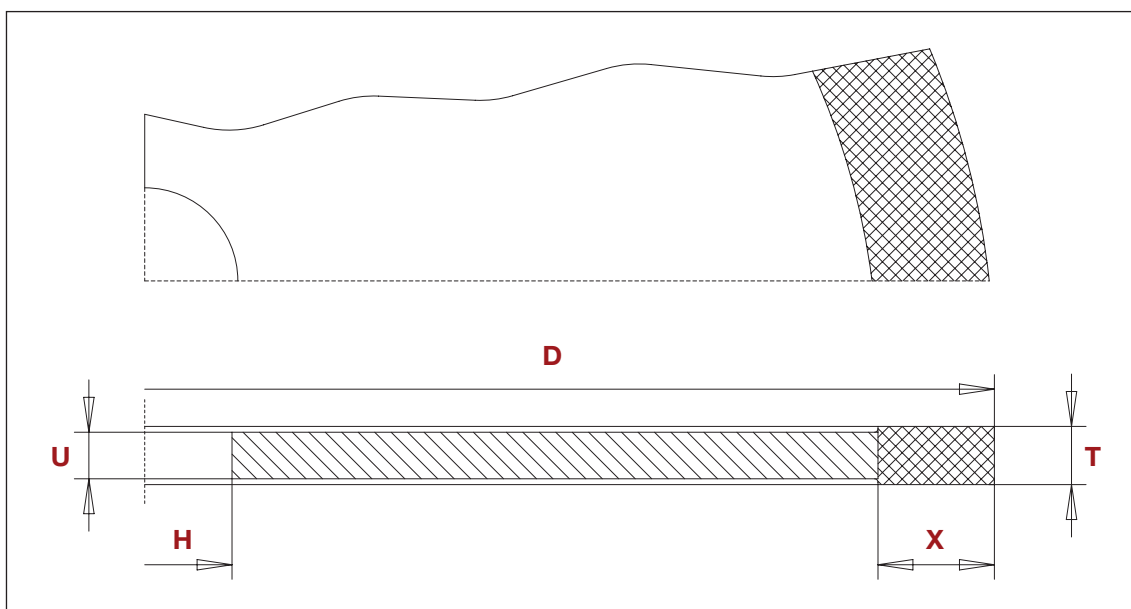
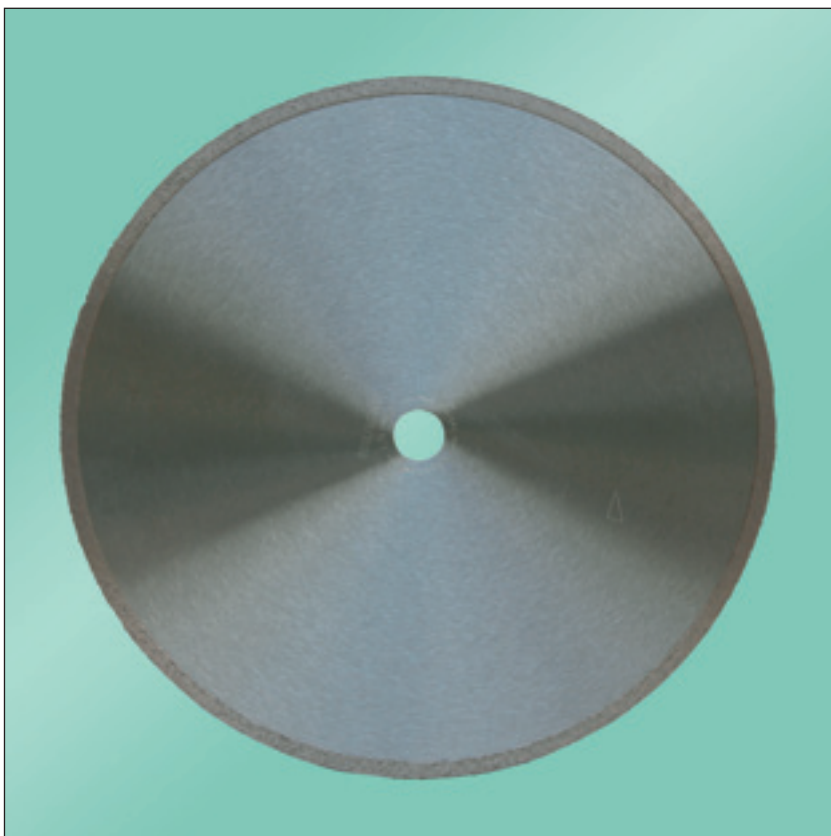
PE = Pencil Edging · FA = Facet Edging

# Cutting Wheels



No. S0107M

sintered



# Cutting Wheels

sintered (extension adaptor)

**No. S0107M** 

| H<br>socket | X<br>depth of diamond<br>section mm | T<br>thickness | D<br>Ø<br>mm | E<br>crossbar stability<br>mm |
|-------------|-------------------------------------|----------------|--------------|-------------------------------|
| 22          | 5                                   | 0,4            | 50           | 0,3                           |
|             |                                     | 0,5            |              | 0,4                           |
|             |                                     | 0,6            |              | 0,5                           |
|             |                                     | 0,8            |              | 0,7                           |
|             |                                     | 1,0            |              | 0,9                           |
|             |                                     | 0,5            | 64           | 0,4                           |
|             |                                     | 0,6            |              | 0,5                           |
|             |                                     | 0,8            |              | 0,7                           |
|             |                                     | 1,0            |              | 0,9                           |
|             |                                     | 0,5            | 75           | 0,4                           |
|             |                                     | 0,6            |              | 0,5                           |
|             |                                     | 0,8            |              | 0,7                           |
|             |                                     | 1,0            |              | 0,9                           |
|             |                                     | 0,4            | 100          | 0,3                           |
|             |                                     | 0,6            |              | 0,5                           |
|             |                                     | 0,8            |              | 0,7                           |
|             |                                     | 1,0            |              | 0,9                           |
|             |                                     | 1,2            |              | 1,1                           |
|             |                                     | 1,5            |              | 1,4                           |
|             |                                     | 0,8            | 125          | 0,65                          |
|             |                                     | 1,0            |              | 0,8                           |
|             |                                     | 1,2            |              | 0,9                           |
|             |                                     | 1,5            |              | 1,1                           |
|             | 10                                  | 0,8            | 150          | 0,65                          |
|             |                                     | 0,9            |              | 0,7                           |
|             |                                     | 1,0            |              | 0,8                           |
|             |                                     | 1,5            |              | 1,1                           |
|             |                                     | 1,0            | 200          | 0,8                           |
|             |                                     | 1,2            |              | 0,9                           |
|             |                                     | 1,5            |              | 1,1                           |
|             |                                     | 1,8            |              | 1,4                           |
|             |                                     | 1,0            | 250          | 0,75                          |
|             |                                     | 1,2            |              | 0,8                           |
|             |                                     | 1,5            |              | 1,1                           |
|             |                                     | 1,8            |              | 1,6                           |
|             |                                     | 1,2            | 300          | 0,8                           |
|             |                                     | 1,5            |              | 1,1                           |
|             |                                     | 1,8            |              | 1,4                           |
|             |                                     | 2,0            |              | 1,6                           |

# Accessories



## No. S1101 Sponges




| type  | mass<br>mm | binding | grain size | colour |
|-------|------------|---------|------------|--------|
| Telum | 90 x 55    | Ni      | 60         | red    |
|       |            |         | 120        | green  |
|       |            |         | 200        | yellow |
|       |            |         | 400        | black  |

## Washing Box for Diamond Hollow Drills


No. S1102 





| <b>A</b><br><b>connector on the machine side</b>  | <b>A</b><br><b>connector on the instrument side</b> |
|---|---|
| <p>1/2" 20 drive IG</p> <p>SDS-Plus (1/2" 20 drive)</p> <p>5/8" 16 Gang IG</p> <p>M 18 x 2,5 IG</p> <p>M 16 x 2,0 IG</p> <p>M 14 x 2,0 IG</p> <p>B16 (cone on the inside)</p> <p>13 mm footstep bearing</p> <p>MK 2 (cone on the outside)</p> | <p>R 1/2" IG</p> <p>and on request</p>              |

 **SCHOTT**  
Diamantwerkzeuge GmbH


**Diamond Tools**  
for Processing Glass and Ceramics





 TÜV certified under DIN EN ISO 9001:2000

 **SCHOTT**  
Diamantwerkzeuge GmbH


**Diamond Tools**  
for Processing Micro-optical, Glasses  
and Technical Components





 TÜV certified under DIN EN ISO 9001:2000


 **SCHOTT**  
Diamantwerkzeuge GmbH

**Diamond Tools**  
for Processing All Sorts of Stone





 TÜV certified under DIN EN ISO 9001:2000

 **SCHOTT**  
Diamantwerkzeuge GmbH



**Diamond Tools**  
for Ultrasonic Machines



 TÜV certified under DIN EN ISO 9001:2000

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