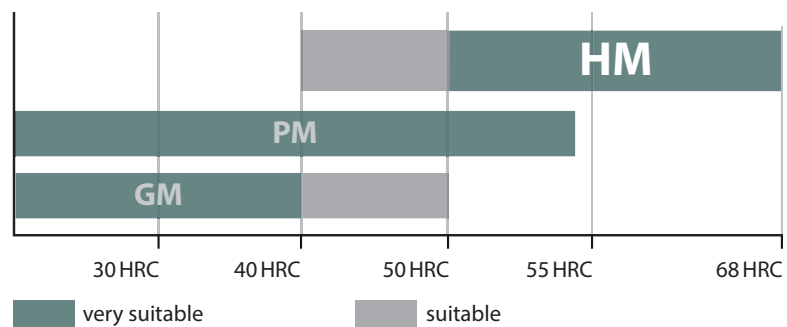


# HM series

## For machining of hardened materials

- For machining of steel up to 68 HRC.
- Very stable cutting edge with high stiffness and newest coating technology for high cutting speeds and feed rates.
- End mills, ball nose cutters, torus mills and mini cutters
- Diameter range 0.3–20.0 mm

Application fields for machining of steel

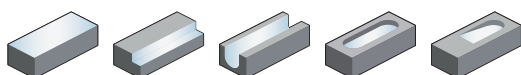


A

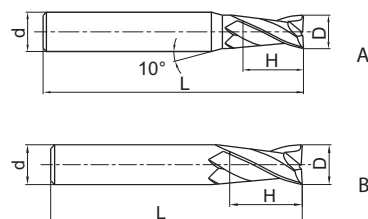
End mill

Hard machining

HM-2E



- Factory standard
- Centre cutting
- Helix angle 35°



Turning

B

Milling

C

Drilling

D

Technical Information

E

Index

| Article     | * | Dimensions [mm] |        |    |     | Teeth | Geometry | Grade  |
|-------------|---|-----------------|--------|----|-----|-------|----------|--------|
|             |   | D               | d (h6) | H  | L   |       |          | KMG555 |
| HM-2E-D1.0S |   | 1               | 4      | 3  | 50  | 2     | A        | ●      |
| HM-2E-D1.5S |   | 1.5             | 4      | 4  | 50  | 2     | A        | ●      |
| HM-2E-D2.0S |   | 2               | 4      | 6  | 50  | 2     | A        | ●      |
| HM-2E-D2.5S |   | 2.5             | 4      | 8  | 50  | 2     | A        | ●      |
| HM-2E-D3.0S |   | 3               | 4      | 8  | 50  | 2     | A        | ●      |
| HM-2E-D4.0S |   | 4               | 4      | 11 | 50  | 2     | B        | ●      |
| HM-2E-D1.0  |   | 1               | 6      | 3  | 50  | 2     | A        | ●      |
| HM-2E-D1.5  |   | 1.5             | 6      | 4  | 50  | 2     | A        | ●      |
| HM-2E-D2.0  |   | 2               | 6      | 6  | 50  | 2     | A        | ●      |
| HM-2E-D2.5  |   | 2.5             | 6      | 8  | 50  | 2     | A        | ●      |
| HM-2E-D3.0  |   | 3               | 6      | 8  | 50  | 2     | A        | ●      |
| HM-2E-D3.5  |   | 3.5             | 6      | 10 | 50  | 2     | A        | ●      |
| HM-2E-D4.0  |   | 4               | 6      | 11 | 50  | 2     | A        | ●      |
| HM-2E-D4.5  |   | 4.5             | 6      | 11 | 50  | 2     | A        | ●      |
| HM-2E-D5.0  |   | 5               | 6      | 13 | 50  | 2     | A        | ●      |
| HM-2E-D5.5  |   | 5.5             | 6      | 16 | 50  | 2     | A        | ●      |
| HM-2E-D6.0  |   | 6               | 6      | 16 | 50  | 2     | B        | ●      |
| HM-2E-D7.0  |   | 7               | 8      | 20 | 60  | 2     | A        | ●      |
| HM-2E-D8.0  |   | 8               | 8      | 20 | 60  | 2     | B        | ●      |
| HM-2E-D9.0  |   | 9               | 10     | 22 | 75  | 2     | A        | ●      |
| HM-2E-D10.0 |   | 10              | 10     | 25 | 75  | 2     | B        | ●      |
| HM-2E-D11.0 |   | 11              | 12     | 26 | 75  | 2     | A        | ○      |
| HM-2E-D12.0 |   | 12              | 12     | 30 | 75  | 2     | B        | ●      |
| HM-2E-D14.0 |   | 14              | 14     | 32 | 100 | 2     | B        | ●      |
| HM-2E-D16.0 |   | 16              | 16     | 45 | 100 | 2     | B        | ●      |
| HM-2E-D18.0 |   | 18              | 18     | 45 | 100 | 2     | B        | ○      |
| HM-2E-D20.0 |   | 20              | 20     | 45 | 100 | 2     | B        | ●      |

● Ex stock ○ On demand

\* With internal cooling

Application field

| P | M | K | N | S | H |
|---|---|---|---|---|---|
|   |   |   |   |   | ✓ |

✓ Very suitable

✓ Suitable

System code > B268

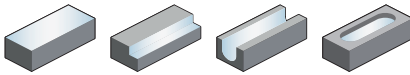
Cutting data > B436

Nonstandard order > B477

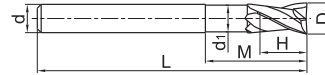
## End mill short cutting edge

## Hard machining

## HM-2EFP



- Factory standard
- Centre cutting
- Helix angle 35°



| Article       | * | Dimensions [mm] |        |                |    |    |     | Teeth | Grade |
|---------------|---|-----------------|--------|----------------|----|----|-----|-------|-------|
|               |   | D               | d (h6) | d <sub>1</sub> | H  | M  | L   |       |       |
| HM-2EFP-D6.0  |   | 6               | 6      | 5.8            | 9  | 30 | 75  | 2     | ○     |
| HM-2EFP-D8.0  |   | 8               | 8      | 7.8            | 12 | 40 | 100 | 2     | ○     |
| HM-2EFP-D10.0 |   | 10              | 10     | 9.6            | 15 | 50 | 100 | 2     | ○     |
| HM-2EFP-D12.0 |   | 12              | 12     | 11.5           | 18 | 50 | 100 | 2     | ○     |
| HM-2EFP-D16.0 |   | 16              | 16     | 15.5           | 24 | 50 | 150 | 2     | ○     |
| HM-2EFP-D20.0 |   | 20              | 20     | 19.5           | 30 | 60 | 150 | 2     | ○     |

● Ex stock ○ On demand

\* With internal cooling

## Application field

| P | M | K | N | S | H |
|---|---|---|---|---|---|
|   |   |   |   |   | ✓ |

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical  
Information

E

Index

System code > B268

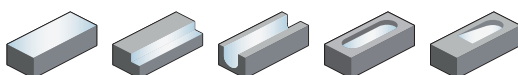
Cutting data > B436

Nonstandard order > B477

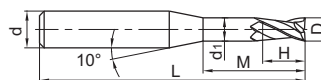
## End mill

## Hard machining

### HM-2EP



- Straight shank
- Centre cutting
- Helix angle 35°



| Article         | * | Dimensions [mm] |        |                |     |    |    | Teeth | Grade |
|-----------------|---|-----------------|--------|----------------|-----|----|----|-------|-------|
|                 |   | D               | d (h6) | d <sub>1</sub> | H   | M  | L  |       |       |
| HM-2EP-D0.5-M04 |   | 0.5             | 4      | 0.45           | 0.7 | 4  | 50 | 2     | ●     |
| HM-2EP-D0.5-M06 |   | 0.5             | 4      | 0.45           | 0.7 | 6  | 50 | 2     | ●     |
| HM-2EP-D0.5-M08 |   | 0.5             | 4      | 0.45           | 0.7 | 8  | 50 | 2     | ●     |
| HM-2EP-D0.8-M04 |   | 0.8             | 4      | 0.75           | 1.2 | 4  | 50 | 2     | ●     |
| HM-2EP-D0.8-M06 |   | 0.8             | 4      | 0.75           | 1.2 | 6  | 50 | 2     | ●     |
| HM-2EP-D0.8-M08 |   | 0.8             | 4      | 0.75           | 1.2 | 8  | 50 | 2     | ●     |
| HM-2EP-D0.8-M10 |   | 0.8             | 4      | 0.75           | 1.2 | 10 | 50 | 2     | ●     |
| HM-2EP-D1.0-M04 |   | 1               | 4      | 0.95           | 1.5 | 4  | 50 | 2     | ●     |
| HM-2EP-D1.0-M06 |   | 1               | 4      | 0.95           | 1.5 | 6  | 50 | 2     | ●     |
| HM-2EP-D1.0-M08 |   | 1               | 4      | 0.95           | 1.5 | 8  | 50 | 2     | ●     |
| HM-2EP-D1.0-M10 |   | 1               | 4      | 0.95           | 1.5 | 10 | 50 | 2     | ●     |
| HM-2EP-D1.0-M12 |   | 1               | 4      | 0.95           | 1.5 | 12 | 50 | 2     | ●     |
| HM-2EP-D1.0-M14 |   | 1               | 4      | 0.95           | 1.5 | 14 | 50 | 2     | ●     |
| HM-2EP-D1.2-M06 |   | 1.2             | 4      | 1.15           | 1.8 | 6  | 50 | 2     | ●     |
| HM-2EP-D1.2-M08 |   | 1.2             | 4      | 1.15           | 1.8 | 8  | 50 | 2     | ●     |
| HM-2EP-D1.2-M10 |   | 1.2             | 4      | 1.15           | 1.8 | 10 | 50 | 2     | ●     |
| HM-2EP-D1.2-M12 |   | 1.2             | 4      | 1.15           | 1.8 | 12 | 50 | 2     | ●     |
| HM-2EP-D1.5-M06 |   | 1.5             | 4      | 1.45           | 2.3 | 6  | 50 | 2     | ●     |
| HM-2EP-D1.5-M08 |   | 1.5             | 4      | 1.45           | 2.3 | 8  | 50 | 2     | ●     |
| HM-2EP-D1.5-M10 |   | 1.5             | 4      | 1.45           | 2.3 | 10 | 50 | 2     | ●     |
| HM-2EP-D1.5-M12 |   | 1.5             | 4      | 1.45           | 2.3 | 12 | 50 | 2     | ●     |
| HM-2EP-D1.5-M14 |   | 1.5             | 4      | 1.45           | 2.3 | 14 | 50 | 2     | ●     |
| HM-2EP-D2.0-M06 |   | 2               | 4      | 1.95           | 3   | 6  | 50 | 2     | ●     |
| HM-2EP-D2.0-M08 |   | 2               | 4      | 1.95           | 3   | 8  | 50 | 2     | ●     |
| HM-2EP-D2.0-M10 |   | 2               | 4      | 1.95           | 3   | 10 | 50 | 2     | ●     |
| HM-2EP-D2.0-M12 |   | 2               | 4      | 1.95           | 3   | 12 | 50 | 2     | ●     |
| HM-2EP-D2.0-M14 |   | 2               | 4      | 1.95           | 3   | 14 | 50 | 2     | ●     |
| HM-2EP-D2.0-M16 |   | 2               | 4      | 1.95           | 3   | 16 | 50 | 2     | ●     |
| HM-2EP-D2.5-M08 |   | 2.5             | 4      | 2.4            | 3.7 | 8  | 50 | 2     | ●     |
| HM-2EP-D2.5-M10 |   | 2.5             | 4      | 2.4            | 3.7 | 10 | 50 | 2     | ●     |
| HM-2EP-D2.5-M12 |   | 2.5             | 4      | 2.4            | 3.7 | 12 | 50 | 2     | ●     |
| HM-2EP-D2.5-M14 |   | 2.5             | 4      | 2.4            | 3.7 | 14 | 50 | 2     | ●     |
| HM-2EP-D2.5-M16 |   | 2.5             | 4      | 2.4            | 3.7 | 16 | 60 | 2     | ●     |
| HM-2EP-D2.5-M18 |   | 2.5             | 4      | 2.4            | 3.7 | 18 | 60 | 2     | ●     |
| HM-2EP-D2.5-M20 |   | 2.5             | 4      | 2.4            | 3.7 | 20 | 60 | 2     | ●     |
| HM-2EP-D3.0-M06 |   | 3               | 6      | 2.85           | 4.5 | 6  | 50 | 2     | ●     |
| HM-2EP-D3.0-M08 |   | 3               | 6      | 2.85           | 4.5 | 8  | 50 | 2     | ●     |

● Ex stock ○ On demand

\* With internal cooling

### Application field

| P | M | K | N | S | H |
|---|---|---|---|---|---|
|   |   |   |   |   | ✓ |

✓ Very suitable

✓ Suitable

System code > B268

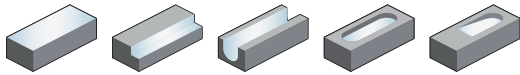
Cutting data > B436

Nonstandard order > B477

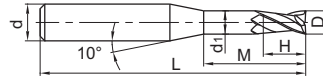
## End mill

## Hard machining

## HM-2EP



- Straight shank
- Centre cutting
- Helix angle 35°



| Article         | * | Dimensions [mm] |        |                |     |    |    | Teeth | Grade |
|-----------------|---|-----------------|--------|----------------|-----|----|----|-------|-------|
|                 |   | D               | d (h6) | d <sub>1</sub> | H   | M  | L  |       |       |
| HM-2EP-D3.0-M10 |   | 3               | 6      | 2.85           | 4.5 | 10 | 50 | 2     | ●     |
| HM-2EP-D3.0-M12 |   | 3               | 6      | 2.85           | 4.5 | 12 | 50 | 2     | ●     |
| HM-2EP-D3.0-M14 |   | 3               | 6      | 2.85           | 4.5 | 14 | 60 | 2     | ●     |
| HM-2EP-D3.0-M16 |   | 3               | 6      | 2.85           | 4.5 | 16 | 60 | 2     | ●     |
| HM-2EP-D3.0-M18 |   | 3               | 6      | 2.85           | 4.5 | 18 | 60 | 2     | ●     |
| HM-2EP-D3.0-M20 |   | 3               | 6      | 2.85           | 4.5 | 20 | 60 | 2     | ●     |
| HM-2EP-D4.0-M12 |   | 4               | 6      | 3.85           | 6   | 12 | 60 | 2     | ●     |
| HM-2EP-D4.0-M16 |   | 4               | 6      | 3.85           | 6   | 16 | 60 | 2     | ●     |
| HM-2EP-D4.0-M20 |   | 4               | 6      | 3.85           | 6   | 20 | 60 | 2     | ●     |
| HM-2EP-D4.0-M25 |   | 4               | 6      | 3.85           | 6   | 25 | 60 | 2     | ●     |
| HM-2EP-D5.0-M16 |   | 5               | 6      | 4.85           | 7.5 | 16 | 60 | 2     | ●     |
| HM-2EP-D5.0-M25 |   | 5               | 6      | 4.85           | 7.5 | 25 | 70 | 2     | ●     |

● Ex stock ○ On demand

\* With internal cooling

## Application field

| P | M | K | N | S | H |
|---|---|---|---|---|---|
|   |   |   |   |   | ✓ |

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical  
Information

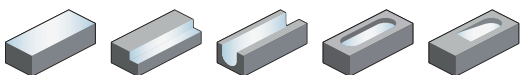
E

Index

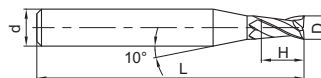
## End mill

## Hard machining

### HM-2ES



- Factory standard
- Centre cutting
- Helix angle 35°



| Article     | * | Dimensions [mm] |        |     |    | Teeth | Grade |
|-------------|---|-----------------|--------|-----|----|-------|-------|
|             |   | D               | d (h6) | H   | L  |       |       |
| HM-2ES-D0.3 |   | 0.3             | 4      | 0.6 | 50 | 2     | ●     |
| HM-2ES-D0.4 |   | 0.4             | 4      | 0.8 | 50 | 2     | ●     |
| HM-2ES-D0.5 |   | 0.5             | 4      | 1   | 50 | 2     | ●     |
| HM-2ES-D0.6 |   | 0.6             | 4      | 1.2 | 50 | 2     | ●     |
| HM-2ES-D0.7 |   | 0.7             | 4      | 1.4 | 50 | 2     | ●     |
| HM-2ES-D0.8 |   | 0.8             | 4      | 1.6 | 50 | 2     | ●     |
| HM-2ES-D0.9 |   | 0.9             | 4      | 1.8 | 50 | 2     | ●     |
| HM-2ES-D1.0 |   | 1               | 4      | 2   | 50 | 2     | ●     |
| HM-2ES-D1.1 |   | 1.1             | 4      | 2   | 50 | 2     | ●     |
| HM-2ES-D1.2 |   | 1.2             | 4      | 2.5 | 50 | 2     | ●     |
| HM-2ES-D1.3 |   | 1.3             | 4      | 2.5 | 50 | 2     | ●     |
| HM-2ES-D1.4 |   | 1.4             | 4      | 3   | 50 | 2     | ●     |
| HM-2ES-D1.5 |   | 1.5             | 4      | 3   | 50 | 2     | ●     |
| HM-2ES-D1.6 |   | 1.6             | 4      | 3.5 | 50 | 2     | ●     |
| HM-2ES-D1.7 |   | 1.7             | 4      | 3.5 | 50 | 2     | ●     |
| HM-2ES-D1.8 |   | 1.8             | 4      | 4   | 50 | 2     | ●     |
| HM-2ES-D1.9 |   | 1.9             | 4      | 4   | 50 | 2     | ●     |
| HM-2ES-D2.0 |   | 2               | 4      | 4   | 50 | 2     | ●     |
| HM-2ES-D2.1 |   | 2.1             | 4      | 4   | 50 | 2     | ●     |
| HM-2ES-D2.2 |   | 2.2             | 4      | 4.5 | 50 | 2     | ●     |
| HM-2ES-D2.3 |   | 2.3             | 4      | 4.5 | 50 | 2     | ●     |
| HM-2ES-D2.4 |   | 2.4             | 4      | 5   | 50 | 2     | ●     |
| HM-2ES-D2.5 |   | 2.5             | 4      | 5   | 50 | 2     | ●     |
| HM-2ES-D2.6 |   | 2.6             | 4      | 5   | 50 | 2     | ●     |
| HM-2ES-D2.7 |   | 2.7             | 4      | 5.5 | 50 | 2     | ●     |
| HM-2ES-D2.8 |   | 2.8             | 4      | 5.5 | 50 | 2     | ●     |
| HM-2ES-D2.9 |   | 2.9             | 4      | 6   | 50 | 2     | ●     |
| HM-2ES-D3.0 |   | 3               | 4      | 6   | 50 | 2     | ●     |

● Ex stock ○ On demand

\* With internal cooling

### Application field

| P | M | K | N | S | H |
|---|---|---|---|---|---|
|   |   |   |   |   | ✓ |

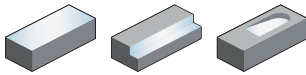
✓ Very suitable

✓ Suitable

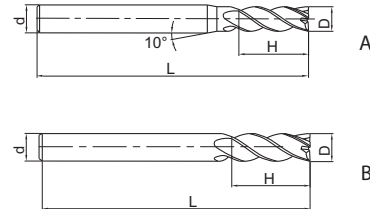
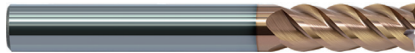
System code > B268

Cutting data > B436

Nonstandard order > B477

**End mill**
**Hard machining**
**HM-4E**


- Factory standard
- Centre cutting
- Helix angle 45°



| Article     | * | Dimensions [mm] |        |    |     | Teeth | Geometry | Grade<br>KMG555 |
|-------------|---|-----------------|--------|----|-----|-------|----------|-----------------|
|             |   | D               | d (h6) | H  | L   |       |          |                 |
| HM-4E-D1.0S |   | 1               | 4      | 3  | 50  | 4     | A        | ●               |
| HM-4E-D1.5S |   | 1.5             | 4      | 4  | 50  | 4     | A        | ●               |
| HM-4E-D2.0S |   | 2               | 4      | 6  | 50  | 4     | A        | ●               |
| HM-4E-D2.5S |   | 2.5             | 4      | 8  | 50  | 4     | A        | ●               |
| HM-4E-D3.0S |   | 3               | 4      | 8  | 50  | 4     | A        | ●               |
| HM-4E-D4.0S |   | 4               | 4      | 11 | 50  | 4     | B        | ●               |
| HM-4E-D1.0  |   | 1               | 6      | 3  | 50  | 4     | A        | ●               |
| HM-4E-D1.5  |   | 1.5             | 6      | 4  | 50  | 4     | A        | ●               |
| HM-4E-D2.0  |   | 2               | 6      | 6  | 50  | 4     | A        | ●               |
| HM-4E-D2.5  |   | 2.5             | 6      | 8  | 50  | 4     | A        | ●               |
| HM-4E-D3.0  |   | 3               | 6      | 8  | 50  | 4     | A        | ●               |
| HM-4E-D3.5  |   | 3.5             | 6      | 10 | 50  | 4     | A        | ●               |
| HM-4E-D4.0  |   | 4               | 6      | 11 | 50  | 4     | A        | ●               |
| HM-4E-D4.5  |   | 4.5             | 6      | 11 | 50  | 4     | A        | ●               |
| HM-4E-D5.0  |   | 5               | 6      | 13 | 50  | 4     | A        | ●               |
| HM-4E-D5.5  |   | 5.5             | 6      | 16 | 50  | 4     | A        | ●               |
| HM-4E-D6.0  |   | 6               | 6      | 16 | 50  | 4     | B        | ●               |
| HM-4E-D7.0  |   | 7               | 8      | 20 | 60  | 4     | A        | ●               |
| HM-4E-D8.0  |   | 8               | 8      | 20 | 60  | 4     | B        | ●               |
| HM-4E-D9.0  |   | 9               | 10     | 22 | 75  | 4     | A        | ●               |
| HM-4E-D10.0 |   | 10              | 10     | 25 | 75  | 4     | B        | ●               |
| HM-4E-D11.0 |   | 11              | 12     | 26 | 75  | 4     | A        | ●               |
| HM-4E-D12.0 |   | 12              | 12     | 30 | 75  | 4     | B        | ●               |
| HM-4E-D14.0 |   | 14              | 14     | 32 | 75  | 4     | B        | ●               |
| HM-4E-D16.0 |   | 16              | 16     | 45 | 100 | 4     | B        | ●               |
| HM-4E-D18.0 |   | 18              | 18     | 45 | 100 | 4     | B        | ●               |
| HM-4E-D20.0 |   | 20              | 20     | 45 | 100 | 4     | B        | ●               |

● Ex stock ○ On demand

\* With internal cooling

**Application field**

| P | M | K | N | S | H |
|---|---|---|---|---|---|
|   |   |   |   |   | ✓ |

✓ Very suitable

✓ Suitable

System code > B268

Cutting data > B436

Nonstandard order > B477

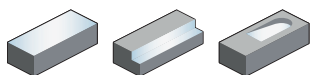


A

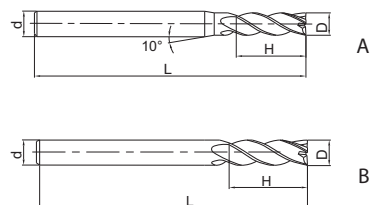
End mill long shank

Hard machining

HM-4EL



- Factory standard
- Centre cutting
- Helix angle 45°



B

Milling

| Article      | * | Dimensions [mm] |        |    |     | Teeth | Geometry | Grade  |
|--------------|---|-----------------|--------|----|-----|-------|----------|--------|
|              |   | D               | d (h6) | H  | L   |       |          | KMG555 |
| HM-4EL-D3.0  |   | 3               | 6      | 12 | 75  | 4     | A        | ●      |
| HM-4EL-D4.0  |   | 4               | 6      | 15 | 75  | 4     | A        | ●      |
| HM-4EL-D5.0  |   | 5               | 6      | 20 | 75  | 4     | A        | ●      |
| HM-4EL-D6.0  |   | 6               | 6      | 20 | 75  | 4     | B        | ●      |
| HM-4EL-D8.0  |   | 8               | 8      | 25 | 100 | 4     | B        | ●      |
| HM-4EL-D10.0 |   | 10              | 10     | 30 | 100 | 4     | B        | ●      |
| HM-4EL-D12.0 |   | 12              | 12     | 35 | 100 | 4     | B        | ●      |
| HM-4EL-D14.0 |   | 14              | 14     | 40 | 100 | 4     | B        | ●      |
| HM-4EL-D16.0 |   | 16              | 16     | 50 | 150 | 4     | B        | ●      |
| HM-4EL-D20.0 |   | 20              | 20     | 55 | 150 | 4     | B        | ●      |

● Ex stock ○ On demand

\* With internal cooling

C

Drilling

Application field

| P | M | K | N | S | H |
|---|---|---|---|---|---|
|   |   |   |   |   | ✓ |

✓ Very suitable

✓ Suitable

D

Technical  
Information

E

Index

System code > B268

Cutting data > B436

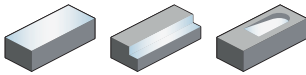
Nonstandard order > B477



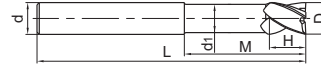
## End mill short cutting edge

## Hard machining

## HM-4EFP



- Factory standard
- Centre cutting
- Helix angle 45°



| Article       | * | Dimensions [mm] |        |                |    |    |     | Teeth | Grade |
|---------------|---|-----------------|--------|----------------|----|----|-----|-------|-------|
|               |   | D               | d (h6) | d <sub>1</sub> | H  | M  | L   |       |       |
| HM-4EFP-D6.0  |   | 6               | 6      | 5.8            | 9  | 30 | 75  | 4     | ●     |
| HM-4EFP-D8.0  |   | 8               | 8      | 7.8            | 12 | 40 | 100 | 4     | ●     |
| HM-4EFP-D10.0 |   | 10              | 10     | 9.6            | 15 | 50 | 100 | 4     | ●     |
| HM-4EFP-D12.0 |   | 12              | 12     | 11.5           | 18 | 50 | 100 | 4     | ●     |
| HM-4EFP-D16.0 |   | 16              | 16     | 15.5           | 24 | 50 | 150 | 4     | ●     |
| HM-4EFP-D20.0 |   | 20              | 20     | 19.5           | 30 | 60 | 150 | 4     | ○     |

● Ex stock ○ On demand

\* With internal cooling

| Application field |   |   |   |   |   |
|-------------------|---|---|---|---|---|
| P                 | M | K | N | S | H |
|                   |   |   |   |   | ✓ |

✓ Very suitable

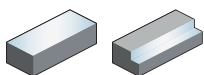
✓ Suitable

A

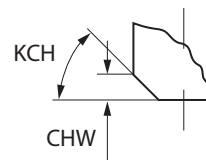
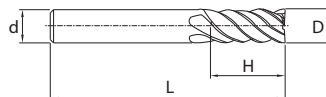
End mill long cutting edge

High-speed hard machining

5502R55MHH



- Type of shank DIN 6535HA
- Non-centre cutting
- Helix angle 55°



Turning

B

| Article         | * | Dimensions [mm] |        |    |     |     |     | Teeth | Grade  |        |
|-----------------|---|-----------------|--------|----|-----|-----|-----|-------|--------|--------|
|                 |   | D               | d (h6) | H  | L   | KCH | CHW |       | KMG405 | KMG555 |
| 5502R55MHH-0300 |   | 3               | 6      | 8  | 57  | 0   | 0   | 4     | ●      | ●      |
| 5502R55MHH-0400 |   | 4               | 6      | 11 | 57  | 0   | 0   | 4     | ●      | ●      |
| 5502R55MHH-0500 |   | 5               | 6      | 13 | 57  | 0   | 0   | 5     | ●      | ●      |
| 5502R55MHH-0600 |   | 6               | 6      | 13 | 57  | 45  | 0.1 | 6     | ●      | ●      |
| 5502R55MHH-0800 |   | 8               | 8      | 19 | 63  | 45  | 0.1 | 6     | ●      | ●      |
| 5502R55MHH-1000 |   | 10              | 10     | 22 | 72  | 45  | 0.1 | 6     | ●      | ●      |
| 5502R55MHH-1200 |   | 12              | 12     | 26 | 83  | 45  | 0.1 | 6     | ●      | ●      |
| 5502R55MHH-1600 |   | 16              | 16     | 32 | 92  | 45  | 0.1 | 6     | ●      | ●      |
| 5502R55MHH-2000 |   | 20              | 20     | 38 | 104 | 45  | 0.1 | 8     | ●      | ●      |

- Ex stock ○ On demand

- \* With internal cooling

C

Application field

| P | M | K | N | S | H |
|---|---|---|---|---|---|
|   |   |   |   |   | ✓ |

✓ Very suitable

✓ Suitable

D

Technical Information

E

Index

System code > B268

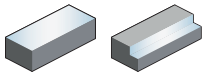
Cutting data > B436

Nonstandard order > B477

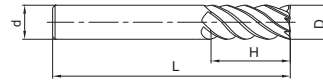
## End mill

## Hard machining

## HM-6E



- Factory standard
- Non-centre cutting
- Helix angle 45°



| Article     | * | Dimensions [mm] |        |    |     | Teeth | Grade  |
|-------------|---|-----------------|--------|----|-----|-------|--------|
|             |   | D               | d (h6) | H  | L   |       | KMG555 |
| HM-6E-D6.0  |   | 6               | 6      | 18 | 60  | 6     | ○      |
| HM-6E-D8.0  |   | 8               | 8      | 20 | 60  | 6     | ○      |
| HM-6E-D10.0 |   | 10              | 10     | 30 | 75  | 6     | ○      |
| HM-6E-D12.0 |   | 12              | 12     | 32 | 75  | 6     | ○      |
| HM-6E-D16.0 |   | 16              | 16     | 40 | 100 | 6     | ○      |
| HM-6E-D20.0 |   | 20              | 20     | 45 | 100 | 6     | ●      |

● Ex stock ○ On demand

\* With internal cooling

| Application field |   |   |   |   |   |
|-------------------|---|---|---|---|---|
| P                 | M | K | N | S | H |
|                   |   |   |   |   | ✓ |

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical  
Information

E

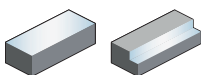
Index

A

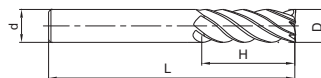
End mill long shank

Hard machining

HM-6EL



- Factory standard
- Non-centre cutting
- Helix angle 45°



B

| Article      | * | Dimensions [mm] |        |    |     | Teeth | Grade  |
|--------------|---|-----------------|--------|----|-----|-------|--------|
|              |   | D               | d (h6) | H  | L   |       | KMG555 |
| HM-6EL-D6.0  |   | 6               | 6      | 24 | 75  | 6     | ●      |
| HM-6EL-D8.0  |   | 8               | 8      | 32 | 75  | 6     | ●      |
| HM-6EL-D10.0 |   | 10              | 10     | 40 | 100 | 6     | ●      |
| HM-6EL-D12.0 |   | 12              | 12     | 45 | 100 | 6     | ●      |
| HM-6EL-D16.0 |   | 16              | 16     | 64 | 150 | 6     | ●      |
| HM-6EL-D20.0 |   | 20              | 20     | 75 | 150 | 6     | ●      |

● Ex stock ○ On demand

\* With internal cooling

C

| Application field |   |   |   |   |   |
|-------------------|---|---|---|---|---|
| P                 | M | K | N | S | H |
|                   |   |   |   |   | ✓ |

✓ Very suitable

✓ Suitable

Drilling

D

Technical  
Information

E

Index

System code > B268

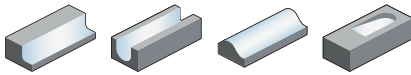
Cutting data > B436

Nonstandard order > B477

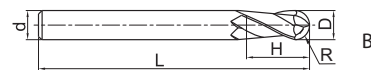
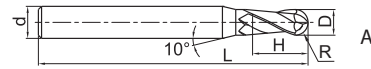
## Ball nose cutter

## Hard machining

## HM-2B



- Factory standard
- Centre cutting
- Helix angle 35°



| Article      | * | Dimensions [mm] |     |        |    |     | Teeth | Geometry | Grade<br>KMG555 |
|--------------|---|-----------------|-----|--------|----|-----|-------|----------|-----------------|
|              |   | R               | D   | d (h6) | H  | L   |       |          |                 |
| HM-2B-R0.5S  |   | 0.5             | 1   | 4      | 2  | 50  | 2     | A        | ●               |
| HM-2B-R0.75S |   | 0.75            | 1.5 | 4      | 3  | 50  | 2     | A        | ●               |
| HM-2B-R1.0S  |   | 1               | 2   | 4      | 4  | 50  | 2     | A        | ●               |
| HM-2B-R1.25S |   | 1.25            | 2.5 | 4      | 5  | 50  | 2     | A        | ●               |
| HM-2B-R1.5S  |   | 1.5             | 3   | 4      | 6  | 50  | 2     | A        | ●               |
| HM-2B-R2.0S  |   | 2               | 4   | 4      | 8  | 50  | 2     | B        | ●               |
| HM-2B-R0.5   |   | 0.5             | 1   | 6      | 2  | 50  | 2     | A        | ●               |
| HM-2B-R0.75  |   | 0.75            | 1.5 | 6      | 3  | 50  | 2     | A        | ●               |
| HM-2B-R1.0   |   | 1               | 2   | 6      | 4  | 50  | 2     | A        | ●               |
| HM-2B-R1.25  |   | 1.25            | 2.5 | 6      | 5  | 50  | 2     | A        | ●               |
| HM-2B-R1.5   |   | 1.5             | 3   | 6      | 6  | 50  | 2     | A        | ●               |
| HM-2B-R1.75  |   | 1.75            | 3.5 | 6      | 8  | 50  | 2     | A        | ●               |
| HM-2B-R2.0   |   | 2               | 4   | 6      | 8  | 50  | 2     | A        | ●               |
| HM-2B-R2.5   |   | 2.5             | 5   | 6      | 10 | 50  | 2     | A        | ●               |
| HM-2B-R2.75  |   | 2.75            | 5.5 | 6      | 12 | 50  | 2     | A        | ●               |
| HM-2B-R3.0   |   | 3               | 6   | 6      | 12 | 50  | 2     | B        | ●               |
| HM-2B-R3.5   |   | 3.5             | 7   | 8      | 14 | 60  | 2     | A        | ●               |
| HM-2B-R4.0   |   | 4               | 8   | 8      | 16 | 60  | 2     | B        | ●               |
| HM-2B-R4.5   |   | 4.5             | 9   | 10     | 18 | 75  | 2     | A        | ●               |
| HM-2B-R5.0   |   | 5               | 10  | 10     | 20 | 75  | 2     | B        | ●               |
| HM-2B-R6.0   |   | 6               | 12  | 12     | 24 | 75  | 2     | B        | ●               |
| HM-2B-R7.0   |   | 7               | 14  | 14     | 28 | 75  | 2     | B        | ●               |
| HM-2B-R8.0   |   | 8               | 16  | 16     | 32 | 100 | 2     | B        | ●               |
| HM-2B-R10.0  |   | 10              | 20  | 20     | 40 | 100 | 2     | B        | ●               |

● Ex stock ○ On demand

\* With internal cooling

## Application field

| P | M | K | N | S | H |
|---|---|---|---|---|---|
|   |   |   |   |   | ✓ |

✓ Very suitable

✓ Suitable

System code &gt; B268

Cutting data &gt; B436

Nonstandard order &gt; B477



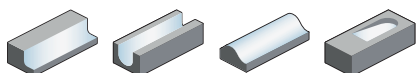
A

Turning

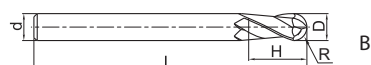
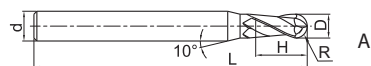
## Ball nose cutter long shank

## Hard machining

### HM-2BL



- Factory standard
- Centre cutting
- Helix angle 35°



B

Milling

| Article      | * | Dimensions [mm] |     |        |    |     | Teeth | Geometry | Grade |
|--------------|---|-----------------|-----|--------|----|-----|-------|----------|-------|
|              |   | R               | D   | d (h6) | H  | L   |       |          |       |
| HM-2BL-R1.0  |   | 1               | 2   | 6      | 4  | 75  | 2     | A        | ●     |
| HM-2BL-R1.25 |   | 1.25            | 2.5 | 6      | 6  | 75  | 2     | A        | ●     |
| HM-2BL-R1.5  |   | 1.5             | 3   | 6      | 6  | 75  | 2     | A        | ●     |
| HM-2BL-R1.75 |   | 1.75            | 3.5 | 6      | 8  | 75  | 2     | A        | ●     |
| HM-2BL-R2.0  |   | 2               | 4   | 6      | 8  | 75  | 2     | A        | ●     |
| HM-2BL-R2.5  |   | 2.5             | 5   | 6      | 10 | 75  | 2     | A        | ●     |
| HM-2BL-R2.75 |   | 2.75            | 5.5 | 6      | 12 | 75  | 2     | A        | ●     |
| HM-2BL-R3.0  |   | 3               | 6   | 6      | 12 | 75  | 2     | B        | ●     |
| HM-2BL-R3.5  |   | 3.5             | 7   | 8      | 14 | 75  | 2     | A        | ●     |
| HM-2BL-R4.0  |   | 4               | 8   | 8      | 16 | 100 | 2     | B        | ●     |
| HM-2BL-R4.5  |   | 4.5             | 9   | 10     | 18 | 100 | 2     | A        | ●     |
| HM-2BL-R5.0  |   | 5               | 10  | 10     | 20 | 100 | 2     | B        | ●     |
| HM-2BL-R6.0  |   | 6               | 12  | 12     | 24 | 100 | 2     | B        | ●     |
| HM-2BL-R7.0  |   | 7               | 14  | 14     | 28 | 100 | 2     | B        | ●     |
| HM-2BL-R8.0  |   | 8               | 16  | 16     | 32 | 150 | 2     | B        | ●     |
| HM-2BL-R10.0 |   | 10              | 20  | 20     | 40 | 150 | 2     | B        | ●     |

● Ex stock ○ On demand

\* With internal cooling

C

Drilling

D

Technical Information

### Application field

| P | M | K | N | S | H |
|---|---|---|---|---|---|
|   |   |   |   |   | ✓ |

✓ Very suitable

✓ Suitable

E

Index

System code > B268

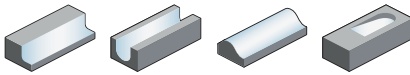
Cutting data > B436

Nonstandard order > B477

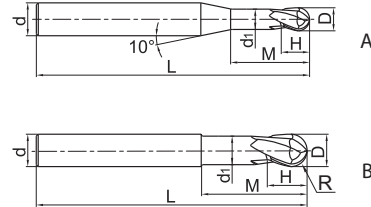
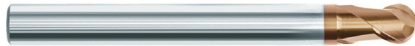
## Ball nose cutter short cutting edge

## Hard machining

## HM-2BFP



- Factory standard
- Centre cutting
- Helix angle 35°



| Article       | * | Dimensions [mm] |     |        |                |     |     |     | Teeth | Geometry | Grade |
|---------------|---|-----------------|-----|--------|----------------|-----|-----|-----|-------|----------|-------|
|               |   | R               | D   | d (h6) | d <sub>1</sub> | H   | M   | L   |       |          |       |
| HM-2BFP-R0.5  |   | 0.5             | 1   | 6      | 0.95           | 1   | 2.5 | 75  | 2     | A        | ●     |
| HM-2BFP-R0.75 |   | 0.75            | 1.5 | 6      | 1.45           | 1.5 | 3   | 75  | 2     | A        | ●     |
| HM-2BFP-R1.0  |   | 1               | 2   | 6      | 1.95           | 2   | 4   | 75  | 2     | A        | ●     |
| HM-2BFP-R1.5  |   | 1.5             | 3   | 6      | 2.85           | 3   | 6   | 75  | 2     | A        | ●     |
| HM-2BFP-R2.0  |   | 2               | 4   | 6      | 3.85           | 4   | 8   | 75  | 2     | A        | ●     |
| HM-2BFP-R2.5  |   | 2.5             | 5   | 6      | 4.85           | 5   | 10  | 75  | 2     | A        | ●     |
| HM-2BFP-R3.0  |   | 3               | 6   | 6      | 5.8            | 6   | 12  | 75  | 2     | B        | ●     |
| HM-2BFP-R4.0  |   | 4               | 8   | 8      | 7.8            | 8   | 16  | 100 | 2     | B        | ●     |
| HM-2BFP-R5.0  |   | 5               | 10  | 10     | 9.6            | 10  | 20  | 100 | 2     | B        | ●     |
| HM-2BFP-R6.0  |   | 6               | 12  | 12     | 11.5           | 12  | 24  | 100 | 2     | B        | ●     |
| HM-2BFP-R8.0  |   | 8               | 16  | 16     | 15.5           | 16  | 32  | 150 | 2     | B        | ●     |
| HM-2BFP-R10.0 |   | 10              | 20  | 20     | 19.5           | 20  | 40  | 150 | 2     | B        | ○     |

● Ex stock ○ On demand

\* With internal cooling

## Application field

| P | M | K | N | S | H |
|---|---|---|---|---|---|
|   |   |   |   |   | ✓ |

✓ Very suitable

✓ Suitable

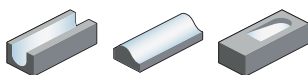
# A

Turning

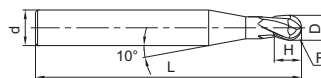
## Ball nose cutter

## Hard machining

### HM-2BS



- Factory standard
- Centre cutting
- Helix angle 35°



# B

Milling

| Article      | * | Dimensions [mm] |     |        |     |    | Teeth | Grade  |
|--------------|---|-----------------|-----|--------|-----|----|-------|--------|
|              |   | R               | D   | d (h6) | H   | L  |       | KMG555 |
| HM-2BS-R0.15 |   | 0.15            | 0.3 | 4      | 0.5 | 50 | 2     | ●      |
| HM-2BS-R0.20 |   | 0.2             | 0.4 | 4      | 0.6 | 50 | 2     | ●      |
| HM-2BS-R0.25 |   | 0.25            | 0.5 | 4      | 0.8 | 50 | 2     | ●      |
| HM-2BS-R0.30 |   | 0.3             | 0.6 | 4      | 0.9 | 50 | 2     | ●      |
| HM-2BS-R0.35 |   | 0.35            | 0.7 | 4      | 1   | 50 | 2     | ●      |
| HM-2BS-R0.40 |   | 0.4             | 0.8 | 4      | 1.2 | 50 | 2     | ●      |
| HM-2BS-R0.45 |   | 0.45            | 0.9 | 4      | 1.3 | 50 | 2     | ●      |
| HM-2BS-R0.50 |   | 0.5             | 1   | 4      | 1.5 | 50 | 2     | ●      |
| HM-2BS-R0.60 |   | 0.6             | 1.2 | 4      | 1.8 | 50 | 2     | ●      |
| HM-2BS-R0.70 |   | 0.7             | 1.4 | 4      | 2   | 50 | 2     | ●      |
| HM-2BS-R0.75 |   | 0.75            | 1.5 | 4      | 2.3 | 50 | 2     | ●      |
| HM-2BS-R0.80 |   | 0.8             | 1.6 | 4      | 2.5 | 50 | 2     | ●      |
| HM-2BS-R0.90 |   | 0.9             | 1.8 | 4      | 2.7 | 50 | 2     | ●      |
| HM-2BS-R1.00 |   | 1               | 2   | 4      | 3   | 50 | 2     | ●      |
| HM-2BS-R1.25 |   | 1.25            | 2.5 | 4      | 3.7 | 50 | 2     | ●      |
| HM-2BS-R1.50 |   | 1.5             | 3   | 4      | 4.5 | 50 | 2     | ●      |

● Ex stock ○ On demand

\* With internal cooling

# C

Drilling

### Application field

| P | M | K | N | S | H |
|---|---|---|---|---|---|
|   |   |   |   |   | ✓ |

✓ Very suitable

✓ Suitable

# D

Technical Information

# E

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System code > B268

Cutting data > B436

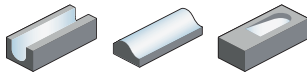
Nonstandard order > B477



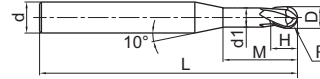
## End mill

## Hard machining

## HM-2BP



- Straight shank
- Centre cutting
- Helix angle 35°



| Article          | * | Dimensions [mm] |     |        |                |     |    |    | Teeth | Grade<br>KMG555 |
|------------------|---|-----------------|-----|--------|----------------|-----|----|----|-------|-----------------|
|                  |   | R               | D   | d (h6) | d <sub>1</sub> | H   | M  | L  |       |                 |
| HM-2BP-R0.25-M04 |   | 0.25            | 0.5 | 4      | 0.45           | 0.7 | 4  | 50 | 2     | ●               |
| HM-2BP-R0.25-M06 |   | 0.25            | 0.5 | 4      | 0.45           | 0.7 | 6  | 50 | 2     | ●               |
| HM-2BP-R0.3-M04  |   | 0.3             | 0.6 | 4      | 0.55           | 0.9 | 4  | 50 | 2     | ●               |
| HM-2BP-R0.3-M06  |   | 0.3             | 0.6 | 4      | 0.55           | 0.9 | 6  | 50 | 2     | ●               |
| HM-2BP-R0.3-M08  |   | 0.3             | 0.6 | 4      | 0.55           | 0.9 | 8  | 50 | 2     | ●               |
| HM-2BP-R0.4-M04  |   | 0.4             | 0.8 | 4      | 0.75           | 1.2 | 4  | 50 | 2     | ●               |
| HM-2BP-R0.4-M06  |   | 0.4             | 0.8 | 4      | 0.75           | 1.2 | 6  | 50 | 2     | ●               |
| HM-2BP-R0.4-M08  |   | 0.4             | 0.8 | 4      | 0.75           | 1.2 | 8  | 50 | 2     | ●               |
| HM-2BP-R0.4-M10  |   | 0.4             | 0.8 | 4      | 0.75           | 1.2 | 10 | 50 | 2     | ●               |
| HM-2BP-R0.5-M04  |   | 0.5             | 1   | 4      | 0.95           | 1.5 | 4  | 50 | 2     | ●               |
| HM-2BP-R0.5-M06  |   | 0.5             | 1   | 4      | 0.95           | 1.5 | 6  | 50 | 2     | ●               |
| HM-2BP-R0.5-M08  |   | 0.5             | 1   | 4      | 0.95           | 1.5 | 8  | 50 | 2     | ●               |
| HM-2BP-R0.5-M10  |   | 0.5             | 1   | 4      | 0.95           | 1.5 | 10 | 50 | 2     | ●               |
| HM-2BP-R0.5-M12  |   | 0.5             | 1   | 4      | 0.95           | 1.5 | 12 | 50 | 2     | ●               |
| HM-2BP-R0.6-M06  |   | 0.6             | 1.2 | 4      | 1.15           | 1.8 | 6  | 50 | 2     | ●               |
| HM-2BP-R0.6-M08  |   | 0.6             | 1.2 | 4      | 1.15           | 1.8 | 8  | 50 | 2     | ●               |
| HM-2BP-R0.6-M12  |   | 0.6             | 1.2 | 4      | 1.15           | 1.8 | 12 | 50 | 2     | ●               |
| HM-2BP-R0.6-M16  |   | 0.6             | 1.2 | 4      | 1.15           | 1.8 | 16 | 50 | 2     | ●               |
| HM-2BP-R0.75-M08 |   | 0.75            | 1.5 | 4      | 1.45           | 2.3 | 8  | 50 | 2     | ●               |
| HM-2BP-R0.75-M12 |   | 0.75            | 1.5 | 4      | 1.45           | 2.3 | 12 | 50 | 2     | ●               |
| HM-2BP-R0.75-M16 |   | 0.75            | 1.5 | 4      | 1.45           | 2.3 | 16 | 50 | 2     | ●               |
| HM-2BP-R1.0-M06  |   | 1               | 2   | 4      | 1.95           | 3   | 6  | 50 | 2     | ●               |
| HM-2BP-R1.0-M08  |   | 1               | 2   | 4      | 1.95           | 3   | 8  | 50 | 2     | ●               |
| HM-2BP-R1.0-M10  |   | 1               | 2   | 4      | 1.95           | 3   | 10 | 50 | 2     | ●               |
| HM-2BP-R1.0-M12  |   | 1               | 2   | 4      | 1.95           | 3   | 12 | 50 | 2     | ●               |
| HM-2BP-R1.0-M16  |   | 1               | 2   | 4      | 1.95           | 3   | 16 | 50 | 2     | ●               |
| HM-2BP-R1.0-M20  |   | 1               | 2   | 4      | 1.95           | 3   | 20 | 50 | 2     | ●               |
| HM-2BP-R1.25-M08 |   | 1.25            | 2.5 | 4      | 2.4            | 3.7 | 8  | 50 | 2     | ●               |
| HM-2BP-R1.25-M12 |   | 1.25            | 2.5 | 4      | 2.4            | 3.7 | 12 | 50 | 2     | ●               |
| HM-2BP-R1.25-M16 |   | 1.25            | 2.5 | 4      | 2.4            | 3.7 | 16 | 60 | 2     | ●               |
| HM-2BP-R1.25-M20 |   | 1.25            | 2.5 | 4      | 2.4            | 3.7 | 20 | 60 | 2     | ●               |
| HM-2BP-R1.5-M08  |   | 1.5             | 3   | 6      | 2.85           | 4.5 | 8  | 50 | 2     | ●               |
| HM-2BP-R1.5-M10  |   | 1.5             | 3   | 6      | 2.85           | 4.5 | 10 | 50 | 2     | ●               |
| HM-2BP-R1.5-M12  |   | 1.5             | 3   | 6      | 2.85           | 4.5 | 12 | 50 | 2     | ●               |
| HM-2BP-R1.5-M16  |   | 1.5             | 3   | 6      | 2.85           | 4.5 | 16 | 60 | 2     | ●               |
| HM-2BP-R1.5-M20  |   | 1.5             | 3   | 6      | 2.85           | 4.5 | 20 | 60 | 2     | ●               |
| HM-2BP-R2.0-M10  |   | 2               | 4   | 6      | 3.85           | 6   | 10 | 60 | 2     | ●               |

● Ex stock ○ On demand

\* With internal cooling

## Application field

| P | M | K | N | S | H |
|---|---|---|---|---|---|
|   |   |   |   |   | ✓ |

✓ Very suitable

✓ Suitable

System code &gt; B268

Cutting data &gt; B436

Nonstandard order &gt; B477

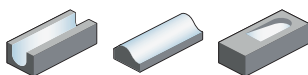


A

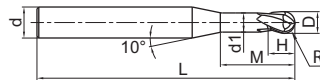
End mill

Hard machining

HM-2BP



- Straight shank
- Centre cutting
- Helix angle 35°



B

| Article         | * | Dimensions [mm] |   |        |                |     |    |    | Teeth | Grade |
|-----------------|---|-----------------|---|--------|----------------|-----|----|----|-------|-------|
|                 |   | R               | D | d (h6) | d <sub>1</sub> | H   | M  | L  |       |       |
| HM-2BP-R2.0-M16 |   | 2               | 4 | 6      | 3.85           | 6   | 16 | 60 | 2     | ●     |
| HM-2BP-R2.0-M20 |   | 2               | 4 | 6      | 3.85           | 6   | 20 | 60 | 2     | ●     |
| HM-2BP-R2.0-M25 |   | 2               | 4 | 6      | 3.85           | 6   | 25 | 60 | 2     | ●     |
| HM-2BP-R2.5-M16 |   | 2.5             | 5 | 6      | 4.85           | 7.5 | 16 | 60 | 2     | ●     |
| HM-2BP-R2.5-M25 |   | 2.5             | 5 | 6      | 4.85           | 7.5 | 25 | 70 | 2     | ●     |

● Ex stock ○ On demand

\* With internal cooling

C

Application field

| P | M | K | N | S | H |
|---|---|---|---|---|---|
|   |   |   |   |   | ✓ |

✓ Very suitable

✓ Suitable

Drilling

D

Technical  
Information

E

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System code > B268

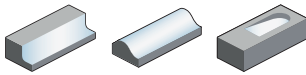
Cutting data > B436

Nonstandard order > B477

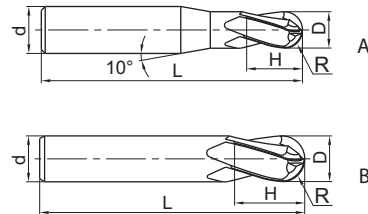
## Ball nose cutter

## Hard machining

## HM-4B



- Factory standard
- Centre cutting
- Helix angle 35°



| Article     | * | Dimensions [mm] |    |        |    |     | Teeth | Geometry | Grade  |
|-------------|---|-----------------|----|--------|----|-----|-------|----------|--------|
|             |   | R               | D  | d (h6) | H  | L   |       |          | KMG555 |
| HM-4B-R1.5  |   | 1.5             | 3  | 6      | 6  | 50  | 4     | A        | ●      |
| HM-4B-R2.0  |   | 2               | 4  | 6      | 8  | 50  | 4     | A        | ●      |
| HM-4B-R2.5  |   | 2.5             | 5  | 6      | 10 | 50  | 4     | A        | ●      |
| HM-4B-R3.0  |   | 3               | 6  | 6      | 12 | 50  | 4     | B        | ●      |
| HM-4B-R4.0  |   | 4               | 8  | 8      | 16 | 60  | 4     | B        | ●      |
| HM-4B-R5.0  |   | 5               | 10 | 10     | 20 | 75  | 4     | B        | ●      |
| HM-4B-R6.0  |   | 6               | 12 | 12     | 24 | 75  | 4     | B        | ●      |
| HM-4B-R7.0  |   | 7               | 14 | 14     | 28 | 75  | 4     | B        | ●      |
| HM-4B-R8.0  |   | 8               | 16 | 16     | 32 | 100 | 4     | B        | ●      |
| HM-4B-R9.0  |   | 9               | 18 | 18     | 36 | 100 | 4     | B        | ●      |
| HM-4B-R10.0 |   | 10              | 20 | 20     | 40 | 100 | 4     | B        | ●      |

● Ex stock ○ On demand

\* With internal cooling

## Application field

| P | M | K | N | S | H |
|---|---|---|---|---|---|
|   |   |   |   |   | ✓ |

✓ Very suitable

✓ Suitable

System code > B268

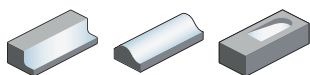
Cutting data > B436

Nonstandard order > B477

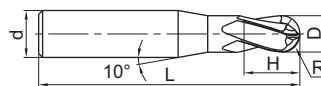
## Ball nose cutter long shank

## Hard machining

### HM-4BL



- Factory standard
- Centre cutting
- Helix angle 35°



| Article      | * | Dimensions [mm] |    |        |    |     | Teeth | Geometry | Grade |
|--------------|---|-----------------|----|--------|----|-----|-------|----------|-------|
|              |   | R               | D  | d (h6) | H  | L   |       |          |       |
| HM-4BL-R1.5  |   | 1.5             | 3  | 6      | 6  | 75  | 4     | A        | ●     |
| HM-4BL-R2.0  |   | 2               | 4  | 6      | 8  | 75  | 4     | A        | ●     |
| HM-4BL-R2.5  |   | 2.5             | 5  | 6      | 10 | 75  | 4     | A        | ●     |
| HM-4BL-R3.0  |   | 3               | 6  | 6      | 12 | 75  | 4     | B        | ●     |
| HM-4BL-R4.0  |   | 4               | 8  | 8      | 16 | 100 | 4     | B        | ●     |
| HM-4BL-R5.0  |   | 5               | 10 | 10     | 20 | 100 | 4     | B        | ●     |
| HM-4BL-R6.0  |   | 6               | 12 | 12     | 24 | 100 | 4     | B        | ●     |
| HM-4BL-R7.0  |   | 7               | 14 | 14     | 28 | 100 | 4     | B        | ●     |
| HM-4BL-R8.0  |   | 8               | 16 | 16     | 32 | 150 | 4     | B        | ●     |
| HM-4BL-R9.0  |   | 9               | 18 | 18     | 36 | 150 | 4     | B        | ●     |
| HM-4BL-R10.0 |   | 10              | 20 | 20     | 40 | 150 | 4     | B        | ●     |

● Ex stock ○ On demand

\* With internal cooling

### Application field

| P | M | K | N | S | H |
|---|---|---|---|---|---|
|   |   |   |   |   | ✓ |

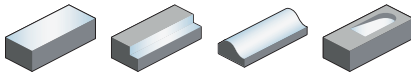
✓ Very suitable

✓ Suitable

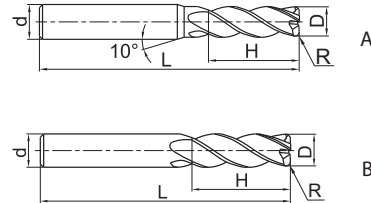
## Torus mill

## Hard machining

## HM-4R



- Factory standard
- Centre cutting
- Helix angle 35°



| Article         | * | Dimensions [mm] |    |        |    |    | Teeth | Geometry | Grade<br>KMG555 |
|-----------------|---|-----------------|----|--------|----|----|-------|----------|-----------------|
|                 |   | R               | D  | d (h6) | H  | L  |       |          |                 |
| HM-4R-D3.0R0.2  |   | 0.2             | 3  | 4      | 8  | 50 | 4     | A        | ●               |
| HM-4R-D4.0R0.3  |   | 0.3             | 4  | 4      | 10 | 50 | 4     | B        | ●               |
| HM-4R-D4.0R0.5  |   | 0.5             | 4  | 4      | 10 | 50 | 4     | B        | ●               |
| HM-4R-D5.0R0.5  |   | 0.5             | 5  | 6      | 13 | 50 | 4     | A        | ●               |
| HM-4R-D5.0R1.0  |   | 1               | 5  | 6      | 13 | 50 | 4     | A        | ●               |
| HM-4R-D6.0R0.5  |   | 0.5             | 6  | 6      | 16 | 50 | 4     | B        | ●               |
| HM-4R-D6.0R1.0  |   | 1               | 6  | 6      | 16 | 50 | 4     | B        | ●               |
| HM-4R-D8.0R0.5  |   | 0.5             | 8  | 8      | 20 | 60 | 4     | B        | ●               |
| HM-4R-D8.0R1.0  |   | 1               | 8  | 8      | 20 | 60 | 4     | B        | ●               |
| HM-4R-D10.0R0.5 |   | 0.5             | 10 | 10     | 25 | 75 | 4     | B        | ●               |
| HM-4R-D10.0R1.0 |   | 1               | 10 | 10     | 25 | 75 | 4     | B        | ●               |
| HM-4R-D10.0R2.0 |   | 2               | 10 | 10     | 25 | 75 | 4     | B        | ●               |
| HM-4R-D10.0R3.0 |   | 3               | 10 | 10     | 25 | 75 | 4     | B        | ●               |
| HM-4R-D12.0R0.5 |   | 0.5             | 12 | 12     | 30 | 75 | 4     | B        | ●               |
| HM-4R-D12.0R1.0 |   | 1               | 12 | 12     | 30 | 75 | 4     | B        | ●               |
| HM-4R-D12.0R2.0 |   | 2               | 12 | 12     | 30 | 75 | 4     | B        | ●               |
| HM-4R-D12.0R3.0 |   | 3               | 12 | 12     | 30 | 75 | 4     | B        | ●               |

● Ex stock ○ On demand

\* With internal cooling

## Application field

| P | M | K | N | S | H |
|---|---|---|---|---|---|
|   |   |   |   |   | ✓ |

✓ Very suitable

✓ Suitable

System code > B268

Cutting data > B436

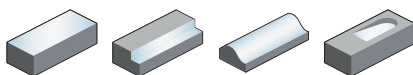
Nonstandard order > B477

A

## Torus mill short cutting edge

## Hard machining

### HM-4RF



- Factory standard
- Centre cutting
- Helix angle 35°



B

| Article          | * | Dimensions [mm] |    |        |    |    | Teeth | Grade |
|------------------|---|-----------------|----|--------|----|----|-------|-------|
|                  |   | R               | D  | d (h6) | H  | L  |       |       |
| HM-4RF-D6.0R0.5  |   | 0.5             | 6  | 6      | 6  | 50 | 4     | ◦     |
| HM-4RF-D6.0R1.0  |   | 1               | 6  | 6      | 6  | 50 | 4     | ◦     |
| HM-4RF-D8.0R0.5  |   | 0.5             | 8  | 8      | 8  | 60 | 4     | ◦     |
| HM-4RF-D8.0R1.0  |   | 1               | 8  | 8      | 8  | 60 | 4     | ◦     |
| HM-4RF-D10.0R1.0 |   | 1               | 10 | 10     | 10 | 75 | 4     | ◦     |
| HM-4RF-D10.0R2.0 |   | 2               | 10 | 10     | 10 | 75 | 4     | ◦     |
| HM-4RF-D12.0R0.5 |   | 0.5             | 12 | 12     | 12 | 75 | 4     | ◦     |
| HM-4RF-D12.0R1.0 |   | 1               | 12 | 12     | 12 | 75 | 4     | ◦     |
| HM-4RF-D12.0R2.0 |   | 2               | 12 | 12     | 12 | 75 | 4     | ◦     |

● Ex stock ◦ On demand

\* With internal cooling

C

### Application field

| P | M | K | N | S | H |
|---|---|---|---|---|---|
|   |   |   |   |   | ✓ |

✓ Very suitable

✓ Suitable

Drilling

D

Technical  
Information

E

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System code > B268

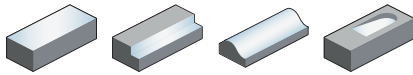
Cutting data > B436

Nonstandard order > B477

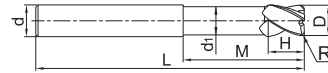
## Torus mill long shank

## Hard machining

### HM-4RP



- Factory standard
- Centre cutting
- Helix angle 35°



| Article          | * | Dimensions [mm] |    |        |                |    |    |     | Teeth | Grade |
|------------------|---|-----------------|----|--------|----------------|----|----|-----|-------|-------|
|                  |   | R               | D  | d (h6) | d <sub>1</sub> | H  | M  | L   |       |       |
| HM-4RP-D6.0R0.5  |   | 0.5             | 6  | 6      | 5.8            | 6  | 18 | 75  | 4     | ○     |
| HM-4RP-D6.0R1.0  |   | 1               | 6  | 6      | 5.8            | 6  | 18 | 75  | 4     | ○     |
| HM-4RP-D8.0R0.5  |   | 0.5             | 8  | 8      | 7.8            | 8  | 24 | 100 | 4     | ○     |
| HM-4RP-D8.0R1.0  |   | 1               | 8  | 8      | 7.8            | 8  | 24 | 100 | 4     | ○     |
| HM-4RP-D10.0R0.5 |   | 0.5             | 10 | 10     | 9.6            | 10 | 30 | 100 | 4     | ○     |
| HM-4RP-D10.0R1.0 |   | 1               | 10 | 10     | 9.6            | 10 | 30 | 100 | 4     | ○     |
| HM-4RP-D10.0R2.0 |   | 2               | 10 | 10     | 9.6            | 10 | 30 | 100 | 4     | ○     |
| HM-4RP-D12.0R0.5 |   | 0.5             | 12 | 12     | 11.5           | 12 | 36 | 100 | 4     | ○     |
| HM-4RP-D12.0R1.0 |   | 1               | 12 | 12     | 11.5           | 12 | 36 | 100 | 4     | ○     |
| HM-4RP-D12.0R2.0 |   | 2               | 12 | 12     | 11.5           | 12 | 36 | 100 | 4     | ○     |
| HM-4RP-D16.0R1.0 |   | 1               | 16 | 16     | 15.5           | 16 | 40 | 150 | 4     | ●     |
| HM-4RP-D16.0R2.0 |   | 2               | 16 | 16     | 15.5           | 16 | 40 | 150 | 4     | ○     |

● Ex stock ○ On demand

\* With internal cooling

| Application field |   |   |   |   |   |
|-------------------|---|---|---|---|---|
| P                 | M | K | N | S | H |
|                   |   |   |   |   | ✓ |

✓ Very suitable

✓ Suitable

System code > B268

Cutting data > B436

Nonstandard order > B477



## Notes

**A**

Turning

**B**

Milling

**C**

Drilling

**D**

Technical  
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