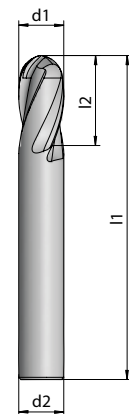
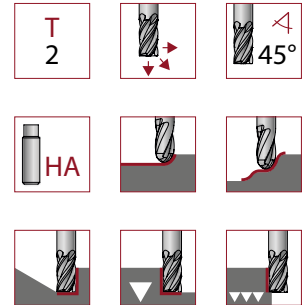


# BALL END MILLS

## ALULINE | K 1080 | K 1081

| Short version |    |    |     |    |
|---------------|----|----|-----|----|
| Article no.   | d1 | d2 | l1  | l2 |
| 10800300      | 3  | 6  | 60  | 8  |
| 10800400      | 4  | 6  | 70  | 10 |
| 10800500      | 5  | 6  | 70  | 14 |
| 10800600      | 6  | 6  | 98  | 16 |
| 10800800      | 8  | 8  | 98  | 24 |
| 10801000      | 10 | 10 | 98  | 30 |
| 10801200      | 12 | 12 | 98  | 36 |
| 10801600      | 16 | 16 | 128 | 48 |
| 10802000      | 20 | 20 | 140 | 60 |
| 10802500      | 25 | 25 | 150 | 75 |

| Long version |    |    |     |     |
|--------------|----|----|-----|-----|
| Article no.  | d1 | d2 | l1  | l2  |
| 10810600     | 6  | 6  | 120 | 24  |
| 10810800     | 8  | 8  | 120 | 32  |
| 10811000     | 10 | 10 | 150 | 40  |
| 10811200     | 12 | 12 | 150 | 48  |
| 10811600     | 16 | 16 | 180 | 64  |
| 10812000     | 20 | 20 | 200 | 80  |
| 10812500     | 25 | 25 | 200 | 100 |
| 10813200     | 32 | 32 | 250 | 128 |



|                    |                                     |
|--------------------|-------------------------------------|
| Ball track milling | $a_p \times a_e = 0,5d \times 1d$   |
| Copy milling       | $a_p \times a_e = 0,5d \times 0,5d$ |



| Cutting data for short version |  | Ball track           | Copy     |
|--------------------------------|--|----------------------|----------|
| Material                       | N/mm <sup>2</sup>                          | v <sub>c</sub> m/min |          |
| <b>N</b>                       | Aluminum Si content 0,5–9% 3.1645   3.2163 | –                    | 500–2000 |
|                                | Aluminum Si content 10–15% 3.2523          | –                    | 500–1300 |
|                                | Copper/ brass/ bronze 2.0321   2.1030      | –                    | 230      |
|                                | Medium hard/ soft plastics                 | –                    | 200–300  |

| d1 | Ball track | Copy  |
|----|------------|-------|
|    | fz mm      |       |
| 3  | 0,030      | 0,020 |
| 4  | 0,040      | 0,030 |
| 5  | 0,045      | 0,030 |
| 6  | 0,055      | 0,040 |
| 8  | 0,075      | 0,050 |
| 10 | 0,090      | 0,065 |
| 12 | 0,105      | 0,075 |
| 16 | 0,150      | 0,100 |
| 20 | 0,160      | 0,110 |
| 25 | 0,170      | 0,120 |
| 32 | 0,180      | 0,120 |