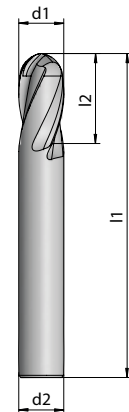
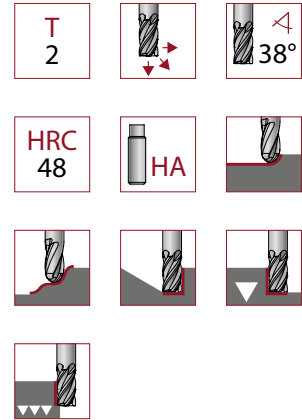


BALL END MILLS

POWERLINE | K 1010

Short version				
Article no.	d1	d2	l1	l2
10100300	3	6	57	7
10100400	4	6	57	8
10100500	5	6	57	10
10100600	6	6	57	10
10100800	8	8	63	16
10101000	10	10	72	19
10101200	12	12	83	22
10101600	16	16	92	30
10101800	18	18	104	34
10102000	20	20	104	38

Long version				
Article no.	d1	d2	l1	l2
10100301	3	3	80	7
10100401	4	4	80	8
10100501	5	5	80	10
10100601	6	6	100	10
10100801	8	8	100	16
10101001	10	10	100	19
10101201	12	12	120	22



Ball track milling	$a_p \times a_e = 0,1d \times 0,3d$
Copy milling	$a_p \times a_e = 0,65d \times 1d$



Cutting data for short version		Ball track	Copy
Material	N/mm ²	v _c m/min	
P Gen. structural/ case hard. steels 1.0037 1.0570 1.0503 1.7131 Tool/ tempering steels 1.2367 1.2379 1.7225 Alloyed/ cold work steels 1.2312 1.2767 1.3505 1.7707	< 800	170	120
	< 1100	130	90
	< 1400	90	80
N Copper/ brass/ bronze 2.0321 2.1030 Medium hard/ soft plastics	-	230	150
	-	200-300	180-250

	Ball track	Copy
d1	fz mm	
3	0,030	0,020
4	0,040	0,025
5	0,050	0,035
6	0,060	0,040
8	0,080	0,045
10	0,080	0,050
12	0,100	0,070
14	0,100	0,070
16	0,100	0,070
18	0,100	0,070
20	0,100	0,070