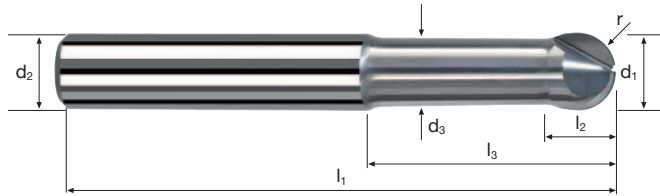
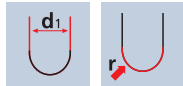


Kugelpkopfräser Sphero-CBN

Zylindrischer Hals, 3xd

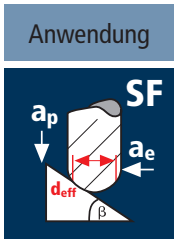


CBN λ 0°
 γ 0°



HRC 48-56 HRC 56-60 HRC > 60 HSS

Beispiel: Bestell-Nr.		Beschichtung		Artikel-Nr.		ø-Code					
				31700		.220					
ø Code	d1 0/-0.01	d2 h5	d3	l1	l2	l3	r ±0.005	α	z		
.220	4	6	3.7	80	3.2	12	2.0	4.0°	2	●	
.260	5	6	4.6	80	4.0	15	2.5	2.0°	2	●	
.300	6	6	5.5	80	4.8	20	3.0	0.0°	2	●	
.391	8	8	7.4	100	6.4	26	4.0	0.0°	2	●	
.450	10	10	9.2	100	8.0	31	5.0	0.0°	2	●	
.501	12	12	11.0	120	9.6	37	6.0	0.0°	2	●	



Werkstoff

Werkzeugstahl gehärtet
52 - 56 HRC

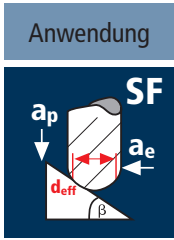
d1 [mm]	z	v _c [m/min]	f _z [mm]	a _p [mm]	a _e [mm]	d _{eff} [mm]	n [min ⁻¹]	v _f [mm/min]	β [°]
4	2	700	0.020	0.014	0.022	2.40	60000	2400	30°
5	2	700	0.025	0.016	0.024	2.97	60000	3000	30°
6	2	700	0.030	0.018	0.026	3.55	60000	3600	30°
8	2	700	0.040	0.020	0.030	4.67	47715	3815	30°
10	2	700	0.040	0.022	0.034	5.79	38485	3080	30°
12	2	700	0.050	0.026	0.038	6.94	32105	3210	30°

Werkzeugstahl gehärtet
56 - 60 HRC

4	2	650	0.020	0.014	0.022	2.40	60000	2400	30°
5	2	650	0.025	0.016	0.024	2.97	60000	3000	30°
6	2	650	0.025	0.018	0.026	3.55	58285	2915	30°
8	2	650	0.035	0.020	0.030	4.67	44305	3100	30°
10	2	650	0.035	0.022	0.034	5.79	35735	2500	30°
12	2	650	0.045	0.026	0.038	6.94	29815	2685	30°

Werkzeugstahl gehärtet
> 60 HRC

4	2	600	0.015	0.014	0.022	2.40	60000	1800	30°
5	2	600	0.020	0.016	0.024	2.97	60000	2400	30°
6	2	600	0.025	0.018	0.026	3.55	53800	2690	30°
8	2	600	0.030	0.020	0.030	4.67	40900	2455	30°
10	2	600	0.030	0.022	0.034	5.79	32985	1980	30°
12	2	600	0.040	0.026	0.038	6.94	27520	2200	30°



Werkstoff

Werkzeugstahl gehärtet
52 - 56 HRC

d1 [mm]	z	v _c [m/min]	f _z [mm]	a _p [mm]	a _e [mm]	d _{eff} [mm]	n [min ⁻¹]	v _f [mm/min]	β [°]
4	2	700	0.020	0.022	0.014	3.72	59900	2395	60°
5	2	700	0.025	0.024	0.016	4.63	48125	2405	60°
6	2	700	0.030	0.026	0.018	5.55	40150	2410	60°
8	2	700	0.040	0.030	0.020	7.37	30235	2420	60°
10	2	700	0.040	0.034	0.022	9.18	24275	1940	60°
12	2	700	0.050	0.038	0.026	11.00	20255	2025	60°

Werkzeugstahl gehärtet
56 - 60 HRC

4	2	650	0.020	0.022	0.014	3.72	55620	2225	60°
5	2	650	0.025	0.024	0.016	4.63	44690	2235	60°
6	2	650	0.025	0.026	0.018	5.55	37280	1865	60°
8	2	650	0.035	0.030	0.020	7.37	28075	1965	60°
10	2	650	0.035	0.034	0.022	9.18	22540	1580	60°
12	2	650	0.045	0.038	0.026	11.00	18810	1695	60°

Werkzeugstahl gehärtet
> 60 HRC

4	2	600	0.015	0.022	0.014	3.72	51340	1540	60°
5	2	600	0.020	0.024	0.016	4.63	41250	1650	60°
6	2	600	0.025	0.026	0.018	5.55	34415	1720	60°
8	2	600	0.030	0.030	0.020	7.37	25915	1555	60°
10	2	600	0.030	0.034	0.022	9.18	20805	1250	60°
12	2	600	0.040	0.038	0.026	11.00	17365	1390	60°