

Four Flute Ball Nose 四齿球头标准型

SF

TYPE
N

HRC
60

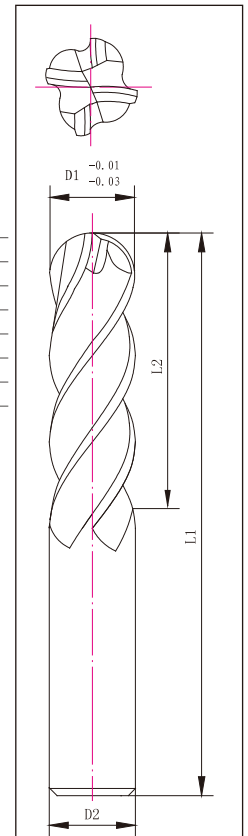
35°

RUN
OUT
<0.02

R
±0.01

Type & Specifications/类型与规格

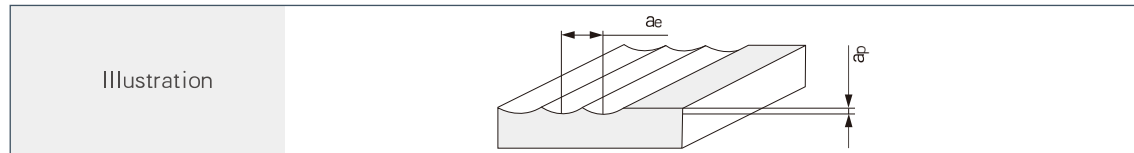
D1	D2 h6	L2 js14	L1 js14	Flute No.	Order No.
R1.0	4	4	50	4	P1980502020
R1.5	4	6	50	4	P1980503020
R2.0	4	8	50	4	P1980504020
R1.0	6	6	50	4	P1980505020
R1.5	6	8	50	4	P1980506020
R2.0	6	10	50	4	P1980507020
R2.5	6	12	50	4	P1980508020
R3.0	6	12	50	4	P1980509020
R4.0	8	20	60	4	P1980510020
R5.0	10	25	75	4	P1980511020
R6.0	12	25	75	4	P1980512020
R7.0	14	35	90	4	P1980513020
R8.0	16	35	100	4	P1980514020
R9.0	18	40	100	4	P1980515020
R10.0	20	40	100	4	P1980516020



Carbide End Mills

Recommendation/推荐切削条件

Diameter D1 (mm)	Hardened Steel HRC45~55		Hardened Steel HRC55~60	
	Speed n (R/min)	Feed Vf (mm/min)	Speed n (R/min)	Feed Vf (mm/min)
R3.0	8800	1530	6380	980
R4.0	6600	1375	4840	880
R5.0	5280	1240	3850	770
R6.0	4400	1110	3190	660
R8.0	3630	960	2630	480
R9.0	2940	760	2120	470
R10.0	2900	740	2105	460
ap (Depth)	ap=0.1D		ap=0.1D	
ae (Width)	ae=0.2D		ae=0.1D	



- ⊙ Please use rigid and precision equipments and chucks
- ⊙ Be in climb milling. Please lower the recommendations simultaneously in case cutting tools shake badly
- ⊙ Please use suitable coolants

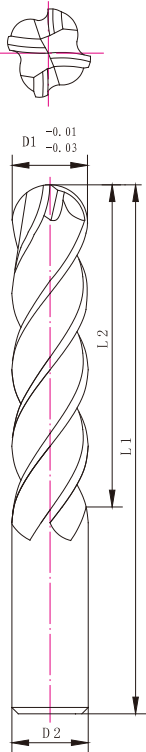
Work Materials/被加工材质

Steels			Cast Iron	Aluminium Alloys	Copper Alloys	Stainless Steel	Titanium Alloys	Graphite
<HRC45	<HRC60	<HRC65						
○	⊙		○			○		
⊙ Preferential			○ Suitable					

Four Flute Ball Nose Long Length 四齿球头加长型



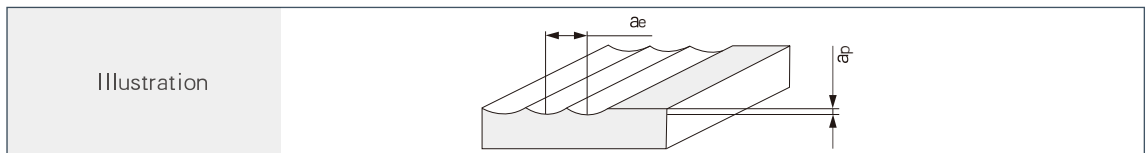
Type & Specifications/类型与规格



D1	D2 h6	L2 js14	L1 js14	Flute No.	Order No.
R0.5	4	4	60	4	P1982601020
R0.75	4	6	60	4	P1982602020
R1.0	4	8	60	4	P1982603020
R1.25	4	10	60	4	P1982604020
R1.5	4	12	60	4	P1982605020
R1.75	4	12	60	4	P1982606020
R2.0	4	15	60	4	P1982607020
R2.25	6	20	75	4	P1982608020
R2.5	6	25	75	4	P1982609020
R2.75	6	25	75	4	P1982610020
R3.0	6	25	75	4	P1982611020
R3.5	8	30	75	4	P1982612020
R4.0	8	30	75	4	P1982613020
R4.5	10	40	100	4	P1982614020
R5.0	10	40	100	4	P1982615020
R6.0	12	45	100	4	P1982616020
R7.0	14	45	100	4	P1982617020
R8.0	16	60	150	4	P1982618020
R9.0	18	60	150	4	P1982619020
R10.0	20	60	150	4	P1982620020

Recommendation/推荐切削条件

Diameter D1 (mm)	Hardened Steel HRC45~55		Hardened Steel HRC55~60	
	Speed n (R/min)	Feed Vf (mm/min)	Speed n (R/min)	Feed Vf (mm/min)
R3.0	6400	1112	4640	712
R4.0	4800	1000	3520	640
R5.0	3840	904	2800	560
R6.0	3200	808	2320	480
R8.0	2400	625	1740	350
R9.0	2130	600	1545	340
R10.0	1920	540	1390	335
ap (Depth)	ap=0.1D		ap=0.07D	
ae (Width)	ae=0.3D		ae=0.21D	



- ⊙ Please optimize the over-hang
- ⊙ Be in climb milling. Please lower the recommendations simultaneously in case cutting tools shake badly
- ⊙ Please use suitable coolants

Work Materials/被加工材质

Steels			Cast Iron	Aluminium Alloys	Copper Alloys	Stainless Steel	Titanium Alloys	Graphite
<HRC45	<HRC60	<HRC65						
○	⊙		○			○		
⊙ Preferential ○ Suitable								

Four Flute Ball Nose Standard

四齿球头标准型



Type & Specifications/类型与规格

D1	D2	L2	L1	Flute No.	Order No.
h10	h6	js14	js14		
1.0	3	3	38	4	1980530020
1.5	3	5	38	4	1980530520
2.0	3	6	38	4	1980531020
2.5	3	7	38	4	1980531520
3.0	3	7	38	4	1980532020
3.5	4	10	50	4	1980532520
4.0	4	10	50	4	1980533020
5.0	5	11	50	4	1980533520
6.0	6	13	57	4	1980534020
7.0	8	13	63	4	1980534520
8.0	8	16	63	4	1980535020
9.0	10	16	72	4	1980535520
10.0	10	19	72	4	1980536020
12.0	12	22	83	4	1980536520
14.0	14	22	83	4	1980537020
16.0	16	26	92	4	1980537520
18.0	18	26	92	4	1980538020
20.0	20	32	104	4	1980538520

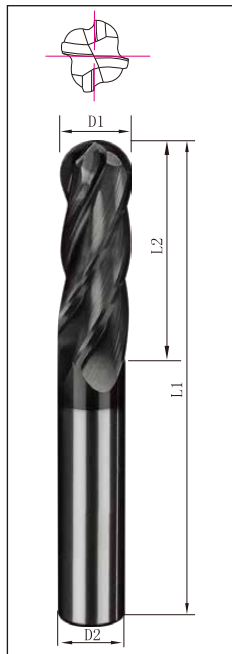


Four Flute Ball Nose Long Length

四齿球头加长型



Type & Specifications / 类型与规格



D1	D2 h6	L2 js14	L1 js14	Flute No.	Order No.
3.0	3	15	57	4	1982641120
4.0	4	19	57	4	1982641620
5.0	5	25	63	4	1982642120
6.0	6	25	75	4	1982642620
8.0	8	30	75	4	1982643120
10.0	10	35	90	4	1982643620
12.0	12	45	100	4	1982644120
14.0	14	45	100	4	1982644620
16.0	16	50	100	4	1982645120
18.0	18	50	100	4	1982645620
20.0	20	60	120	4	1982646120
25.0	25	60	120	4	1982646620

