

## 公司简介



浙江方大合金科技有限公司，作为中国五金行业龙头企业方大控股有限公司的控股子公司，成立于2012年，是一家致力于生产适用于多个行业用硬质合金产品，集设计，开发，生产销售于一体的生产企业。特别是硬质合金电锤钻头，木工刀具，锯齿片，开孔器，矿山用钎片，球齿，棒材，板材，旋转锉，非标等复杂产品，在国内外享有盛誉。产品远销欧美，中东，东南亚，非洲等国家和地区，深受广大客户的欢迎和信赖。

依托母公司积聚的实力，我司装备了整套生产高档硬质合金所必需的生产，研发，检测设备。检测设备齐全，检验方法科学，管理先进。同时本公司技术力量雄厚，拥有一批经验丰富的生产技术骨干，还聘请了行业内经验丰富的粉料，模具，压制，烧结等高级工程师和教授级高工，他们在各自的领域都有着几十年的技术生产管理经验，为我司生产，研发高质量以及稳定质量的硬质合金产品打下了坚实的基础。目前公司已拥有五项专利，具有年产600吨各种类型的硬质合金制品的能力。

公司本着“以客户为中心，为用户提供全方位服务”为原则，提供各种以客户要求为中心设计生产的产品。同时，根据我司所具备的开发经验，为客户打造相关领域的产品。

## **C**ompany Overview



Fangda Cemented Carbide Technology Co., Ltd(FDCC), a wholly owned subsidiary of Fangda Holding Co., Ltd-leading company in the field of hardware in china was set up in 2001.It specializes in manufacturing, designing, R&D, producing and selling tungsten carbide products. Its tungsten carbide tips for wood-cutting tools, saw tips, tips for hollow saw, tips for hammer drill bit , tips for coal mining tools, buttons for DTH button bit, rods, strips, rotary bur heads, irregular & - complicated products, ect enjoy a good reputation in china. The products are sold to countries and areas in Europe and America, Middle East, Eastern-South Asia, Africa, etc and are warmly welcomed and trusted by the customers.

Aiming at customers' needs and provide perfect service for customers as its policy. FDCC offers the service to manufacture different kinds of tungsten carbide products according to the customers' requirements. Also, with its rich experience, the company also serves to design and manufacture specialized products for customers. FDCC warmly welcome customers domestically and abroad.

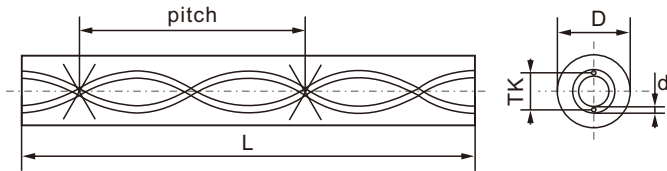
**硬质合金牌号\性能\应用 Carbide Grade\Property\Application**

国标牌号 GB Grade	ISO牌号 ISO Grade	硬度 HRA≥	密度 (g/cm <sup>3</sup> )≥	抗弯强度 (N/mm <sup>2</sup> )≥	应用Application
YG6X-H	K05	93.2	14.88	3100	<p>适用于铸铁及金属的精加和半精加工是制作整体硬质合金孔加工工具的优良材料,也适用于木工刀具。</p> <p>Suitable for precision machining and semi precision machining of cast iron and metal, it is an excellent material for making integral cemented carbide hole machining tools. Also suitable for woodworking router bit.</p>
FD10	K20-K30	91.2	14.38	3000	<p>细晶粒,适用于各种铣刀及孔加工刀具。</p> <p>Fine grain, suitable for various milling cutters and hole processing tools.</p>
FK30	K20-K30	91.6	14.45	3500	<p>亚微细晶粒,韧性与耐磨性兼备,适用于制作各种硬质合金整体工具。通用性强,可用于钢、铸铁、不锈钢、耐热钢、镍基及钛合金等材料的加工。综合性能及稳定性好,是麻花钻头、立铣刀等整体合金刀具材料之首选。</p> <p>Sub micro grain, with both toughness and wear resistance, suitable for making various hard alloy integral tools. Strong versatility, suitable for processing materials such as steel, cast iron, stainless steel, heat-resistant steel, nickel based and titanium alloys. With good comprehensive performance and stability, it is the first choice of integral alloy tool materials such as Fried Dough Twists drills and end mills.</p>

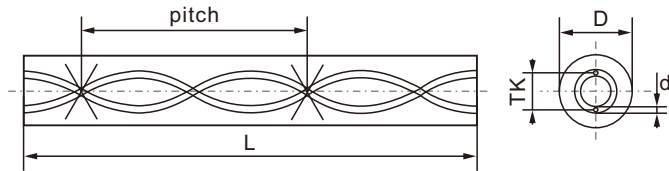
硬质合金牌号\性能\应用 Carbide Grade\Property\Application

国标牌号 GB Grade	ISO牌号 ISO Grade	硬度 HRA≥	密度 (g/cm <sup>3</sup> )≥	抗弯强度 (N/mm <sup>2</sup> )≥	应用Application
FK30U	K20-K30	91.8	14.40	3800	<p>亚微细晶粒,耐磨性较好,具有非常广泛的用途。适合对不锈钢和耐高温钢、铬-镍-钴-钛合金钢、合成材料、非铁材料、合金钢等进行铣削、钻孔甚至木材加工。</p> <p>Sub micro grain size with good wear resistance. It has a very wide range of uses. Suitable for milling, drilling, and even wood processing of stainless steel and high-temperature resistant steel, chromium nickel cobalt titanium alloy steel, synthetic materials, non-ferrous materials, alloy steel, etc.</p>
FK30S	K20-K30	92.8	14.35	4000	<p>超细晶粒合金,适用于制作各类孔加工刀具,用于加工硬铸铁、耐热合金钢、有色金属及各类塑料材料、碳纤维等非金属;同时也是制作涂层刀具的优秀基体。</p> <p>Ultra micro grain size, suitable for making various hole processing tools, used for processing hard cast iron, heat-resistant alloy steel, non-ferrous metals, various plastic materials, carbon fiber and other non-metals; It is also an excellent substrate for making coated cutting tools.</p>
FK40S	K30-K40	92.5	14.15	4200	<p>超细晶粒合金,耐磨性、韧性均较好,特别适合用于制作高速铣削钻头,特别适合模具制造。适合于低合金钢、高合金钢、钛合金、奥氏体不锈钢、耐热合金、玻璃纤维强化塑料等。</p> <p>Ultra micro grain size with good wear resistance and toughness, especially suitable for making high-speed milling drill bits and mold manufacturing. Suitable for low alloy steel, high alloy steel, titanium alloy, austenitic stainless steel, heat-resistant alloy, glass fiber reinforced plastic, etc.</p>

30度双孔螺旋圆棒  
With Two coolant holes, 30°

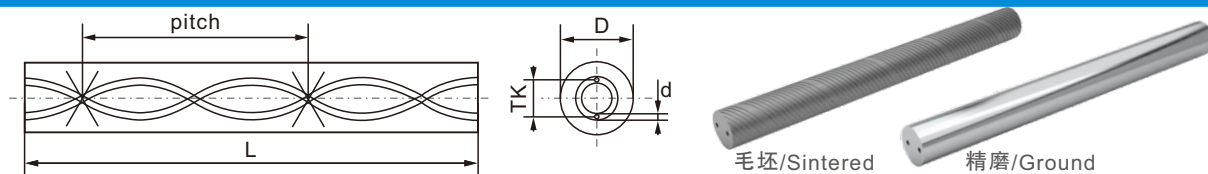


直径 ØD	公差 TOL.			孔径 Ød	公差 TOL.	孔距 TKØ	公差 TOL.	导程 Lead	长度 Length
	毛坯 Sintered	粗磨 Rough Ground	精磨 Fully Ground						
D(mm)	毛坯 Sintered	粗磨 Rough Ground	精磨 Fully Ground	d(mm)	mm	TK(mm)	mm	PITCH	L(+5mm)
3.3	0.4~1.0	0.15~0.35	φ3(h6)	0.40	+/-0.10	1.20	+/-0.10	16.32	330
4.3	0.4~1.0	0.15~0.35	φ4(h6)	0.60	+/-0.10	1.30	+/-0.10	21.77	330
4.3	0.4~1.0	0.15~0.35	φ4(h6)	0.50	+/-0.10	1.65	+/-0.15	21.77	330
4.3	0.4~1.0	0.15~0.35	φ4(h6)	0.70	+/-0.10	2.10	+/-0.15	21.77	330
5.3	0.4~1.0	0.15~0.35	φ5(h6)	0.70	+/-0.10	2.40	+/-0.15	27.21	330
6.3	0.5~1.1	0.15~0.45	φ6(h6)	0.50	+/-0.10	1.60	+/-0.15	32.65	330
6.3	0.5~1.1	0.15~0.45	φ6(h6)	0.50	+/-0.10	1.80	+/-0.15	32.65	330
6.3	0.5~1.1	0.15~0.45	φ6(h6)	0.60	+/-0.10	1.30	+/-0.10	32.65	330
6.3	0.5~1.1	0.15~0.45	φ6(h6)	0.70	+/-0.10	2.40	+/-0.15	32.65	330
6.3	0.5~1.1	0.15~0.45	φ6(h6)	0.80	+/-0.10	2.70	+/-0.20	32.65	330
6.3	0.5~1.1	0.15~0.45	φ6(h6)	0.90	+/-0.10	2.60	+/-0.20	32.65	330
7.3	0.5~1.1	0.15~0.45	φ7(h6)	1.00	+/-0.10	3.50	+/-0.30	38.09	330
8.3	0.6~1.2	0.15~0.45	φ8(h6)	0.70	+/-0.10	2.40	+/-0.15	43.53	330
8.3	0.6~1.2	0.15~0.45	φ8(h6)	1.00	+/-0.10	3.10	+/-0.30	43.53	330
8.3	0.6~1.2	0.15~0.45	φ8(h6)	1.00	+/-0.10	3.40	+/-0.30	43.53	330
8.3	0.6~1.2	0.15~0.45	φ8(h6)	1.00	+/-0.10	3.80	+/-0.30	43.53	330
8.3	0.6~1.2	0.15~0.45	φ8(h6)	1.15	+/-0.15	3.70	+/-0.30	43.53	330
8.3	0.6~1.2	0.15~0.45	φ8(h6)	1.25	+/-0.15	3.80	+/-0.30	43.53	330
9.3	0.6~1.2	0.15~0.45	φ9(h6)	0.70	+/-0.10	2.40	+/-0.15	48.97	330
9.3	0.6~1.2	0.15~0.45	φ9(h6)	1.40	+/-0.15	4.50	+/-0.30	48.97	330
10.3	0.6~1.2	0.15~0.45	φ10(h6)	0.80	+/-0.10	2.40	+/-0.15	54.41	330
10.3	0.6~1.2	0.15~0.45	φ10(h6)	1.00	+/-0.10	3.50	+/-0.30	54.41	330
10.3	0.6~1.2	0.15~0.45	φ10(h6)	1.40	+/-0.15	4.50	+/-0.30	54.41	330
10.3	0.6~1.2	0.15~0.45	φ10(h6)	1.30	+/-0.15	4.80	+/-0.30	54.41	330
10.3	0.6~1.2	0.15~0.45	φ10(h6)	1.40	+/-0.15	4.90	+/-0.30	54.41	330
11.3	0.6~1.2	0.15~0.45	φ11(h6)	1.40	+/-0.15	4.90	+/-0.30	59.86	330
11.3	0.6~1.2	0.15~0.45	φ11(h6)	1.40	+/-0.15	5.70	+/-0.40	59.86	330
12.3	0.6~1.2	0.15~0.45	φ12(h6)	1.00	+/-0.10	3.00	+/-0.20	65.30	330
12.3	0.6~1.2	0.15~0.45	φ12(h6)	1.00	+/-0.10	3.50	+/-0.30	65.30	330
12.3	0.6~1.2	0.15~0.45	φ12(h6)	1.00	+/-0.10	3.80	+/-0.30	65.30	330



直径 ØD	公差 TOL.			孔径 Ød	公差 TOL.	孔距 TKØ	公差 TOL.	导程 Lead	长度 Length
	毛坯 Sintered	粗磨 Rough Ground	精磨 Fully Ground						
D(mm)	毛坯 Sintered	粗磨 Rough Ground	精磨 Fully Ground	d(mm)	mm	TK(mm)	mm	PITCH	L(+5mm)
12.3	0.6~1.2	0.15~0.45	φ12(h6)	1.00	+/-0.15	5.85	+/-0.40	65.30	330
12.3	0.6~1.2	0.15~0.45	φ12(h6)	1.00	+/-0.20	5.85	+/-0.40	65.30	330
12.3	0.6~1.2	0.15~0.45	φ12(h6)	1.00	+/-0.20	6.30	+/-0.40	65.30	330
13.3	0.6~1.2	0.15~0.45	φ13(h6)	1.75	+/-0.20	6.10	+/-0.40	70.74	330
14.3	0.6~1.2	0.15~0.45	φ14(h6)	1.00	+/-0.10	4.30	+/-0.30	76.18	330
14.3	0.6~1.2	0.15~0.45	φ14(h6)	1.20	+/-0.15	5.30	+/-0.40	76.18	330
14.3	0.6~1.2	0.15~0.45	φ14(h6)	1.75	+/-0.20	6.70	+/-0.40	76.18	330
14.3	0.6~1.2	0.15~0.45	φ14(h6)	2.00	+/-0.20	6.70	+/-0.40	76.18	330
15.3	0.6~1.2	0.15~0.45	φ15(h6)	1.20	+/-0.15	5.30	+/-0.40	81.62	330
15.3	0.6~1.2	0.15~0.45	φ15(h6)	1.75	+/-0.20	7.30	+/-0.40	81.62	330
16.3	0.6~1.2	0.35~0.65	φ16(h6)	1.20	+/-0.15	5.30	+/-0.40	87.06	330
16.3	0.6~1.2	0.35~0.65	φ16(h6)	1.75	+/-0.20	7.90	+/-0.40	87.06	330
16.3	0.6~1.2	0.35~0.65	φ16(h6)	2.00	+/-0.20	7.90	+/-0.40	87.06	330
17.3	0.8~1.4	0.35~0.65	φ17(h6)	1.75	+/-0.20	6.50	+/-0.40	92.50	330
17.3	0.8~1.4	0.35~0.65	φ17(h6)	1.75	+/-0.20	8.50	+/-0.40	92.50	330
18.3	0.8~1.4	0.35~0.65	φ18(h6)	1.40	+/-0.15	5.90	+/-0.40	97.95	330
18.3	0.8~1.4	0.35~0.65	φ18(h6)	2.00	+/-0.20	9.15	+/-0.40	97.95	330
18.3	0.8~1.4	0.35~0.65	φ18(h6)	2.30	+/-0.25	9.00	+/-0.40	97.95	330
18.3	0.8~1.4	0.35~0.65	φ18(h6)	2.50	+/- 0.3	9.95	+/-0.40	97.95	330
19.3	0.8~1.4	0.35~0.65	φ19(h6)	1.00	+/-0.10	3.80	+/-0.30	103.39	330
19.3	0.8~1.4	0.35~0.65	φ19(h6)	2.00	+/-0.20	9.70	+/-0.40	103.39	330
20.3	0.8~1.4	0.35~0.65	φ20(h6)	0.70	+/-0.10	2.40	+/-0.15	108.83	330
20.3	0.8~1.4	0.35~0.65	φ20(h6)	1.50	+/-0.15	6.60	+/-0.40	108.83	330
20.3	0.8~1.4	0.35~0.65	φ20(h6)	2.00	+/-0.20	7.80	+/-0.40	108.83	330
20.3	0.8~1.4	0.35~0.65	φ20(h6)	2.00	+/-0.20	9.90	+/-0.40	108.83	330
20.3	0.8~1.4	0.35~0.65	φ20(h6)	2.50	+/- 0.3	10.00	+/-0.50	108.83	330
20.3	0.8~1.4	0.35~0.65	φ20(h6)	2.50	+/- 0.3	10.65	+/-0.50	108.83	330
21.3	0.8~1.4	0.35~0.65	φ21(h6)	2.00	+/-0.20	7.90	+/-0.40	114.27	330
21.3	0.8~1.4	0.35~0.65	φ21(h6)	2.00	+/-0.20	10.65	+/-0.50	114.27	330
22.3	0.8~1.4	0.35~0.65	φ22(h6)	1.00	+/-0.10	4.30	+/-0.30	119.71	330

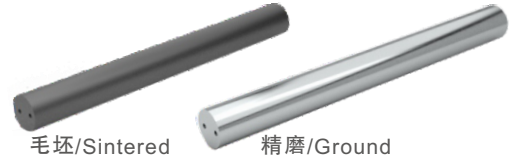
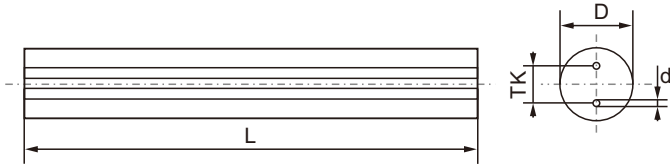




直径 ØD	公差 TOL.			孔径 Ød	公差 TOL.	孔距 TKØ	公差 TOL.	导程 Lead	长度 Length
	毛坯 Sintered	粗磨 Rough Ground	精磨 Fully Ground						
D(mm)	毛坯 Sintered	粗磨 Rough Ground	精磨 Fully Ground	d(mm)	mm	TK(mm)	mm	PITCH	L(+5mm)
4.3	0.4~1.0	0.05~0.35	φ4(h6)	0.50	+/-0.10	1.50	+/-0.15	14.98	330
6.3	0.5~1.1	0.15~0.45	φ6(h6)	0.50	+/-0.10	2.00	+/-0.15	22.46	330
6.3	0.5~1.1	0.15~0.45	φ6(h6)	0.70	+/-0.10	1.90	+/-0.15	22.46	330
8.3	0.6~1.2	0.15~0.45	φ8(h6)	0.65	+/-0.10	2.40	+/-0.15	29.95	330
10.3	0.6~1.2	0.15~0.45	φ10(h6)	0.50	+/-0.10	2.00	+/-0.15	37.44	330
10.3	0.6~1.2	0.15~0.45	φ10(h6)	0.80	+/-0.10	3.20	+/-0.15	37.44	330
12.3	0.6~1.2	0.15~0.45	φ12(h6)	0.90	+/-0.10	3.80	+/-0.30	44.93	330
14.3	0.6~1.2	0.15~0.45	φ14(h6)	1.00	+/-0.10	4.30	+/-0.30	52.42	330
16.3	0.6~1.2	0.35~0.65	φ16(h6)	0.80	+/-0.10	3.20	+/-0.30	59.90	330
16.3	0.6~1.2	0.35~0.65	φ16(h6)	1.20	+/-0.10	5.10	+/-0.30	59.90	330
18.3	0.8~1.4	0.35~0.65	φ18(h6)	1.40	+/-0.15	5.90	+/-0.40	67.39	330
20.3	0.8~1.4	0.35~0.65	φ20(h6)	1.50	+/-0.15	6.60	+/-0.40	74.88	330
22.3	0.8~1.4	0.35~0.65	φ22(h6)	1.70	+/-0.15	7.20	+/-0.40	82.37	330
23.3	0.8~1.4	0.35~0.65	φ23(h6)	1.70	+/-0.20	7.60	+/-0.40	86.11	330
25.3	0.8~1.4	0.35~0.65	φ25(h6)	1.75	+/-0.20	7.60	+/-0.40	93.60	330
28.3	0.8~1.4	0.35~0.65	φ28(h6)	2.00	+/-0.20	8.40	+/-0.40	104.83	330
30.3	0.8~1.4	0.35~0.65	φ30(h6)	2.00	+/-0.20	8.40	+/-0.40	112.32	330
32.3	0.8~1.4	0.35~0.65	φ32(h6)	2.00	+/-0.20	8.40	+/-0.40	119.81	330



双直内冷孔圆棒  
Rods with Two Straight Coolant Holes

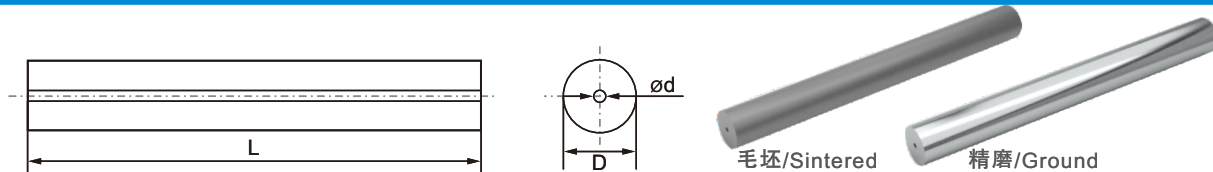


毛坯/Sintered

精磨/Grind

直径 ØD	公差 TOL.		孔径 Ød	公差 TOL.	孔距 TKØ	公差 TOL.	长度 Length
	毛坯 Sintered	精磨 Fully Ground					
D(mm)			d(mm)	mm	TK(mm)	mm	L(+5mm)
4.2	+0.0/+0.2	φ4(h6)	0.80	+/-0.10	1.72	+/-0.20	330
5.2	+0.0/+0.2	φ5(h6)	0.80	+/-0.10	1.92	+/-0.20	330
6.2	+0.0/+0.2	φ6(h6)	1.00	+/-0.10	2.90	+/-0.20	330
7.2	+0.0/+0.3	φ7(h6)	1.00	+/-0.10	3.40	+/-0.30	330
8.2	+0.0/+0.3	φ8(h6)	1.00	+/-0.10	3.85	+/-0.30	330
9.2	+0.0/+0.3	φ9(h6)	1.40	+/-0.15	3.85	+/-0.30	330
10.2	+0.0/+0.3	φ10(h6)	1.40	+/-0.15	4.85	+/-0.30	330
11.2	+0.0/+0.3	φ11(h6)	1.40	+/-0.15	5.85	+/-0.40	330
12.2	+0.1/+0.4	φ12(h6)	1.75	+/-0.20	5.85	+/-0.40	330
13.2	+0.1/+0.4	φ13(h6)	1.75	+/-0.20	5.85	+/-0.40	330
14.2	+0.1/+0.4	φ14(h6)	1.75	+/-0.20	6.85	+/-0.40	330
15.2	+0.1/+0.4	φ15(h6)	2.00	+/-0.20	6.85	+/-0.40	330
16.2	+0.1/+0.5	φ16(h6)	2.00	+/-0.20	7.85	+/-0.40	330
17.2	+0.1/+0.5	φ17(h6)	2.00	+/-0.20	7.85	+/-0.40	330
18.2	+0.1/+0.5	φ18(h6)	2.00	+/-0.20	8.85	+/-0.40	330
19.2	+0.1/+0.5	φ19(h6)	2.00	+/-0.20	8.85	+/-0.40	330
20.2	+0.1/+0.5	φ20(h6)	2.50	+/-0.30	9.80	+/-0.40	330
21.2	+0.1/+0.5	φ21(h6)	2.50	+/-0.30	9.80	+/-0.40	330
22.2	+0.2/+0.6	φ22(h6)	2.50	+/-0.30	10.80	+/-0.50	330
23.2	+0.2/+0.6	φ23(h6)	2.50	+/-0.30	10.80	+/-0.50	330
24.2	+0.2/+0.6	φ24(h6)	3.00	+/-0.30	11.75	+/-0.50	330
25.2	+0.2/+0.6	φ25(h6)	3.00	+/-0.30	11.75	+/-0.50	330
26.2	+0.2/+0.6	φ26(h6)	3.00	+/-0.30	12.75	+/-0.50	330
28.2	+0.2/+0.6	φ28(h6)	3.00	+/-0.30	13.75	+/-0.50	330
30.2	+0.5/+1.1	φ30(h6)	3.00	+/-0.30	13.75	+/-0.50	330
32.2	+0.5/+1.1	φ32(h6)	3.00	+/-0.30	13.75	+/-0.50	330

## 单直内冷孔圆棒 Rods with Central Coolant Hole



直径 ØD	公差 TOL.		孔径 Ød	公差 TOL.	偏心距 mm	长度 Length
D(mm)	毛坯 Sintered	精磨 Fully Ground	d(mm)	mm	mm	L(+5mm)
2.2	+0.0/+0.2	φ2(h6)	0.80	+/-0.10	5.85	330
3.2	+0.0/+0.2	φ3(h6)	0.80	+/-0.10	5.85	330
4.2	+0.0/+0.2	φ4(h6)	0.80	+/-0.10	6.30	330
5.2	+0.0/+0.2	φ5(h6)	1.00	+/-0.10	6.10	330
6.2	+0.0/+0.2	φ6(h6)	1.00	+/-0.10	4.30	330
7.2	+0.0/+0.3	φ7(h6)	1.00	+/-0.10	5.30	330
8.2	+0.0/+0.3	φ8(h6)	1.00	+/-0.10	6.70	330
9.2	+0.0/+0.3	φ9(h6)	1.50	+/-0.15	6.70	330
9.2	+0.0/+0.3	φ9(h6)	2.00	+/-0.20	5.30	330
10.2	+0.0/+0.3	φ10(h6)	1.50	+/-0.15	7.30	330
10.2	+0.0/+0.3	φ10(h6)	2.00	+/-0.20	5.30	330
11.2	+0.0/+0.3	φ11(h6)	2.00	+/-0.20	7.90	330
12.2	+0.1/+0.4	φ12(h6)	1.00	+/-0.10	7.90	330
12.2	+0.1/+0.4	φ12(h6)	1.50	+/-0.15	6.50	330
12.2	+0.1/+0.4	φ12(h6)	2.00	+/-0.20	8.50	330
13.2	+0.1/+0.4	φ13(h6)	2.00	+/-0.20	5.90	330
14.2	+0.1/+0.4	φ14(h6)	2.00	+/-0.20	9.15	330
15.2	+0.1/+0.4	φ15(h6)	2.00	+/-0.20	9.00	330
16.2	+0.1/+0.5	φ16(h6)	2.00	+/-0.20	9.95	330
16.2	+0.1/+0.5	φ16(h6)	3.00	+/-0.30	3.80	330
18.2	+0.1/+0.5	φ18(h6)	3.00	+/-0.30	9.70	330
20.2	+0.1/+0.5	φ20(h6)	2.00	+/-0.20	2.40	330
20.2	+0.1/+0.5	φ20(h6)	3.00	+/-0.30	6.60	330
22.2	+0.2/+0.6	φ22(h6)	3.00	+/-0.30	7.80	330
24.2	+0.2/+0.6	φ24(h6)	3.00	+/-0.30	9.90	330
25.2	+0.2/+0.6	φ25(h6)	3.00	+/-0.30	10.00	330
26.2	+0.2/+0.6	φ26(h6)	3.00	+/-0.30	10.65	330
28.2	+0.2/+0.6	φ28(h6)	3.00	+/-0.30	7.90	330
30.2	+0.5/+1.1	φ30(h6)	3.00	+/-0.30	10.65	330
32.2	+0.5/+1.1	φ32(h6)	3.00	+/-0.30	4.30	330