RUKO
Germany

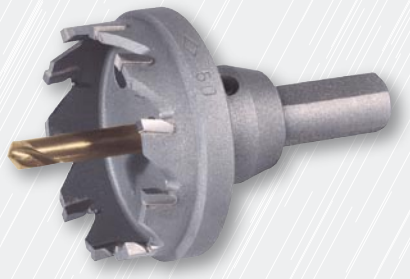
HOLE SAWS

COMPETENCE
IN PRECISION
AND QUALITY

Tungsten carbide hole saws, shallow cut

Cutting edges: tungsten carbide
Material thickness: up to 4 mm
Cutting depth: up to max. 10 mm
Cutting angle: works standard
Right-hand cutting

Suitable for high-alloyed steels such as stainless and acidresistant steel (up to 2 mm), steel and cast steel, non-ferrous and light metals, plastics, reinforced fabrics, plasterboard and light building boards, wood.



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Packing unit:
individual carton

Ø mm	Ø inch	Through dimensions M + PG	Tube dimensions inch	Shank Ø mm	Article no.	Price / each €
16,0	5/8	~ PG 9		10	105 016	
16,5		M 16		10	105 165	
17,0				10	105 017	
18,0				10	105 018	
18,6		PG 11		10	105 186	
19,0	3/4		3/8	10	105 019	
20,0				10	105 020	
20,4	13/16	M 20 / PG 13,5		10	105 204	
21,0				10	105 021	
22,0			1/2	10	105 022	
22,5	7/8	PG 16		10	105 225	
23,0				10	105 023	
24,0	15/16			10	105 024	
25,0				10	105 025	
25,5	1	M 25		10	105 255	
26,0				10	105 026	
27,0	1 1/16			10	105 027	
28,0	1 3/32			10	105 028	
28,3	1 1/8	PG 21		10	105 283	
29,0			3/4	10	105 029	
30,0	1 3/16			10	105 030	
31,0	1 7/32			10	105 031	
32,0	1 1/4			10	105 032	
32,5		M 32		10	105 325	
33,0				10	105 033	
34,0				10	105 034	
35,0	1 3/8		1	10	105 035	
36,0				10	105 036	
37,0	1 7/16	PG 29		10	105 037	
38,0	1 1/2			10	105 038	
39,0				10	105 039	
40,0	1 9/16			10	105 040	
40,5		M 40		10	105 405	
41,0	1 5/8			10	105 041	
42,0				10	105 042	
43,0	1 11/16			10	105 043	
44,0	1 3/4		1 1/4	10	105 044	
45,0				10	105 045	
46,0				10	105 046	
47,0	1 7/8	PG 36		10	105 047	
48,0				10	105 048	
49,0				10	105 049	
50,0	1 31/32			10	105 050	
50,5		M 50		10	105 505	
51,0	2		1 1/2	13	105 051	
52,0				13	105 052	
53,0				13	105 053	
54,0	2 1/8	PG 42		13	105 054	
55,0				13	105 055	
56,0				13	105 056	
57,0	2 1/4			13	105 057	
58,0				13	105 058	
59,0				13	105 059	
60,0	2 3/8	~ PG 48		13	105 060	
63,5	2 1/2	M 63	2	13	105 635	
65,0				13	105 065	

Characteristics:

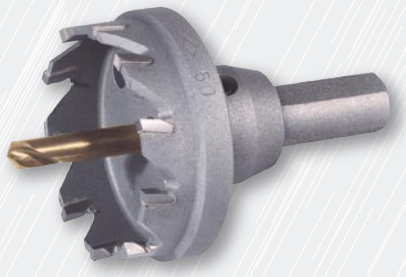
- Pilot drill HSS Co 5
  Split point in accordance with DIN 1412 C
- High rotational precision
- Sturdy construction
- Hole saw and shank in one piece
- Triangular shank
- With cutting-depth limiter
- Positive chipping angle with specially ground cutting edge
- Good chip removal
- Exchangeable centring drill
- Regrindable tungsten-carbide blades
- Unsuitable for percussion-drill operation
- Only slight pressure required to start drilling
- Drill with light, steady pressure
- Avoid pendulum movements while drilling
- Observe table of drilling speeds
- Use prescribed cooling agents

RUKO tungsten-carbide-tipped hole saws can be used in hand and pillar drills. When employing pillar drills, use manual advance only.

Tungsten carbide hole saws, shallow cut

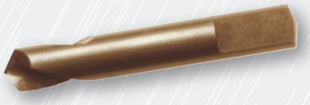
Cutting edges: tungsten carbide
Material thickness: up to 4 mm
Cutting depth: up to max. 10 mm
Cutting angle: works standard
Right-hand cutting

Suitable for high-alloyed steels such as stainless and acidresistant steel (up to 2 mm), steel and cast steel, non-ferrous and light metals, plastics, reinforced fabrics, plasterboard and light building boards, wood.

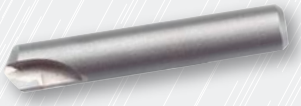


Packing unit:
individual carton

Ø mm	Ø inch	Through dimensions M + PG	Tube dimensions inch	Shank Ø mm	Article no.	Price / each €
68,0				13	105 068	
70,0	2 3/4			13	105 070	
75,0				13	105 075	
80,0				13	105 080	
85,0				13	105 085	
90,0				13	105 090	
95,0	3 3/4			13	105 095	
100,0				13	105 100	
110,0				13	105 110	
120,0				13	105 120	
130,0	5 1/8			13	105 130	
140,0	5 1/2			13	105 140	
150,0				13	105 150	



No. 105 171



No. 105 173

No. 105 174

Pilot drills for tungsten carbide hole saws, shallow cut

Version:
- HSS Co 5 ground blade split point in accordance with DIN 1412 C
- tungsten carbide blade

Right-hand cutting

Suitable for high-alloyed steels such as stainless and acidresistant steel (up to 2 mm), steel and cast steel, non-ferrous and light metals, plastics, reinforced fabrics, plasterboard and light building boards, wood.

Packing unit:
individual carton

Material	Ø mm	Length mm	For hole saws Ø mm	For hole saws cutting depth	Article no.	Price / each €
HSS Co 5	6,0	52	16,0 - 70,0	shallow	105 170	
HSS Co 5	8,0	52	75,0 - 150,0	shallow	105 171	
tungsten carbide	6,0	52	16,0 - 70,0	shallow	105 172	
tungsten carbide	8,0	52	75,0 - 150,0	shallow	105 173	
Ejector spring					105 174	

No. 105 300

Set of tungsten carbide hole saws in plastic case

Description	Article no.	Price / set €
Set of tungsten carbide hole saws with 5 tungsten carbide hole saws Ø 20 mm - 22 mm - 25 mm - 32 mm - 35 mm 1 cutting spray 50 ml 1 extra pilot drill 6,0 mm HSS Co 5	105 300	
Set of tungsten carbide hole saws with 4 tungsten carbide hole saws Ø 16,5 mm ≈ M 16, Ø 20,4 mm ≈ M 20 / PG 13,5 Ø 25,5 mm ≈ M 25, Ø 32,5 mm ≈ M 32 1 cutting spray 50 ml 1 extra pilot drill 6,0 mm HSS Co 5	105 302	

No. 105 302

Tungsten carbide multigrade hole saws MHS

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Cutting edge: tungsten carbide
Material thickness: 2 to 28 mm
Cutting depth: up to 28 mm
Cutting angle: work's standard
Adapter: thread M 18 x 6 P1,5
Right-hand cutting

Suitable for high-alloyed steels such as stainless and acidresistant steel, steel and cast steel (up to 20 mm), non-ferrous and light metals, plastics (up to 28 mm). Applications: drills flat materials, tubes, vaulted surfaces, overlapped holes possible.

Packing unit:
individual plastic pack

Ø mm	Ø inch	Tube dimensions inch	Shank	Article no.	Price / each €
15,0			Ø 13 mm	113 015	
16,0	5/8		Ø 13 mm	113 016	
17,0			Ø 13 mm	113 017	
18,0			Ø 13 mm	113 018	
19,0	3/4	3/8	Ø 13 mm	113 019	
20,0			Ø 13 mm	113 020	
21,0			Ø 13 mm	113 021	
22,0	7/8	1/2	Ø 13 mm	113 022	
23,0			Ø 13 mm	113 023	
24,0	15/16		Ø 13 mm	113 024	
25,0	1		Ø 13 mm	113 025	
26,0			Ø 13 mm	113 026	
27,0	1 1/16		Ø 13 mm	113 027	
28,0	1 3/32		Ø 13 mm	113 028	
29,0	1 1/8	3/4	Ø 13 mm	113 029	
30,0	1 3/16		Ø 13 mm	113 030	
31,0			H1 / H3	113 031	
32,0	1 1/4		H1 / H3	113 032	
33,0			H1 / H3	113 033	
34,0			H1 / H3	113 034	
35,0	1 3/8	1	H1 / H3	113 035	
36,0			H1 / H3	113 036	
37,0			H1 / H3	113 037	
38,0	1 1/2		H1 / H3	113 038	
39,0			H1 / H3	113 039	
40,0			H1 / H3	113 040	
41,0	1 5/8		H1 / H3	113 041	
42,0			H1 / H3	113 042	
43,0	1 11/16		H1 / H3	113 043	
44,0	1 3/4	1 1/4	H1 / H3	113 044	
45,0			H1 / H3	113 045	
46,0			H1 / H3	113 046	
47,0			H1 / H3	113 047	
48,0	1 7/8		H1 / H3	113 048	
49,0			H1 / H3	113 049	
50,0			H1 / H3	113 050	
51,0	2	1 1/2	H1 / H3	113 051	
52,0			H1 / H3	113 052	
53,0			H1 / H3	113 053	
54,0	2 1/8		H1 / H3	113 054	
55,0			H1 / H3	113 055	
56,0			H1 / H3	113 056	
57,0	2 1/4		H1 / H3	113 057	
58,0			H1 / H3	113 058	
59,0			H1 / H3	113 059	
60,0	2 3/8		H1 / H3	113 060	
65,0			H1 / H3	113 065	
68,0			H1 / H3	113 068	
70,0	2 3/4		H1 / H3	113 070	
75,0			H1 / H3	113 075	
80,0			H1 / H3	113 080	
85,0			H1 / H3	113 085	
90,0			H1 / H3	113 090	
95,0	3 3/4		H1 / H3	113 095	
100,0			H1 / H3	113 100	

Characteristics:

- Pilot pin HSS Co 5
  Split point in accordance with DIN 1412 C
- High rotational precision
- Sturdy construction
- **Ø 15 up to 30 mm hole saw and shank in one piece. Complete with pilot pin and wrench.**
- **Ø 31 up to 100 mm hole saws MHS without arbor**
- Adapter with triangular shank
- Considerably improved cutting behaviour was attained by research into the cutting geome try, which has a beneficial effect on cutting performance and drill life.
- Exchangeable pilot pin
- Regrindable tungsten-carbide blades
- Unsuitable for percussion-drill operation
- Only slight pressure required to start drilling
- Drill with light, steady pressure
- Avoid pendulum movements while drilling
- Observe table of drilling speeds (see also tungsten carbide core drill speed table)
- Use prescribed cooling agents

RUKO tungsten carbide multigrade hole saws MHS can be used on:

- Core drilling machines up to 20 mm in steel
- Pillar drilling machines up to 20 mm in steel
- Hand drilling machines up to 6 mm in steel

For cutting depths over 6 mm we recommend to remove the chips from the hole. From Ø 65 mm on we recommend to use our morse taper holder Article no. 113 203.

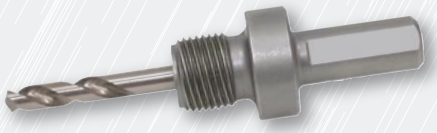
Arbor holders for tungsten carbide multigrade hole saws MHS with thread including pilot drill HSS Co 5

Adapter: thread M 18 x 6 P1,5

For tungsten carbide multigrade hole saws MHS from Ø 31 mm up to Ø 100 mm.

Packing unit:
individual plastic pack

Hole saws Ø mm	Type	Shank	Article no.	Price / each €
31 - 100	H1	Ø 13 mm	113 201	
31 - 100	H3	morse taper no. 2	113 203	



No. 113 201

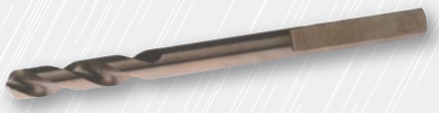
No. 113 203

Pilot drills for tungsten carbide multigrade hole saws MHS

Version:
- HSS Co 5 ground blade split point in accordance with DIN 1412 C
- tungsten carbide blade

Right-hand cutting

Suitable for high-alloyed steels such as stainless and acidresistant steel, steel and cast steel (up to 20 mm), non-ferrous and light metals, plastics (up to 28 mm). Applications: drills flat materials, tubes, vaulted surfaces, overlapped holes possible.



No. 113 216

Packing unit:
individual plastic pack

Material	Ø mm	Length mm	For hole saws MHS Ø mm	Article no.	Price / each €
HSS Co 5	6,0	71	15 - 100	113 216	
Tungsten carbide	6,0	71	15 - 100	113 217	
Ejector spring				113 218	

No. 113 218

Adapter with Weldon shank for tungsten carbide multigrade hole saws in magnetic-stand drilling machine

Packing unit: individual plastic pack

Description	Article no.	Price / each €
Adapter with Weldon shank 3/4" from Ø 31 mm for tungsten carbide multigrade hole saws MHS with thread retainer M18 x 6 P1,5	108 108	
Pilot pin from Ø 31 mm for tungsten carbide multigrade hole saws MHS Ø 6,35 x 95,0 mm	108 110	

No. 108 108

No. 108 110

Arbor holders for tungsten carbide multigrade hole saws in magnetic-stand drilling machine

Packing unit: individual carton

Description	Article no.	Price / each €
MT 2 arbor holder from Ø 31 mm for tungsten carbide multigrade hole saws MHS with thread retainer M18 x 6 P1,5 + Adapter article no. 108 108 + tube + pilot pin article no. 108 110 + cooling bottle article no. 108 101	108 102	
MT 3 arbor holder from Ø 31 mm for tungsten carbide multigrade hole saws MHS with thread retainer M18 x 6 P1,5 + Adapter article no. 108 108 + tube + pilot pin article no. 108 110 + cooling bottle article no. 108 101	108 103	

No. 108 103

Arbor holders with interior cooling for tungsten carbide multigrade hole saws in magnetic-stand drilling machine

NEW

Packing unit: individual carton

Description	Article no.	Price / each €
MT 2 arbor holder with interior cooling from Ø 31 mm for tungsten carbide multigrade hole saws MHS with thread retainer M18 x 6 P1,5 + Adapter article no. 108 108 + pilot pin article no. 108 110	108 104	
MT 3 arbor holder with interior cooling from Ø 31 mm for tungsten carbide multigrade hole saws MHS with thread retainer M18 x 6 P1,5 + Adapter article no. 108 108 + pilot pin article no. 108 110	108 105	

No. 108 105

Recommended cutting speeds for tungsten carbide hole saws

Material:		High carbon struc. steel up to 700 N/mm²	Alloyed steel up to 1000 N/mm²	Cast iron over 250 N/mm²	CuZn alloy	Aluminium alloy up to 11% Si	Thermo-plastics	Duro-plastics	Wood
Vc = m/min		50	35	40	60	60	45	40	50
coolant		Cutting spray	Cutting spray	Compressed air	Compressed air	Cutting spray	Water	Compressed air	Compressed air
Ø mm	Ø inch	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.
16,0	5/8	995	697	796	1194	1194	896	796	995
16,5		965	676	772	1158	1158	869	772	965
17,0		937	656	749	1124	1124	843	749	937
18,0		885	619	708	1062	1062	796	708	885
18,6		856	599	685	1027	1027	770	685	856
19,0	3/4	838	587	670	1006	1006	754	670	838
20,0		796	557	637	955	955	717	637	796
20,4	13/16	781	546	624	937	937	703	624	781
21,0		758	531	607	910	910	682	607	758
22,0		724	507	579	869	869	651	579	724
22,5	7/8	708	495	566	849	849	637	566	708
23,0		692	485	554	831	831	623	554	692
24,0	15/16	663	464	531	796	796	597	531	663
25,0		637	446	510	764	764	573	510	637
25,5	1	624	437	500	749	749	562	500	624
26,0		612	429	490	735	735	551	490	612
27,0	1 1/16	590	413	472	708	708	531	472	590
28,0	1 3/32	569	398	455	682	682	512	455	569
28,3	1 1/8	563	394	450	675	675	506	450	563
29,0		549	384	439	659	659	494	439	549
30,0	1 3/16	531	372	425	637	637	478	425	531
31,0	1 7/32	514	360	411	616	616	462	411	514
32,0	1 1/4	498	348	398	597	597	448	398	498
32,5		490	343	392	588	588	441	392	490
33,0		483	338	386	579	579	434	386	483
34,0		468	328	375	562	562	422	375	468
35,0	1 3/8	455	318	364	546	546	409	364	455
36,0		442	310	354	531	531	398	354	442
37,0	1 7/16	430	301	344	516	516	387	344	430
38,0	1 1/2	419	293	335	503	503	377	335	419
39,0		408	286	327	490	490	367	327	408
40,0	1 9/16	398	279	318	478	478	358	318	398
40,5		393	275	315	472	472	354	315	393
41,0	1 5/8	388	272	311	466	466	350	311	388
42,0		379	265	303	455	455	341	303	379
43,0	1 11/16	370	259	296	444	444	333	296	370
44,0	1 3/4	362	253	290	434	434	326	290	362
45,0		354	248	283	425	425	318	283	354
46,0		346	242	277	415	415	312	277	346
47,0	1 7/8	339	237	271	407	407	305	271	339
48,0		332	232	265	398	398	299	265	332
49,0		325	227	260	390	390	292	260	325
50,0	1 31/32	318	223	255	382	382	287	255	318
50,5		315	221	252	378	378	284	252	315
51,0	2	312	219	250	375	375	281	250	312
52,0		306	214	245	367	367	276	245	306
53,0		300	210	240	361	361	270	240	300
54,0	2 1/8	295	206	236	354	354	265	236	295
55,0		290	203	232	347	347	261	232	290
56,0		284	199	227	341	341	256	227	284
57,0	2 1/4	279	196	223	335	335	251	223	279
58,0		275	192	220	329	329	247	220	275
59,0		270	189	216	324	324	243	216	270
60,0	2 3/8	265	186	212	318	318	239	212	265
63,5	2 1/2	251	176	201	301	301	226	201	251
65,0		245	171	196	294	294	220	196	245
70,0	2 3/4	227	159	182	273	273	205	182	227
75,0		212	149	170	255	255	191	170	212
80,0		199	139	159	239	239	179	159	199
85,0		187	131	150	225	225	169	150	187
90,0		177	124	142	212	212	159	142	177
95,0	3 3/4	168	117	134	201	201	151	134	168
100,0		159	111	127	191	191	143	127	159
110,0		145	101	116	174	174	130	116	145
120,0		133	93	106	159	159	119	106	133
130,0	5 1/8	122	86	98	147	147	110	98	122
140,0	5 1/2	114	80	91	136	136	102	91	114
150,0		106	74	85	127	127	96	85	106

HSS bi-metal hole saws, with varied toothing

Cutting edges: HSS
Jacket: special steel
Cutting depth: up to max. 38 mm (1 1/2")
Cutting teeth: varied toothing
Right-hand cutting

Suitable for unalloyed steel (up to 700 N/mm² strength), non-ferrous and light metals, plastics, plasterboard and light building boards, fibreboard, plywood and wood.

Packing unit: individual carton

1.9

Ø mm	Ø inch	Through dimensions PG	Tube dimensions inch	For arbor holders	Article no.	Price / each €
14	9/16			A1 / A4 / A5	106 014	
16	5/8	~ PG 9		A1 / A4 / A5	106 016	
17				A1 / A4 / A5	106 017	
19	3/4	~ PG 11	3/8	A1 / A4 / A5	106 019	
20				A1 / A4 / A5	106 020	
21		~ PG 13,5		A1 / A4 / A5	106 021	
22	7/8		1/2	A1 / A4 / A5	106 022	
24	15/16	~ PG 16		A1 / A4 / A5	106 024	
25	1			A1 / A4 / A5	106 025	
27	1 1/16			A1 / A4 / A5	106 027	
28	1 3/32			A1 / A4 / A5	106 028	
29	1 1/8	~ PG 21	3/4	A1 / A4 / A5	106 029	
30	1 3/16			A1 / A4 / A5	106 030	
32	1 1/4			A2 / A6 / A7	106 032	
33				A2 / A6 / A7	106 033	
35	1 3/8		1	A2 / A6 / A7	106 035	
36				A2 / A6 / A7	106 036	
37		PG 29		A2 / A6 / A7	106 037	
38	1 1/2			A2 / A6 / A7	106 038	
40				A2 / A6 / A7	106 040	
41	1 5/8			A2 / A6 / A7	106 041	
43	1 11/16			A2 / A6 / A7	106 043	
44	1 3/4		1 1/4	A2 / A6 / A7	106 044	
46	1 13/16			A2 / A6 / A7	106 046	
48	1 7/8	~ PG 36		A2 / A6 / A7	106 048	
51	2		1 1/2	A2 / A6 / A7	106 051	
52				A2 / A6 / A7	106 052	
54	2 1/8	PG 42		A2 / A6 / A7	106 054	
55				A2 / A6 / A7	106 055	
57	2 1/4			A2 / A6 / A7	106 057	
59				A2 / A6 / A7	106 059	
60	2 3/8	~ PG 48		A2 / A6 / A7	106 060	
63				A2 / A6 / A7	106 063	
64	2 1/2		2	A2 / A6 / A7	106 064	
65				A2 / A6 / A7	106 065	
67	2 5/8			A2 / A6 / A7	106 067	
68				A2 / A6 / A7	106 068	
70	2 3/4			A2 / A6 / A7	106 070	
73	2 7/8			A2 / A6 / A7	106 073	
76	3		2 1/2	A2 / A6 / A7	106 076	
79	3 1/8			A2 / A6 / A7	106 079	
83	3 1/4			A2 / A6 / A7	106 083	
86	3 3/8			A2 / A6 / A7	106 086	
89	3 1/2			A2 / A6 / A7	106 089	
92	3 5/8		3	A2 / A6 / A7	106 092	
95	3 3/4			A2 / A6 / A7	106 095	
98	3 7/8			A2 / A6 / A7	106 098	
102	4			A2 / A6 / A7	106 102	
105			3 1/2	A2 / A6 / A7	106 105	
108	4 1/4			A2 / A6 / A7	106 108	
111	4 3/8			A2 / A6 / A7	106 111	
114	4 1/2		4	A2 / A6 / A7	106 114	
121	4 3/4			A2 / A6 / A7	106 121	
127	5			A2 / A6 / A7	106 127	
140	5 1/2			A2 / A6 / A7	106 140	
152	6			A2 / A6 / A7	106 152	
160	6 5/16			A2 / A6 / A7	106 160	
168	6 5/8			A2 / A6 / A7	106 168	
177				A2 / A6 / A7	106 177	
210	8 9/32			A2 / A6 / A7	106 200	

Characteristics:

- High rotational precision
- Sturdy construction
- Hole saw and shank in two parts, so hole saws of different diameters can be exchanged and fitted more rapidly
- A1, A2, A5, A6 arbor with hexagonal shank and A7 arbor with SDS-plus shank
- A4 arbor with cylindrical shank
- Positive chipping and cutting angles ensure more aggressive cutting
- Varied toothing ensures:
  - smoother cutting
  - less effort
  - less vibration and heat production during cutting
  - up to three times longer tool life
- The HSS teeth are welded onto a jacket of special steel
- Good chip removal
- Slots in the jacket side assist removal of cutouts
- Exchangeable centring drill
- Unsuitable for percussion-drill operation
- Only slight pressure required to start drilling
- Drill with light, steady pressure
- Avoid pendulum movements while drilling
- Observe table of drilling speeds
- Use prescribed cooling agents

RUKO HSS bi-metal hole saws can be used in hand and pillar drills. When employing pillar drills, use manual advance only.

Also suitable for other makes of drill.
Prices without arbor.

HSS Co 8 bi-metal hole saws, with fine toothing

Cutting edges: HSS Co 8
Jacket: special steel
Cutting depth: up to max. 38 mm (1 1/2")
Cutting teeth: fine toothing
Right-hand cutting

Suitable for alloyed and non-alloyed steels (up to 1,000 N/mm² strength), high chromium alloyed steels such as staniless steel, steels resistant to rusts and acids, non-ferrous and light metals.

Packing unit: individual carton

Ø mm	Ø inch	Through dimensions PG	Tube dimensions inch	For arbor holders	Article no.	Price / each €
14	9/16			A1 / A4 / A5	126 014	
16	5/8	~ PG 9		A1 / A4 / A5	126 016	
17				A1 / A4 / A5	126 017	
19	3/4	~ PG 11	3/8	A1 / A4 / A5	126 019	
20				A1 / A4 / A5	126 020	
21		~ PG 13,5		A1 / A4 / A5	126 021	
22	7/8		1/2	A1 / A4 / A5	126 022	
24	15/16	~ PG 16		A1 / A4 / A5	126 024	
25	1			A1 / A4 / A5	126 025	
27	1 1/16			A1 / A4 / A5	126 027	
28	1 3/32			A1 / A4 / A5	126 028	
29	1 1/8	~ PG 21	3/4	A1 / A4 / A5	126 029	
30	1 3/16			A1 / A4 / A5	126 030	
32	1 1/4			A2 / A6 / A7	126 032	
33				A2 / A6 / A7	126 033	
35	1 3/8		1	A2 / A6 / A7	126 035	
36				A2 / A6 / A7	126 036	
37		PG 29		A2 / A6 / A7	126 037	
38	1 1/2			A2 / A6 / A7	126 038	
40				A2 / A6 / A7	126 040	
41	1 5/8			A2 / A6 / A7	126 041	
43	1 11/16			A2 / A6 / A7	126 043	
44	1 3/4		1 1/4	A2 / A6 / A7	126 044	
46	1 13/16			A2 / A6 / A7	126 046	
48	1 7/8	~ PG 36		A2 / A6 / A7	126 048	
51	2		1 1/2	A2 / A6 / A7	126 051	
52				A2 / A6 / A7	126 052	
54	2 1/8	PG 42		A2 / A6 / A7	126 054	
55				A2 / A6 / A7	126 055	
57	2 1/4			A2 / A6 / A7	126 057	
59				A2 / A6 / A7	126 059	
60	2 3/8	~ PG 48		A2 / A6 / A7	126 060	
63				A2 / A6 / A7	126 063	
64	2 1/2		2	A2 / A6 / A7	126 064	
65				A2 / A6 / A7	126 065	
67	2 5/8			A2 / A6 / A7	126 067	
68				A2 / A6 / A7	126 068	
70	2 3/4			A2 / A6 / A7	126 070	
73	2 7/8			A2 / A6 / A7	126 073	
76	3		2 1/2	A2 / A6 / A7	126 076	
79	3 1/8			A2 / A6 / A7	126 079	
83	3 1/4			A2 / A6 / A7	126 083	
86	3 3/8			A2 / A6 / A7	126 086	
89	3 1/2			A2 / A6 / A7	126 089	
92	3 5/8		3	A2 / A6 / A7	126 092	
95	3 3/4			A2 / A6 / A7	126 095	
98	3 7/8			A2 / A6 / A7	126 098	
102	4			A2 / A6 / A7	126 102	
105			3 1/2	A2 / A6 / A7	126 105	
108	4 1/4			A2 / A6 / A7	126 108	
111	4 3/8			A2 / A6 / A7	126 111	
114	4 1/2		4	A2 / A6 / A7	126 114	
121	4 3/4			A2 / A6 / A7	126 121	
127	5			A2 / A6 / A7	126 127	
140	5 1/2			A2 / A6 / A7	126 140	
152	6			A2 / A6 / A7	126 152	
160	6 5/16			A2 / A6 / A7	126 160	
168	6 5/8			A2 / A6 / A7	126 168	
177				A2 / A6 / A7	126 177	
210	8 9/32			A2 / A6 / A7	126 200	

NEW

Characteristics:

- High rotational precision
- Sturdy construction
- Hole saw and shank in two parts, so hole saws of different diameters can be exchanged and fitted more rapidly
- A1, A2, A5, A6 arbor with hexagonal shank and A7 arbor with SDS-plus shank
- A4 arbor with cylindrical shank
- The fine toothing ensures:
  - particularly good suitability for metals
  - quieter running
  - less power needed
  - lower vibrations and development of heat in cutting
  - the tool life is increased, in particular with metals.
- The HSS Co 8 teeth are welded onto a jacket of special steel
- Good chip removal
- Slots in the jacket side assist removal of cutouts
- Exchangeable centring drill
- Unsuitable for percussion-drill operation
- Only slight pressure required to start drilling
- Drill with light, steady pressure
- Avoid pendulum movements while drilling
- Observe table of drilling speeds
- Use prescribed cooling agents

RUKO HSS Co 8 bi-metal hole saws can be used in hand and pillar drills. When employing pillar drills, use manual advance only.

Also suitable for other makes of drill.
Prices without arbor.

Arbor holders including pilot drill for HSS and HSS Co 8 bi-metal hole saws

Packing unit: in individual carton

Hole saws Ø mm	Type	Shank Ø mm	Shank shape	Thread	Article no.	Price / each €
14,0 - 30,0	A 1	11,0	⬡	1/2" x 20	106 201	
32,0 - 210,0	A 2	11,0	⬡	5/8" x 18	106 202	
14,0 - 30,0	A 4	6,0	○	1/2" x 20	106 204	
14,0 - 30,0	A 5	9,5	⬡	1/2" x 20	106 210	
32,0 - 210,0	A 6	9,5	⬡	5/8" x 18	106 209	
32,0 - 210,0	A 7	10,0	SDS-Plus	5/8" x 18	106 211	

No. 106 202

Adapter for arbor holders, type A1 / A4 / A5

NEW

Packing unit: individual plastic pack

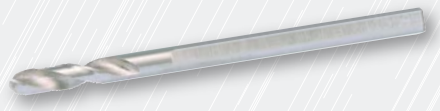
Description	Article no.	Price / each €
Adapter to support HSS and HSS Co 8 bi-metal hole saws from Ø 32 to Ø 210 mm	106 212	

No. 106 212

Accessories for HSS and HSS Co 8 bi-metal hole saws

Packing unit: individual plastic pack

Description	Article no.	Price / each €
Pilot drill HSS, ground, Ø 6.35 mm x 102 mm and split point in accordance with DIN 1412 C (A4)	106 207	
Pilot drill HSS, ground, Ø 6.35 mm x 82 mm and split point in accordance with DIN 1412 C (A1 + A2 + A5 + A6 + A7)	106 206	
Extension 300 mm, arbors for A1 + A2 shank shape ⬡ 11 mm	106 205	
Ejector spring	106 208	



No. 106 207

No. 106 205

No. 106 208

Sets of HSS bi-metal hole saws in plastic cases

Type	Description	Article no.	Price / set €
PK 1	For plumbers 6 HSS bi-metal hole saws Ø 19 - 22 - 29 - 38 - 44 - 57 mm + 2 arbor holders A2 and A4	106 301	
PK 2	For plumbers 9 HSS bi-metal hole saws Ø 19 - 22 - 29 - 35 - 38 - 44 - 51 - 57 - 64 mm + 2 arbor holders A2 and A4	106 306	

Nr. 106 306

Sets of HSS bi-metal hole saws in plastic cases

Type	Description	Article no.	Price / set €
EK 1	For electricians 6 HSS bi-metal hole saws Ø 22 - 29 - 35 - 44 - 51 - 64 mm + 2 arbor holders A2 and A4	106 305	
EK 2	For electricians 6 HSS bi-metal hole saws Ø 22 - 29 - 35 - 44 - 51 - 68 mm + 2 arbor holders A2 and A4	106 302	
Universal	10 HSS bi-metal hole saws Ø 19 - 22 - 25 - 29 - 35 - 38 - 44 - 51 - 57 - 64 mm + 2 arbor holders A2 and A4	106 303	
Super	10 HSS bi-metal hole saws Ø 22 - 25 - 32 - 35 - 41 - 44 - 51 - 54 - 60 - 64 mm + 2 arbor holders A2 and A4	106 304	
Premium	15 HSS bi-metal hole saws Ø 16 - 19 - 21 - 24 - 25 - 29 - 32 - 37 - 40 - 48 - 51 - 54 - 60 - 73 - 83 mm NEW + 2 arbor holders A1 and A2 + 1 Pilot dril HSS Ø 6,35 mm x 82 mm + 1 Extension 300 mm, arbors for A1 and A2	106 318	

No. 106 304

No. 106 318

Sets of HSS Co 8 bi-metal hole saws in plastic cases

Type	Description	Article no.	Price / set €
PK 1	For plumbers 6 HSS Co 8 bi-metal hole saws Ø 19 - 22 - 29 - 38 - 44 - 57 mm NEW + 2 arbor holders A2 and A4	126 301	
PK 2	For plumbers 9 HSS Co 8 bi-metal hole saws Ø 19 - 22 - 29 - 35 - 38 - 44 - 51 - 57 - 64 mm NEW + 2 arbor holders A2 and A4	126 306	
EK 1	For electricians 6 HSS Co 8 bi-metal hole saws Ø 22 - 29 - 35 - 44 - 51 - 64 mm NEW + 2 arbor holders A2 and A4	126 305	
EK 2	For electricians 6 HSS Co 8 bi-metal hole saws Ø 22 - 29 - 35 - 44 - 51 - 68 mm NEW + 2 arbor holders A2 and A4	126 302	
Universal	10 HSS Co 8 bi-metal hole saws Ø 19 - 22 - 25 - 29 - 35 - 38 - 44 - 51 - 57 - 64 mm + 2 arbor holders A2 and A4 NEW	126 303	
Super	10 HSS Co 8 bi-metal hole saws Ø 22 - 25 - 32 - 35 - 41 - 44 - 51 - 54 - 60 - 64 mm + 2 arbor holders A2 and A4 NEW	126 304	
Premium	15 HSS Co 8 bi-metal hole saws Ø 16 - 19 - 21 - 24 - 25 - 29 - 32 - 37 - 40 - 48 - 51 - 54 - 60 - 73 - 83 mm NEW + 2 arbor holders A1 and A2 + 1 Pilot dril HSS Ø 6,35 mm x 82 mm + 1 Extension 300 mm, arbors for A1 and A2	126 318	

No. 126 306

No. 126 304

Recommended cutting speeds for HSS and HSS Co 8 bi-metal hole saws

1.9

Material:		High carbon struc.steel up to 700 N/mm²	Alloyed steel up to 1000 N/mm²	Cast iron over 250 N/mm²	CuZn alloy	Aluminium alloy up to 11% Si	Thermo-plastics	Duro-plastics	Wood
Vc = m/min		30	20	10	35	30	20	15	40
Coolant		Cutting spray	Cutting spray	Compressed air	Compressed air	Cutting spray	Water	Compressed air	Compressed air
Ø mm	Ø inch	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.
14	9/16	682	455	227	796	682	455	341	910
16	5/8	597	398	199	697	597	398	299	796
17		562	375	187	656	562	375	281	749
19	3/4	503	335	168	587	503	335	251	670
21		455	303	152	531	455	303	227	607
22	7/8	434	290	145	507	434	290	217	579
24	15/16	398	265	133	464	398	265	199	531
25	1	382	255	127	446	382	255	191	510
27	1 1/16	354	236	118	413	354	236	177	472
28	1 3/32	341	227	114	398	341	227	171	455
29	1 1/8	329	220	110	384	329	220	165	439
30	1 3/16	318	212	106	372	318	212	159	425
32	1 1/4	299	199	100	348	299	199	149	398
33		290	193	97	338	290	193	145	386
35	1 3/8	273	182	91	318	273	182	136	364
36		265	177	88	310	265	177	133	354
37		258	172	86	301	258	172	129	344
38	1 1/2	251	168	84	293	251	168	126	335
40		239	159	80	279	239	159	119	318
41	1 5/8	233	155	78	272	233	155	117	311
43	1 11/16	222	148	74	259	222	148	111	296
44	1 3/4	217	145	72	253	217	145	109	290
46	1 3/4	208	138	69	242	208	138	104	277
48	1 7/8	199	133	66	232	199	133	100	265
51	2	187	125	62	219	187	125	94	250
52		184	122	61	214	184	122	92	245
54	2 1/8	177	118	59	206	177	118	88	236
57	2 1/4	168	112	56	196	168	112	84	223
59		162	108	54	189	162	108	81	216
60	2 3/8	159	106	53	186	159	106	80	212
63		152	101	51	177	152	101	76	202
64	2 1/2	149	100	50	174	149	100	75	199
65		147	98	49	171	147	98	73	196
67	2 5/8	143	95	48	166	143	95	71	190
68		141	94	47	164	141	94	70	187
70	2 3/4	136	91	45	159	136	91	68	182
73	2 7/8	131	87	44	153	131	87	65	175
76	3	126	84	42	147	126	84	63	168
79	3 1/8	121	81	40	141	121	81	60	161
83	3 1/4	115	77	38	134	115	77	58	153
86	3 3/8	111	74	37	130	111	74	56	148
89	3 1/2	107	72	36	125	107	72	54	143
92	3 5/8	104	69	35	121	104	69	52	138
95	3 3/4	101	67	34	117	101	67	50	134
98	3 7/8	97	65	32	114	97	65	49	130
102	4	94	62	31	109	94	62	47	125
105		91	61	30	106	91	61	45	121
108	4 1/4	88	59	29	103	88	59	44	118
111	4 3/8	86	57	29	100	86	57	43	115
114	4 1/2	84	56	28	98	84	56	42	112
121	4 3/4	79	53	26	92	79	53	39	105
127	5	75	50	25	88	75	50	38	100
140	5 1/2	68	45	23	80	68	45	34	91
152	6	63	42	21	73	63	42	31	84
160	6 5/16	60	40	20	70	60	40	30	80
168	6 5/8	57	38	19	66	57	38	28	76
177		54	36	18	63	54	36	27	72
210	8 9/32	45	30	15	53	45	30	23	61