



CORE DRILLS

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PRODUCT OVERVIEW

Boring tools made of HSS

HSS boring tools are used to create the necessary initial size of a bore for the subsequent reaming. They are characterised by their simple handling. More important, however, is the matching of the diameter to the reaming operation. This eliminates the need for expensive drilling tools with intermediate diameters. Longer tool lives are achieved due to the chip space ground design.



Core drills with cylindrical shank in accordance with DIN 344



Full size and under size

Ø range: 4.8 – 20.0 mm

Basic
LINE

Page 350

Core drills with Morse taper shank in accordance with DIN 343



Full size and under size

Ø range: 7.8 – 50.0 mm

Basic
LINE

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Shell core drills in accordance DIN 222



Full size and under size

Ø range: 23.7 – 100.0 mm



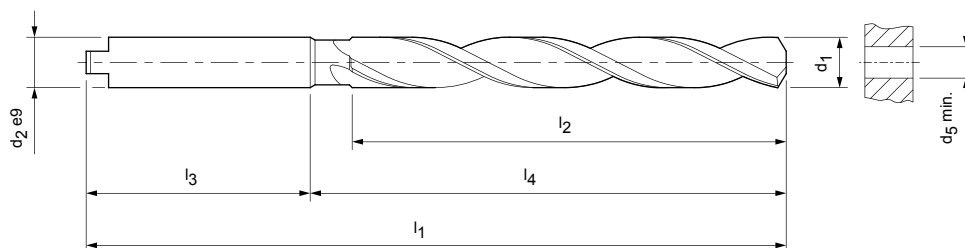
Core drill - full size I 050010

Preferred series with cylindrical shank and driving tang in accordance to DIN 1809

Design:

Diameter:
Cutting direction:
Cutting material:
Flute direction:

5,00-20,00 mm
Right-hand cutting
HSS
Approx. 27°
right-hand spiral



Dimensions							z	Order No.
d ₁ h8	d ₂ e9	l ₁	l ₂	l ₃	l ₄	d ₅ min		
5,00	5	108	65	32	76	3,5	3	30110316
6,00	6	116	71	34	82	4,2	3	30110318
7,00	7	133	84	39	94	4,9	3	30110320
8,00	8	142	91	41	101	5,6	3	30110322
9,00	9	151	98	43	108	6,3	3	30110324
10,00	10	162	107	45	117	7,0	3	30110326
11,00	11	173	114	45	128	7,7	3	30110328
12,00	12	184	123	47	137	8,4	3	30110330
13,00	13	184	123	47	137	9,1	3	30110332
14,00	14	194	132	47	147	9,8	3	30110334
15,00	15	202	137	50	152	10,5	3	30110336
16,00	16	211	143	53	158	11,2	3	30110338
17,00	17	218	146	52	166	11,9	3	30110340
18,00	18	226	152	56	170	12,6	3	30110342
19,00	19	234	158	58	176	13,3	3	30110344
20,00	20	242	164	60	182	14,0	3	30110346

Dimensions in mm.

Intermediate diameters and special tolerances can be ordered by the overview pages for configurable series on page 352.

Core drill - under size I 050011

Preferred series with cylindrical shank and driving tang in accordance to DIN 1809

Design:

Diameter:

Cutting direction:

Beschichtung:

Flute direction:

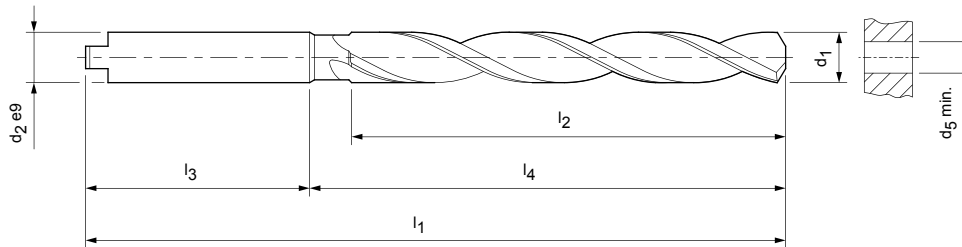
4,80-19,70 mm

Right-hand cutting

HSS

Approx. 27°

right-hand spiral



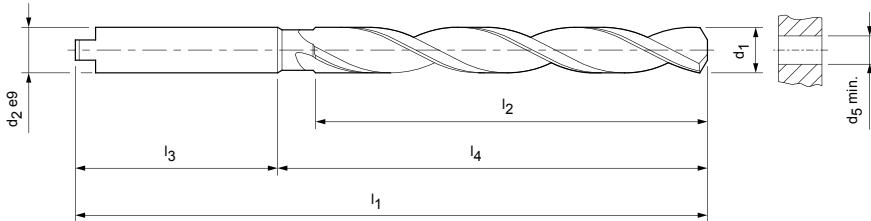
Dimensions							z	Order No.
d ₁ h8	d ₂ e9	l ₁	l ₂	l ₃	l ₄	d ₅ min		
4,80	5	108	65	32	76	3,5	3	30110348
5,80	6	116	71	34	82	4,2	3	30110350
6,80	7	133	84	39	94	4,9	3	30110352
7,80	8	142	91	41	101	5,6	3	30110354
8,80	9	151	98	43	108	6,3	3	30110356
9,80	10	162	107	45	117	7,0	3	30110358
10,75	11	173	114	45	128	7,7	3	30110360
11,75	12	184	123	47	137	8,4	3	30110362
12,75	13	184	123	47	137	9,1	3	30110364
13,75	14	194	132	47	147	9,8	3	30110366
14,75	15	202	137	50	152	10,5	3	30110369
15,75	16	211	143	53	158	11,2	3	30110371
16,75	17	218	146	52	166	11,9	3	30110373
17,75	18	226	152	56	170	12,6	3	30110375
18,70	19	234	158	58	176	13,3	3	30110377
19,70	20	242	164	60	182	14,0	3	30110379

Core drill overview | 050010

Configurable series with cylindrical shank and driving tang in accordance to DIN 1809

Design:

Diameter: 4,700-20,200 mm
 Cutting direction: Right-hand cutting
 Cutting material: HSS
 Flute direction: Approx. 27° right-hand spiral



Dimensions							z
d ₁	d ₂ e9	l ₁	l ₂	l ₃	l ₄	d ₅ min	
4,700-5,200	5	108	65	32	76	3,5	3
5,201-5,700	5,5	116	71	34	82	4,2	3
5,701-6,200	6	116	71	34	82	4,2	3
6,201-6,700	6,5	124	77	36	93	4,2	3
6,701-7,200	7	133	84	39	94	4,9	3
7,201-7,700	7,5	133	84	39	94	4,9	3
7,701-8,200	8	142	91	41	101	5,6	3
8,201-8,700	8,5	142	91	41	101	5,6	3
8,701-9,200	9	151	98	43	108	6,3	3
9,201-9,700	9,5	151	98	43	108	6,3	3
9,701-10,200	10	162	107	45	117	7,0	3
10,201-10,600	10,5	162	107	45	117	7,0	3
10,601-11,200	11	173	114	45	128	7,7	3
11,201-11,700	11,5	173	114	45	128	7,7	3
11,701-12,200	12	184	123	47	137	8,4	3
12,401-13,200	13	184	123	47	137	9,1	3
13,401-14,200	14	194	132	47	147	9,8	3
14,401-15,200	15	202	137	50	152	10,5	3
15,401-16,200	16	211	143	53	158	11,2	3
16,401-17,200	17	218	146	52	166	11,9	3
17,401-18,200	18	226	152	56	170	12,6	3
18,401-19,200	19	234	158	58	176	13,3	3
19,201-20,200	20	242	164	60	182	14,0	3

Dimensions in mm.

Order example:

1. BECK product code

0 5 0 0 1 0 -

BECK product code

Hyphen

2. Diameter

0 8 . 2 0 0

Bore diameter

3. Tolerance

h 8

IT or tolerance in µm

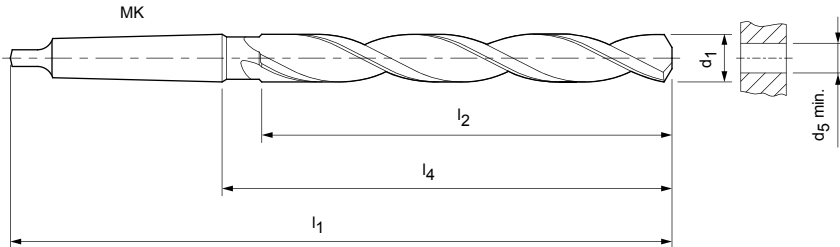
Core drill - full size I 050110

Preferred series with Morse taper shank

Design:

Diameter:
Cutting direction:
Cutting material:
Flute direction:

8,00-50,00 mm
Right-hand cutting
HSS
Approx. 27°
right-hand spiral



Dimensions						z	Order No.
d_1 h8	l_1	l_2	l_4	MK	$d_5 \text{ min}$		
8,00	156	68	90,5	1	5,6	3	30110381
9,00	162	74	96,5	1	6,3	3	30110383
10,00	168	80	102,5	1	7,0	3	30110385
11,00	175	84	109,5	1	7,7	3	30110387
12,00	182	91	116,5	1	8,4	3	30110389
13,00	182	91	116,5	1	9,1	3	30110391
14,00	189	98	123,5	1	9,8	3	30110393
15,00	212	106	132	2	10,5	3	30110395
16,00	218	108	138	2	11,2	3	30110397
17,00	223	113	143	2	11,9	3	30110399
18,00	228	118	148	2	12,6	3	30110401
19,00	233	123	153	2	13,3	3	30110403
20,00	238	128	158	2	14,0	3	30110405
21,00	243	129	163	2	14,6	3	30110407
22,00	248	134	168	2	15,3	3	30110409
23,00	253	139	173	2	16,0	3	30110411
24,00	281	148	182	3	16,6	3	30110413
25,00	281	144	182	3	17,3	3	30110415
26,00	286	149	187	3	18,0	3	30110417
27,00	291	154	192	3	18,6	3	30110419
28,00	291	162	192	3	19,3	3	30110421
29,00	296	167	197	3	20,0	3	30110423
30,00	296	167	197	3	20,5	3	30110425
31,00	301	170	202	3	21,0	3	30110427
32,00	334	178	210	4	22,0	3	30110429
33,00	334	178	210	4	23,0	3	30110431
34,00	339	183	215	4	24,0	3	30110433
35,00	339	181	215	4	25,0	3	30110435
36,00	344	186	220	4	25,5	3	30110437
37,00	344	186	220	4	26,0	3	30110439
38,00	349	191	225	4	26,5	3	30110441
39,00	349	189	225	4	27,0	3	30110443
40,00	349	189	225	4	28,0	3	30110445
41,00	354	194	230	4	28,5	3	30110447
42,00	354	194	230	4	29,0	3	30110449

Core drill, full size I 050110, preferred series with Morse taper shank

Dimensions						z	Order No.
d ₁ h8	l ₁	l ₂	l ₄	MK	d ₅ min		
43,00	359	197	235	4	30,0	3	30110451
44,00	359	197	235	4	30,5	3	30110453
45,00	359	197	235	4	31,0	3	30110455
46,00	364	202	240	4	32,0	3	30110457
47,00	364	200	240	4	32,5	3	30110459
48,00	369	205	245	4	33,0	3	30110461
49,00	369	205	245	4	34,0	3	30110463
50,00	369	205	245	4	34,5	3	30110465

Dimensions in mm.

Intermediate diameters and special tolerances can be ordered by the overview pages for configurable series on page 357.

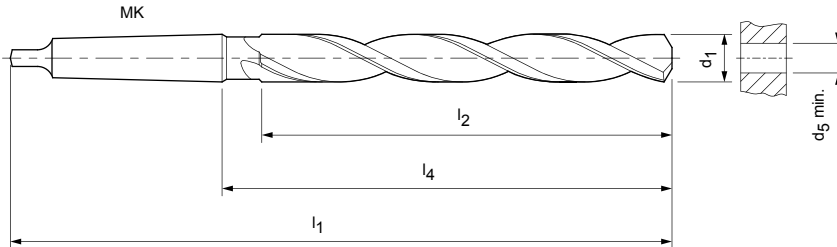
Core drill - under size I 050111

Preferred series with Morse taper shank

Design:

Diameter:
Cutting direction:
Cutting material:
Flute direction:

7,80-49,60 mm
Right-hand cutting
HSS
Approx. 27°
right-hand spiral



Dimensions						z	Order No.
$d_1 \text{ h8}$	l_1	l_2	l_4	MK	$d_5 \text{ min}$		
7,80	156	68	90,5	1	5,6	3	30110467
8,80	162	74	96,5	1	6,3	3	30110469
9,80	168	80	102,5	1	7,0	3	30110471
10,75	175	84	109,5	1	7,7	3	30110473
11,75	182	91	116,5	1	8,4	3	30110475
12,75	182	91	116,5	1	9,1	3	30110477
13,75	189	98	123,5	1	9,8	3	30110479
14,75	212	106	132	2	10,5	3	30110481
15,75	218	108	138	2	11,2	3	30110483
16,75	223	113	143	2	11,9	3	30110485
17,75	228	118	148	2	12,6	3	30110487
18,70	233	123	153	2	13,3	3	30110489
19,70	238	128	158	2	14,0	3	30110491
20,70	243	129	163	2	14,6	3	30110493
21,70	248	134	168	2	15,3	3	30110495
22,70	253	139	173	2	16,0	3	30110497
23,70	281	148	182	3	16,6	3	30110499
24,70	281	144	182	3	17,3	3	30110501
25,70	286	149	187	3	18,0	3	30110503
26,70	291	154	192	3	18,6	3	30110505
27,70	291	162	192	3	19,3	3	30110507
28,70	296	167	197	3	20,0	3	30110509
29,70	296	167	197	3	20,5	3	30110511
30,60	301	170	202	3	21,0	3	30110513
31,60	334	178	210	4	22,0	3	30110515
32,60	334	178	210	4	23,0	3	30110517
33,60	339	183	215	4	24,0	3	30110519
34,60	339	181	215	4	25,0	3	30110521
35,60	344	186	220	4	25,5	3	30110523
36,60	344	186	220	4	26,0	3	30110525
37,60	349	191	225	4	26,5	3	30110527
38,60	349	189	225	4	27,0	3	30110529
39,60	349	189	225	4	28,0	3	30110531
40,60	354	194	230	4	28,5	3	30110533
41,60	354	194	230	4	29,0	3	30110535

Core drill, under size I 050111, preferred series with Morse taper shank

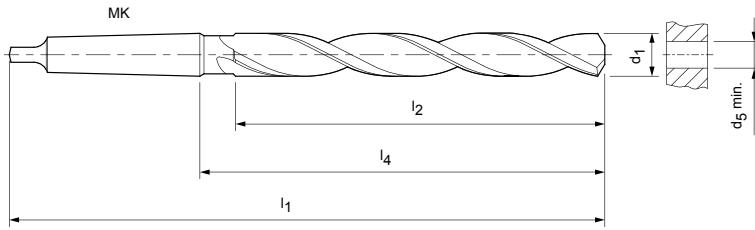
Dimensions						z	Order No.
d ₁ h8	l ₁	l ₂	l ₄	MK	d ₅ min		
42,60	359	197	235	4	30,0	3	30110537
43,60	359	197	235	4	30,5	3	30110539
44,60	359	197	235	4	31,0	3	30110541
45,60	364	202	240	4	32,0	3	30110543
46,60	364	200	240	4	32,5	3	30110545
47,60	369	205	245	4	33,0	3	30110547
48,60	369	205	245	4	34,0	3	30110549
49,60	369	205	245	4	34,5	3	30110551

Core drill overview | 050110

Configurable series with Morse taper shank

Design:

Diameter: 7,600-50,200 mm
 Cutting direction: Right-hand cutting
 Cutting material: HSS
 Flute direction: Approx. 27° right-hand spiral



Dimensions						z
d ₁	l ₁	l ₂	l ₄	MK	d ₅ min	
7,600-8,200	156	68	90,5	1	5,6	3
8,201-8,700	156	68	90,5	1	5,6	3
8,701-9,200	162	74	96,5	1	6,3	3
9,201-9,700	162	74	96,5	1	6,3	3
9,701-10,200	168	80	102,5	1	7,0	3
10,201-10,700	168	80	102,5	1	7,0	3
10,701-11,200	175	84	109,5	1	7,7	3
11,201-11,700	175	84	109,5	1	7,7	3
11,701-12,200	182	91	116,5	1	8,4	3
12,201-12,700	182	91	116,5	1	9,1	3
12,701-13,200	182	91	116,5	1	9,1	3
13,201-13,700	189	98	123,5	1	9,8	3
13,701-14,200	189	98	123,5	1	9,8	3
14,201-14,700	212	106	132	2	10,5	3
14,701-15,200	212	106	132	2	10,5	3
15,201-15,700	218	108	138	2	11,2	3
15,701-16,200	218	108	138	2	11,2	3
16,201-16,700	223	113	143	2	11,9	3
16,701-17,200	223	113	143	2	11,9	3
17,201-17,700	228	118	148	2	12,6	3
17,701-18,200	228	118	148	2	12,6	3
18,201-19,200	233	123	153	2	13,3	3
19,201-20,200	238	128	158	2	14,0	3
20,201-21,200	243	129	163	2	14,6	3
21,201-22,200	248	134	168	2	15,3	3
22,201-23,200	253	139	173	2	16,0	3
23,201-24,200	281	148	182	3	16,6	3
24,201-25,200	281	144	182	3	17,3	3
25,201-26,200	286	149	187	3	18,0	3
26,201-27,200	291	154	192	3	18,6	3
27,201-28,200	291	162	192	3	19,3	3
28,201-29,200	296	167	197	3	20,0	3
29,201-30,200	296	167	197	3	20,5	3
30,201-31,200	301	170	202	3	21,0	3
31,201-32,200	334	178	210	4	22,0	3
32,201-33,200	334	178	210	4	23,0	3
33,201-34,200	339	183	215	4	24,0	3
34,201-35,200	339	181	215	4	25,0	3
35,201-36,200	344	186	220	4	25,5	3
36,201-37,200	344	186	220	4	26,0	3
37,201-38,200	349	191	225	4	26,5	3
38,201-39,200	349	189	225	4	27,0	3
39,201-40,200	349	189	225	4	28,0	3
40,201-41,200	354	194	230	4	28,5	3

Core drill I 050110, configurable series with Morse taper shank

Dimensions						z
d ₁	l ₁	l ₂	l ₄	MK	d ₅ min	
41,201-42,200	354	194	230	4	29,0	3
42,201-43,200	359	197	235	4	30,0	3
43,201-44,200	359	197	235	4	30,5	3
44,201-45,200	359	197	235	4	31,0	3
45,201-46,200	364	202	240	4	32,0	3
46,201-47,200	364	200	240	4	32,5	3
47,201-48,200	369	205	245	4	33,0	3
48,201-49,200	369	205	245	4	34,0	3
49,201-50,200	369	205	245	4	34,5	3

Dimensions in mm.

Order example:**1. BECK product code**

0	5	0	1	1	0	-
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BECK product code

Hyphen

2. Diameter

4	8	.	2	0	0	h	8
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Bore diameter

3. Tolerance

h	8
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IT or tolerance in µm

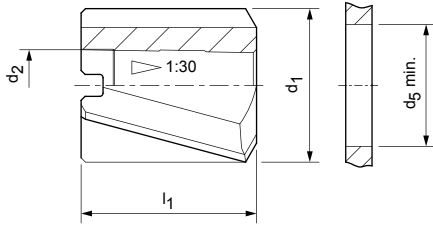
Shell core drill, full size I 050310

Locating bore with 1:30 taper and driving slot in acc. to DIN 138, suitable for tool holders in accordance to DIN 217

Design:

Diameter:
Cutting direction:
Cutting material:
Flute direction:

24,00-100,00 mm
Right-hand cutting
HSS
Approx. 15°
right-hand spiral



Dimensions				z	Order No.
d ₁ h8	l ₁	d ₂	d ₅ min		
24,00	45	13	20	4	30110598
25,00	45	13	21	4	30110600
26,00	45	13	22	4	30110602
27,00	45	13	23	4	30110604
28,00	45	13	24	4	30110606
29,00	45	13	25	4	30110608
30,00	45	13	26	4	30110610
31,00	45	13	27	4	30110612
32,00	45	13	28	4	30110614
33,00	45	13	29	4	30110616
34,00	45	13	30	4	30110618
35,00	45	13	31	4	30110620
36,00	50	16	31	4	30110622
37,00	50	16	32	4	30110624
38,00	50	16	33	4	30110626
39,00	50	16	34	4	30110628
40,00	50	16	35	4	30110630
42,00	50	16	37	4	30110632
44,00	50	16	39	4	30110634
45,00	50	16	40	4	30110636
46,00	56	19	40	4	30110638
47,00	56	19	41	4	30110640
48,00	56	19	42	4	30110642
50,00	56	19	44	4	30110644
52,00	56	19	46	4	30110646
55,00	63	22	48	4	30110648
58,00	63	22	51	4	30110650
60,00	63	22	53	4	30110652
62,00	63	22	55	4	30110654
65,00	71	27	57	4	30110656
68,00	71	27	60	4	30110658
70,00	71	27	62	4	30110660
72,00	71	27	64	4	30110662
75,00	71	27	67	4	30110664
78,00	80	32	68	6	30110666

Shell core drill, finish size I 050310, with 1:30 taper

Dimensions				z	Order No.
d ₁ h8	l ₁	d ₂	d ₅ min		
80,00	80	32	70	6	30110668
82,00	80	32	72	6	30110670
85,00	80	32	75	6	30110672
88,00	80	32	78	6	30110674
90,00	80	32	80	6	30110676
95,00	90	40	83	6	30110678
98,00	90	40	86	6	30110680
100,00	90	40	88	6	30110682

Dimensions in mm.

d₂ = nominal diameter d₁ of suitable holder!

Intermediate diameters and special tolerances can be ordered by the overview pages for configurable series on Page 363.

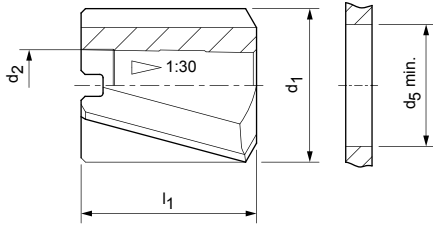
Shell core drill, under size I 050311

Locating bore with 1:30 taper and driving slot in acc. to DIN 138, suitable for tool holders in accordance to DIN 217

Design:

Diameter:
Cutting direction:
Cutting material:
Flute direction:

23,70-99,50 mm
Right-hand cutting
HSS
Approx. 15°
right-hand spiral



Dimensions				z	Order No.
d ₁ h8	l ₁	d ₂	d ₅ min		
23,70	45	13	20	4	30110684
24,70	45	13	21	4	30110686
25,70	45	13	22	4	30110688
26,70	45	13	23	4	30110690
27,70	45	13	24	4	30110692
28,70	45	13	25	4	30110694
29,70	45	13	26	4	30110696
30,60	45	13	27	4	30110698
31,60	45	13	28	4	30110700
32,60	45	13	29	4	30110702
33,60	45	13	30	4	30110704
34,60	45	13	31	4	30110706
35,60	50	16	31	4	30110708
36,60	50	16	32	4	30110710
37,60	50	16	33	4	30110712
38,60	50	16	34	4	30110714
39,60	50	16	35	4	30110716
41,60	50	16	37	4	30110718
43,60	50	16	39	4	30110720
44,60	50	16	40	4	30110722
45,60	56	19	40	4	30110724
46,60	56	19	41	4	30110726
47,60	56	19	42	4	30110728
49,60	56	19	44	4	30110730
51,50	56	19	46	4	30110732
54,50	63	22	48	4	30110734
57,50	63	22	51	4	30110736
59,50	63	22	53	4	30110738
61,50	63	22	55	4	30110740
64,50	71	27	57	4	30110742
67,50	71	27	60	4	30110744
69,50	71	27	62	4	30110746
71,50	71	27	64	4	30110748
74,50	71	27	67	4	30110750
77,50	80	32	68	6	30110752

Shell core drill, under size I 050311, with 1:30 taper

Dimensions				z	Order No.
d ₁ h8	l ₁	d ₂	d ₅ min		
79,50	80	32	70	6	30110754
81,50	80	32	72	6	30110756
84,50	80	32	75	6	30110758
87,50	80	32	78	6	30110760
89,50	80	32	80	6	30110762
94,50	90	40	83	6	30110764
97,50	90	40	86	6	30110766
99,50	90	40	88	6	30110768

Dimensions in mm.

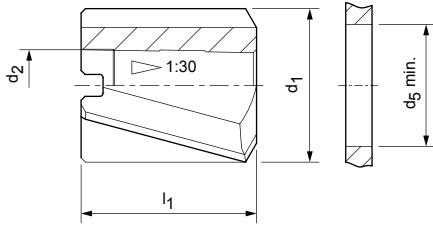
d₂ = nominal diameter d₁ of suitable holder!

Shell core drill, overview I 050310

Configurable series, locating bore with 1:30 taper and driving slot in acc. to DIN 138, suitable for tool holders in accordance to DIN 217

Design:

Diameter: 23,200-100,200 mm
 Cutting direction: Right-hand cutting
 Cutting material: HSS
 Flute direction: Approx. 15° right-hand spiral



Dimensions				z
d_1	l_1	d_2	$d_5 \text{ min}$	
23,200-24,200	45	13	20	4
24,201-25,200	45	13	21	4
25,201-26,200	45	13	22	4
26,201-27,200	45	13	23	4
27,201-28,200	45	13	24	4
28,201-29,200	45	13	25	4
29,201-30,200	45	13	26	4
30,201-31,200	45	13	27	4
31,201-32,200	45	13	28	4
32,201-33,200	45	13	29	4
33,201-34,200	45	13	30	4
34,201-35,200	45	13	31	4
35,201-36,200	50	16	31	4
36,201-37,200	50	16	32	4
37,201-38,200	50	16	33	4
38,201-39,200	50	16	34	4
39,201-40,200	50	16	35	4
41,201-42,200	50	16	37	4
43,201-44,200	50	16	39	4
44,201-45,200	50	16	40	4
45,201-46,200	56	19	40	4
46,201-47,200	56	19	41	4
47,201-48,200	56	19	42	4
49,201-50,200	56	19	44	4
51,201-52,200	56	19	46	4
54,201-55,200	63	22	48	4
57,201-58,200	63	22	51	4
59,201-60,200	63	22	53	4
61,201-62,200	63	22	55	4
64,201-65,200	71	27	57	4
67,201-68,200	71	27	60	4
69,201-70,200	71	27	62	4
70,201-72,200	71	27	64	4
74,201-75,200	71	27	67	4
76,201-78,200	80	32	68	6

Shell core drill, configurable series I 050310, with 1:30 taper

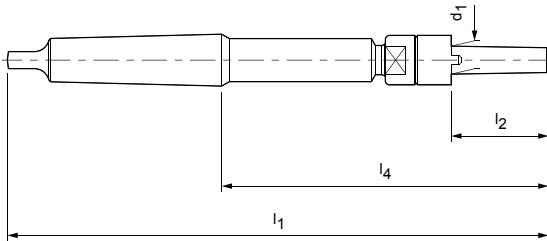
Dimensions				z
d ₁	l ₁	d ₂	d ₅ min	
79,201-80,200	80	32	70	6
81,201-82,200	80	32	72	6
84,201-85,200	80	32	75	6
86,501-88,200	80	32	78	6
88,501-90,200	80	32	80	6
93,501-95,200	90	40	83	6
96,501-98,200	90	40	86	6
98,501-100,200	90	40	88	6

Dimensions in mm.

d₂ = nominal diameter d₁ of suitable holder!

Holder I 031610, 031611, 031612

With 1:30 taper, with driving ring and release nut, for shell reamers DIN 219, DIN 8054 and shell core drills DIN 222



Dimensions								031610	031611	031612
d ₁	DIN 219	DIN 8054	DIN 222	l ₁	l ₂	l ₄	MK	Order No.	Order No.	Order No.
13,00	25-30	25-35	24-35	250	45	151	3	30107905		
16,00	31-35	36-45	36-45	261	50	162	3	30107907		
19,00	36-42	46-52	46-53	298	56	174	4	30107909		
19,00	36-42	46-52	46-53	273	56	174	3		30107921	
22,00	43-50	53-62	54-63	312	63	188	4	30107911		
22,00	43-50	53-62	54-63	287	63	188	3		30107923	
27,00	51-60	63-75	64-75	359	71	203	5	30107913		
27,00	51-60	63-75	64-75	327	71	203	4			30107925
32,00	61-71		76-90	376	80	220	5	30107915		
32,00	61-71		76-90	344	80	220	4			30107927
40,00	72-85		91-100	396	90	240	5	30107917		
50,00	86-100			416	100	260	5	30107919		

The following spare parts are also available from our stock:

Driving rings | 031511

Release nuts | 031512

Washers | 031513

