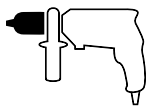
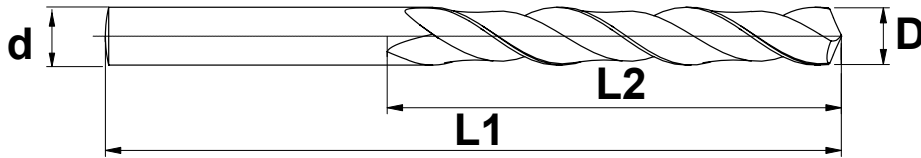


DRILL BITS



HSS JOBBER LENGTH STRAIGHT SHANK TWIST DRILLS

ASME B.94.11M

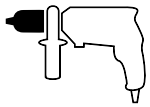
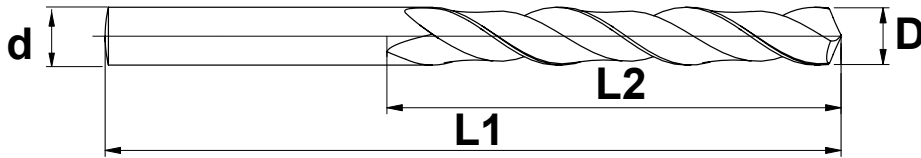


- M2 quality
- manufactured as per ASME B.94.11M
- suited to drill stainless steel and other hard materials
- coolant recommended

Φd (inch)	Φd (mm)	L1 (mm)	L2 (mm)
1/16"	1.58	48	22
5/64"	1.98	51	25
3/32"	2.38	57	32
7/64"	2.78	67	38
1/8"	3.17	70	41
9/64"	3.57	73	44
5/32"	3.96	79	51
11/64"	4.37	83	54
3/16"	4.76	89	59
13/64"	5.16	92	62
7/32"	5.56	95	64
15/64"	5.95	98	67
1/4"	6.35	102	70
17/64"	6.75	105	73
9/32"	7.14	108	75
19/64"	7.54	111	78
5/16"	7.94	114	81
21/64"	8.33	117	84
11/32"	8.73	121	87
23/64"	9.13	124	89
3/8"	9.52	127	92
25/64"	9.92	130	95
13/32"	10.32	133	98
27/64"	10.72	137	100
7/16"	11.11	140	103
29/64"	11.51	143	106
15/32"	11.90	146	110
31/64"	12.30	149	111
1/2"	12.70	152	114

HSS STRAIGHT SHANK TWIST DRILLS

DIN 338

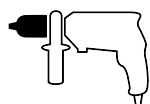
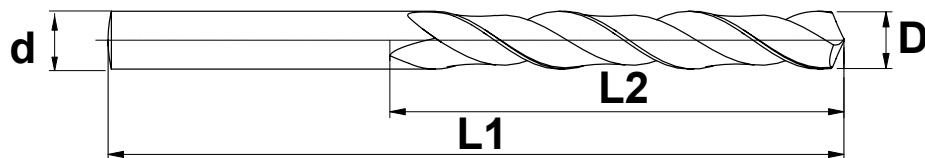


- fully ground HSS 4341 material
- manufactured as per DIN 338
- precise centricity
- high resistance against breaking force
- optimal chip removal
- suited to drill mild steel, steel alloys, sintered iron, graphite, bronze, brass iron, wood and plastic
- coolant recommended

Φd (inch)	Φd (mm)	L1 (mm)	L2 (mm)
	1	26	6
	1.5	32	9
	2	38	12
	2.5	43	14
	3	46	16
	3.2	49	18
	3.5	52	20
	4	55	22
	4.5	58	24
	4.8	62	26
	5	62	26
	5.5	66	28
	6	66	28
	6.5	70	31
	7	74	34
	7.5	74	34
	8	79	37
	8.5	79	37
	9	84	40
	9.5	84	40
	10	89	43
	10.5	133	87
	11	142	94
	11.5	142	94
	12	151	101
	12.5	151	101
	13	151	101

HSS STUBBY DRILLS

DIN 1897

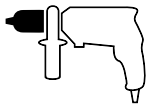
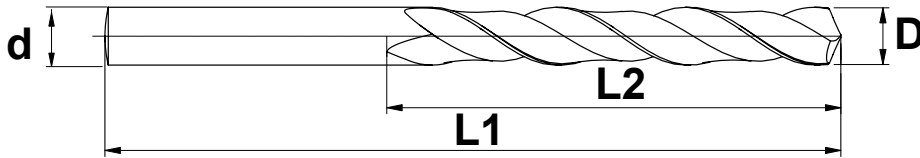


- M2 quality
- manufactured as per DIN 1897
- suited to drill stainless steel and other hard materials
- coolant recommended

Φd (inch)	Φd (mm)	L1 (mm)	L2 (mm)
	1	26	6
	1.5	32	9
	2	38	12
	2.5	43	14
	3	46	16
	3.2	49	18
	3.5	52	20
	4	55	22
	4.5	58	24
	4.8	62	26
	5	62	26
	5.5	66	28
	6	66	28
	6.5	70	31
	7	74	34
	7.5	74	34
	8	79	37
	8.5	79	37
	9	84	40
	9.5	84	40
	10	89	43
	10.5	89	43
	11	95	47
	11.5	95	47
	12	102	51
	12.5	102	51
	13	102	51

HSS LONG LENGTH STRAIGHT SHANK TWST DRILLS

DIN 340

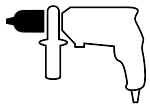
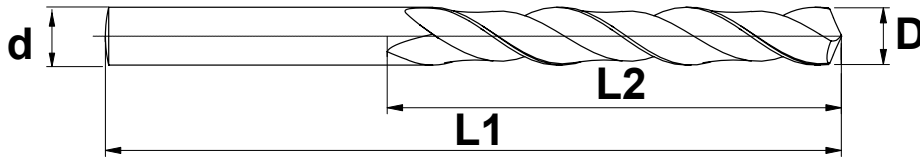


- M2 quality
- manufactured as per DIN 340
- suited to drill stainless steel and other hard materials
- coolant recommended

Φd (inch)	Φd (mm)	L1 (mm)	L2 (mm)
	1	56	33
	1.5	70	45
	2	85	56
	2.5	95	62
	3	100	66
	3.2	106	69
	3.5	112	73
	4	119	78
	4.5	126	82
	4.8	132	87
	5	132	87
	5.5	139	91
	6	139	91
	6.5	148	97
	7	156	102
	7.5	156	102
	8	165	109
	8.5	165	109
	9	175	115
	9.5	175	115
	10	184	121
	10.5	184	121
	11	195	128
	11.5	195	128
	12	205	134
	12.5	205	134
	13	205	134

HSS TAPER LENGTH STRAIGHT SHANK TWIST DRILLS

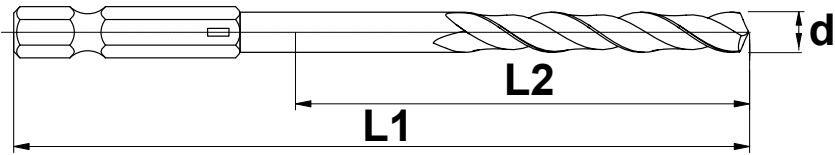
ASME B.94.11M



- M2 quality
- manufactured as per ASME B.94.11M
- suited to drill stainless steel and other hard materials
- coolant recommended

Φd (inch)	Φd (mm)	L1 (mm)	L2 (mm)
1/16"	1.58	76	44
5/64"	1.98	95	51
3/32"	2.38	108	57
7/64"	2.78	117	64
1/8"	3.17	137	76
9/64"	3.57	137	76
5/32"	3.96	137	76
11/64"	4.37	146	86
3/16"	4.76	146	86
13/64"	5.16	152	92
7/32"	5.56	152	92
15/64"	5.95	156	95
1/4"	6.35	156	95
17/64"	6.75	159	98
9/32"	7.14	159	98
19/64"	7.54	162	102
5/16"	7.94	162	102
21/64"	8.33	171	105
11/32"	8.73	165	105
23/64"	9.13	171	108
3/8"	9.52	171	108
25/64"	9.92	178	111
13/32"	10.32	178	111
27/64"	10.72	184	117
7/16"	11.11	184	117
29/64"	11.51	190	121
15/32"	11.90	190	121
31/64"	12.30	197	121
1/2"	12.70	197	121

QUICK CHANGE HEX SHANK IMPACT DRILLS/2PC DESIGN WITH ASSEMBLING SHANK



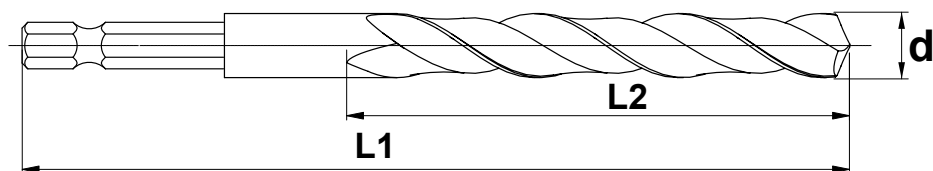
DIN 338

Φd (inch)	Φd (mm)	L1 (mm)	L2 (mm)
	1.5	61	18
	2	70	24
	2.5	78	30
	3	82	33
	3.2	86	36
	3.5	91	39
	4	96	43
	4.5	101	47
	4.8	107	52
	5	107	52
	5.5	114	57
	6	114	57
	6.5	122	63

ANSI B.94.11M

Φd (inch)	Φd (mm)	L1 (mm)	L2 (mm)
1/16"	1.58	64	20
5/64"	1.98	70	24
3/32"	2.38	78	30
7/64"	2.78	82	33
1/8"	3.17	86	36
9/64"	3.57	91	39
5/32"	3.96	96	43
11/64"	4.37	101	47
3/16"	4.76	107	52
13/64"	5.16	107	52
7/32"	5.56	114	57
15/64"	5.95	114	57
1/4"	6.35	122	63

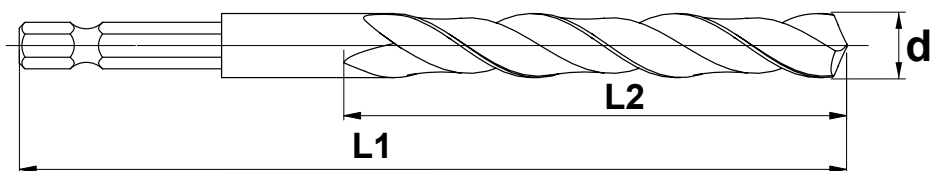
QUICK CHANGE HEX SHANK IMPACT DRILLS/1PC DESIGN SOLID SHANK



DIN 338

Φd (inch)	Φd (mm)	L1 (mm)	L2 (mm)
	3	67	29
	3.2	67	29
	3.5	70	29
	4	71	30
	4.5	75	31
	4.8	78	33
	5	78	33
	5.5	79	35
	6	79	35
	6.5	81	38
	7	89	45
	7.5	89	45
	8	102	51
	8.5	102	51
	9	102	51
	9.5	102	51
	10	102	51
	10.5	102	51
	11	102	51
	11.5	102	51
	12	102	51
	12.5	102	51
	13	102	51

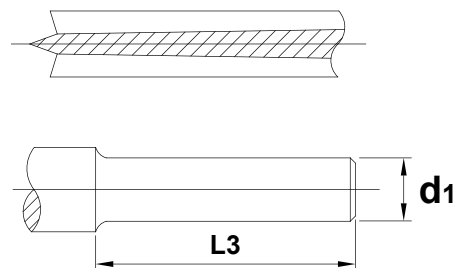
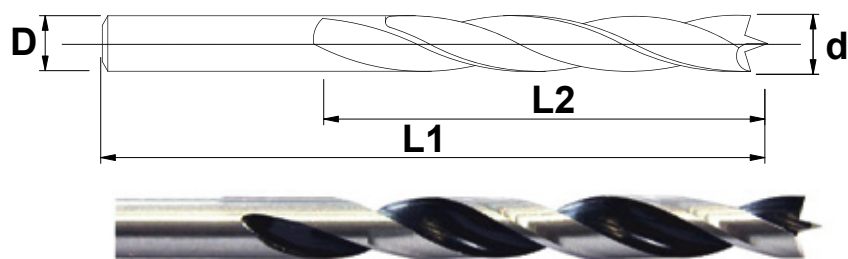
QUICK CHANGE HEX SHANK IMPACT DRILLS/1PC DESIGN SOLID SHANK



ANSI B.94.11M

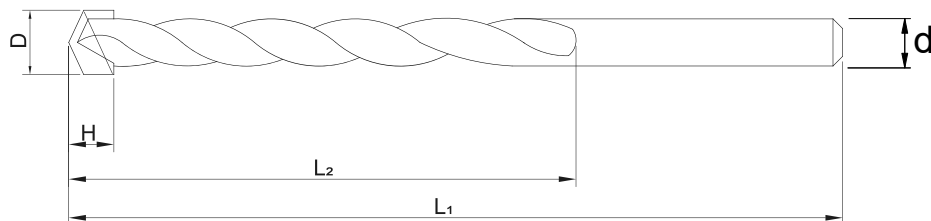
Φd (inch)	Φd (mm)	L1 (mm)	L2 (mm)
1/8"	3.17	70	41
9/64"	3.57	73	44
5/32"	3.96	79	51
11/64"	4.37	83	54
3/16"	4.76	89	59
13/64"	5.16	92	62
7/32"	5.56	95	64
15/64"	5.95	98	67
1/4"	6.35	102	70
17/64"	6.75	105	73
9/32"	7.14	108	75
19/64"	7.54	111	78
5/16"	7.94	114	81
11/32"	8.73	121	87
3/8"	9.52	127	92
1/2"	12.70	152	114

WOOD BRAD POINT DRILLS



Φd (inch)	Φd (mm)	L1 (mm)	L2 (mm)	L3 (mm)	D1 (mm)
	3	60	32		
	3.5	70	38		
	4	75	43		
	4.5	80	45		
	5	85	51		
	5.5	92	54		
	6	92	54		
	6.5	100	60		
	7	100	60		
	7.5	105	60		
	8	115	71		
	8.5	115	71		
	9	115	71		
	9.5	115	85		
	10	120	82		
	10.5	130	82		
	11	140	90		
	11.5	140	90		
	12	140	90		
	12.5	150	92	20	12
	13	150	95	20	12
	13.5	150	92	20	12
	14	150	95	20	12
	14.5	160	100	20	12
	15	160	100	20	12
	15.5	160	100	20	12
	16	160	100	20	12
	16.5	170	115	20	12
	18	170	115	20	12
	18.5	170	115	20	12
	20	180	130	20	12
	22	200	150	30	20
	24	200	150	30	20
	26	250	170	30	20
	28	200	170	30	20
	30	260	180	30	20
	32	280	195	30	20

CONCRETE DRILL BITS, SANDBLASTED



Diamond ground percussion carbide tip with two cutting edges.

For drilling in brick, soft ceramic tile, plaster and aerated concrete blocks.

From Ø13 mm the drill bits are supplied with a multi-flat shank to prevent the drill bits slipping in the chuck.

ΦD (mm)	Φd (mm)	L2 (mm)	L1 (mm)
3	3	30	60
4	4	40	75
5	5	50	85
6	6	60	100
7	7	60	100
8	8	70	120
9	9	70	120
10	10	70	120
11	10	80	150
12	10	80	150
13	10	80	150
14	10	100	150
15	10	100	150
16	13	100	160
17	13	100	160
18	13	100	160
19	13	100	160
20	13	100	160
21	13	100	160
22	13	100	160
23	13	100	160
24	13	100	160
25	13	100	160
26	13	100	160

ΦD (in)	Φd (in)	L2 (in)	L1 (in)
1/8	1/8	1-1/2	3
5/32	5/32	1-1/2	3
3/16	3/16	2-1/8	4
3/16	3/16	4	6
1/4	1/4	2	4
1/4	1/4	4	6
5/16	1/4	2	4
5/16	1/4	4	6
3/8	1/4	2	4
3/8	3/8	4	6
7/16	1/4	2	4
7/16	3/8	4	6
1/2	1/4	2	4
1/2	3/8	4	6
9/16	3/8	4	6
5/8	1/4	2	4
5/8	3/8	4	6
11/16	1/2	4	6
3/4	1/2	4	6
7/8	1/2	4	6
1	1/2	4	6



Concrete drill bit set (5pc)

Ø 4 / 5 / 6 / 8 / 10 mm

5pc

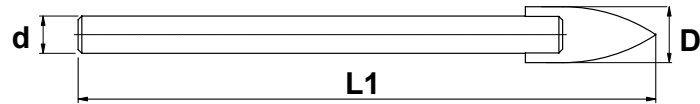


Concrete drill bit set (8pc)

Ø 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 mm

8pc

GLASS & TILE DRILL BITS, STRAIGHT SHANK

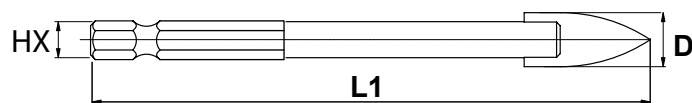


EXECUTION

- Specially ground carbide tip
- Zinc-plated surface
- Thinned cross cutting edges provide precise drilling of pilot holes

ΦD (mm)	ΦD (in)	L1 (mm)	Φd (mm)
3,0	1/8	58	3,0
4,0	5/32	58	3,5
5,0	3/16	58	4,0
5,5	7/32	58	4,0
6,0	15/64	58	5,0
7,0	9/32	78	5,0
8,0	5/16	78	6,0
9,0	11/32	98	6,0
10,0	3/8	98	6,0
12,0	15/32	98	8,0

CLASS & TILE DRILL BITS, 1/4" HEX SHANK

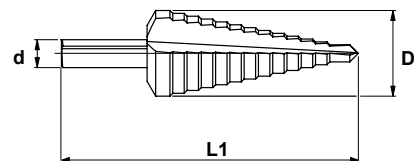


EXECUTION

- Specially ground carbide tip
- Grey surface
- Thinned cross cutting edges provide precise drilling of pilot holes
- 1/4 " bit drive DIN 3126 - E 6.3

ΦD (mm)	ΦD (in)	L1 (mm)	HX(mm)
3,0	1/8	75	6,35
4,0	5/32	75	6,35
5,0	3/16	75	6,35
6,0	15/64	75	6,35
8,0	5/16	85	6,35
10,0	3/8	85	6,35

STEP DRILLS

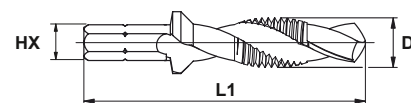


EXECUTION

- CBN profile ground
- Right-hand cutting
- High-performance high-speed steel
- Laser marking
- Two cutters

ΦD (mm)	L1 (mm)	d(mm)
4,0-12,0	80	6,0
4,0-20,0	67	8,0
6,0-30,0	98	10,0
9,0-32,0	80	12,0

COMBINED TAPS



1/4"
HEX SHANK

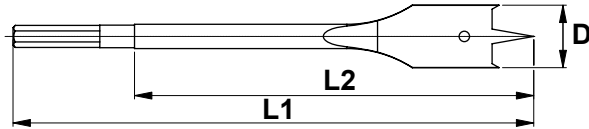


EXECUTION

- Profile-ground with cross-ground finish
- High-performance high-speed steel
- 1/4 " bit drive DIN 3126 - C 6.3

ΦD (mm)	ΦD (in)	L1 (mm)	HX(mm)
2,5	1/8	36	6,35
3,3	5/32	39	6,35
4,2	3/16	41	6,35
5,0	15/64	44	6,35
6,8	5/16	50	6,35
8,5	3/8	59	6,35

WOOD SPADE BIT



1/4"
HEX SHANK



- Forged in one piece from High Carbon Steel.
- Grooved cutting edges cut wood instead of scraping it away, resulting in reduced heat built-up and cutting edges that stay sharper longer.
- Double positive spurs scribe the hole before the chips are made. This provides a cleaner hole inside and reduce vibration.
- Long centre point for accurate hole location.
- High visibility stamped size marking for fast and easy identification.
- Full length heat treatment guards against bending bit in heavy-duty applications.
- 1/4 Quick-Change hex shank won't slip in the chuck and fits quick-change impact drivers.
- For boring smooth, clean, perfectly defined holes in soft and close grained wood.chipboard and floor board.

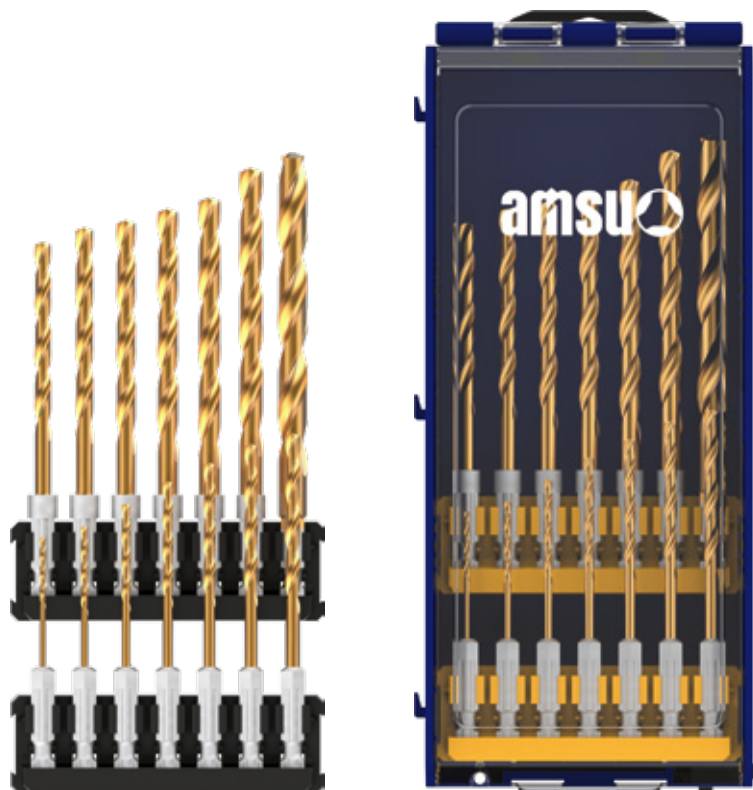
ΦD (mm)	L1 (mm)
6	152
8	152
10	152
11	152
12	152
13	152
14	152
15	152
16	152
17	152
18	152
19	152
20	152
22	152
24	152
25	152
26	152
28	152
30	152
32	152
35	152
38	152
40	152

ΦD (in)	L1 (in)
1/4	6
5/16	6
3/8	6
7/16	6
15/32	6
1/2	6
9/16	6
19/32	6
5/8	6
21/32	6
11/16	6
3/4	6
25/32	6
7/8	6
15/16	6
1	6
1-1/32	6
1-1/8	6
1-3/16	6
1-1/4	6
1-3/8	6
1-1/2	6
1-9/16	6

DISPLAY



DISPLAY



DISPLAY



DISPLAY

