



HSS-DRILLS



Center drills

Form	Cutting direction		Tool material	Surface	Standard	Diameter range (mm)	Catalog no.	Discount group	Standard range, page
------	-------------------	--	---------------	---------	----------	---------------------	-------------	----------------	----------------------

Center drills without flat

	A	right-hand	HSS	bright	DIN 333	0,500 - 12,500	71600	132	367
	A	left-hand	HSS	bright	DIN 333	0,500 - 8,000	71601	138	367
	R	right-hand	HSS	bright	DIN 333	0,500 - 10,000	71602	138	368
	R	right-hand	HSS	TiN	DIN 333	0,800 - 6,300	61602	139	368
	A	right-hand	reinf. neck HSS	bright	Stock std.	1,000 - 6,300	71605	138	369
	B	right-hand	HSS	bright	DIN 333	1,000 - 6,300	71604	138	370

Center drills with flat

	A	right-hand	HSS	bright	Stock std.	1,600 - 6,300	71607	138	371
	R	right-hand	HSS	bright	Stock std.	1,600 - 8,000	71609	138	371

Center drills

Center drills without flat

Catalog no. 71600



Standard drill for producing centre holes acc. to DIN 332, Sheet 1, form A (without protecting chamfer).
Center drills with \varnothing 0.5 and 0.8 mm are only single-sided.

DIN 333

Tool material	HSS
Surface	bright
Form	A
Cutting direction	right-hand
Point grinding	Relieved cone
Point angle °	118
Web thinned $\geq \varnothing$	1.60
Tolerance on \varnothing	
tol. on body \varnothing : h7 (to DIN h9)	
tol. on pilot \varnothing (to new standard):	
\varnothing 0,50 – 2,50	= + 0,14 mm
\varnothing 3,15 – 5,00	= + 0,18 mm
\varnothing 6,30 – 10,0	= + 0,22 mm
\varnothing 12,50	= + 0,27 mm
Web thinning: to DIN 1412, form A	

Center drills without flat

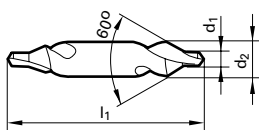
Catalog no. 71601



Standard drill for producing centre holes acc. to DIN 332, Sheet 1, form A (without protecting chamfer).
Center drills with \varnothing 0.5 and 0.8 mm are only single-sided.

DIN 333

Tool material	HSS
Surface	bright
Form	A
Cutting direction	left-hand
Point grinding	Relieved cone
Point angle °	118
Web thinned $\geq \varnothing$	1.60
Tolerance on \varnothing	
tol. on body \varnothing : h7 (to DIN h9)	
tol. on pilot \varnothing (to new standard):	
\varnothing 0,50 – 2,50	= + 0,14 mm
\varnothing 3,15 – 5,00	= + 0,18 mm
\varnothing 6,30 – 10,0	= + 0,22 mm
\varnothing 12,50	= + 0,27 mm
Web thinning: to DIN 1412, form A	



Catalog no.	71600	71601
Tool material	HSS	HSS
Discount group	132	138
Cutting direction	right-hand	left-hand
Surface	bright	bright

d1	d2	l1	price per piece	
mm	mm	mm		
0.500	3.150	25.00	●	●
0.800	3.150	25.00	●	●
1.000	3.150	31.50	●	●
1.250	3.150	31.50	●	●
1.600	4.000	35.50	●	●
2.000	5.000	40.00	●	●
2.500	6.300	45.00	●	●
3.150	8.000	50.00	●	●
4.000	10.000	56.00	●	●
5.000	12.500	63.00	●	●
6.300	16.000	71.00	●	●
8.000	20.000	80.00	●	●
10.000	25.000	100.00	●	●
12.500	31.500	125.00	●	●

Center drills

Center drills without flat

Catalog no. 71602



Special purpose drill for producing centre holes to DIN 332, sheet 1, form R (radiused). Special features of these tools are: 1. high fracture-resistant properties. 2. precise concentricity of the point in relation to the body. 3. radiused form providing a protected centre hole.

Center drills with \varnothing 0.5 and 0.8 mm are only single-sided.

DIN 333

Tool material	HSS
Surface	bright
Form	<i>R</i>
Cutting direction	right-hand
Point grinding	Relieved cone
Point angle °	118
Web thinned $\geq \varnothing$	1.60
Tolerance on \varnothing	
tol. on body \varnothing : h7 (to DIN h9)	
tol. on pilot \varnothing (to new standard):	
\varnothing 0,50 – 2,50	= + 0,14 mm
\varnothing 3,15 – 5,00	= + 0,18 mm
\varnothing 6,30 – 10,0	= + 0,22 mm
\varnothing 12,50	= + 0,27 mm
Web thinning: to DIN 1412, form A	

Center drills without flat

Catalog no. 61602

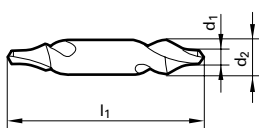


Special purpose drill for producing centre holes to DIN 332, sheet 1, form R (radiused). Special features of these tools are: 1. high fracture-resistant properties. 2. precise concentricity of the point in relation to the body. 3. radiused form providing a protected centre hole.

Center drills with \varnothing 0.5 and 0.8 mm are only single-sided.

DIN 333

Tool material	HSS
Surface	TiN
Form	<i>R</i>
Cutting direction	right-hand
Point grinding	Relieved cone
Point angle °	118
Web thinned $\geq \varnothing$	1.60
Tolerance on \varnothing	
tol. on body \varnothing : h7 (to DIN h9)	
tol. on pilot \varnothing (to new standard):	
\varnothing 0,50 – 2,50	= + 0,14 mm
\varnothing 3,15 – 5,00	= + 0,18 mm
\varnothing 6,30 – 10,0	= + 0,22 mm
\varnothing 12,50	= + 0,27 mm
Web thinning: to DIN 1412, form A	



Catalog no.	71602	61602
Tool material	HSS	HSS
Discount group	138	139
Cutting direction	right-hand	right-hand
Surface	bright	TiN

d1	d2	l1	price per piece	
mm	mm	mm		
0.500	3.150	25.00	●	
0.800	3.150	25.00	●	
1.000	3.150	31.50	●	●
1.250	3.150	31.50	●	●
1.600	4.000	35.50	●	●
2.000	5.000	40.00	●	●
2.500	6.300	45.00	●	●
3.150	8.000	50.00	●	●
4.000	10.000	56.00	●	●
5.000	12.500	63.00	●	●
6.300	16.000	71.00	●	●
8.000	20.000	80.00	●	
10.000	25.000	100.00	●	

Center drills

Center drills without flat

Catalog no. 71605

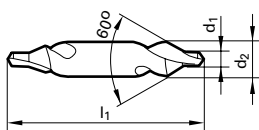


Special purpose drill for producing centre holes to DIN 332, sheet 1, form A (without protecting chamfer), except for an annular groove at the junction of the countersink and the drilled hole. Special features of these tools are: high fracture-resistant properties, specially strengthened form at the junction of the pilot and body which permits high metal removal rates, special form cuts annular groove which acts as a reservoir for the lubricant.

Stock std.	reinf. neck
------------	-------------

Tool material	HSS
Surface	bright
Form	A
Cutting direction	right-hand
Point grinding	Relieved cone
Point angle °	118
Web thinned $\geq \emptyset$	1.60
Tolerance on \emptyset	

tol. on body \emptyset : h7 (to DIN h9)
 tol. on pilot \emptyset (to new standard):
 \emptyset 0,50 – 2,50 = + 0,14 mm
 \emptyset 3,15 – 5,00 = + 0,18 mm
 \emptyset 6,30 – 10,0 = + 0,22 mm
 \emptyset 12,50 = + 0,27 mm
 Web thinning: to DIN 1412, form A



Catalog no.	71605
Tool material	HSS
Discount group	138
Cutting direction	right-hand
Surface	bright

d1	d2	l1	price per piece
mm	mm	mm	
1.000	3.150	31.50	●
1.250	3.150	31.50	●
1.600	4.000	35.50	●
2.000	5.000	40.00	●
2.500	6.300	45.00	●
3.150	8.000	50.00	●
4.000	10.000	56.00	●
5.000	12.500	63.00	●
6.300	16.000	71.00	●

Center drills

Center drills without flat

DIN 333

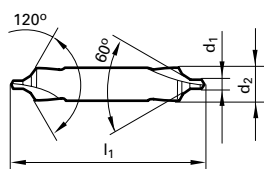
Catalog no. 71604



Special purpose drill for producing centre holes to DIN 332, Sheet 1, form B (with protecting countersink of 120°).

Tool material	HSS
Surface	bright
Form	B
Cutting direction	right-hand
Point grinding	Relieved cone
Point angle °	118
Web thinned $\geq \emptyset$	1.60
Tolerance on \emptyset	

tol. on body \emptyset : h7 (to DIN h9)
 tol. on pilot \emptyset (to new standard):
 \emptyset 0,50 – 2,50 = + 0,14 mm
 \emptyset 3,15 – 5,00 = + 0,18 mm
 \emptyset 6,30 – 10,0 = + 0,22 mm
 \emptyset 12,50 = + 0,27 mm
 Web thinning: to DIN 1412, form A



Catalog no.	71604
Tool material	HSS
Discount group	138
Cutting direction	right-hand
Surface	bright

d1	d2	l1	price per piece
mm	mm	mm	
1.000	4.000	35.50	●
1.250	5.000	40.00	●
1.600	6.300	45.00	●
2.000	8.000	50.00	●
2.500	10.000	56.00	●
3.150	11.200	60.00	●
4.000	14.000	67.00	●
5.000	18.000	75.00	●
6.300	20.000	80.00	●

Center drills

Center drills with flat

Catalog no. 71607



Special purpose drill for producing centre holes to DIN 332, sheet 1, form A (without protecting chamfer). For centering and facing machines where the end face is required to be dressed and centred in the same operation.

Stock std.

Tool material	HSS
Surface	bright
Form	A
Cutting direction	right-hand
Point grinding	Relieved cone
Point angle °	118
Web thinned $\geq \emptyset$	1.60
Tolerance on \emptyset	
tol. on body \emptyset : h7 (to DIN h9)	
tol. on pilot \emptyset (to new standard):	
\emptyset 0,50 – 2,50	= + 0,14 mm
\emptyset 3,15 – 5,00	= + 0,18 mm
\emptyset 6,30 – 10,0	= + 0,22 mm
\emptyset 12,50	= + 0,27 mm
Web thinning: to DIN 1412, form A	

Center drills with flat

Catalog no. 71609

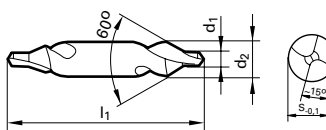


Special purpose drill for producing centre holes to DIN 332, sheet 1, form R (radiused). For centering and facing machines where the end face is required to be dressed and centered in the same operation. Special features of these tools are:

1. high fracture-resistant properties.
2. precise concentricity of the point in relation to the body.
3. radiused form providing a protected centre hole.

Stock std.

Tool material	HSS
Surface	bright
Form	R
Cutting direction	right-hand
Point grinding	Relieved cone
Point angle °	118
Web thinned $\geq \emptyset$	1.60
Tolerance on \emptyset	
tol. on body \emptyset : h7 (to DIN h9)	
tol. on pilot \emptyset (to new standard):	
\emptyset 0,50 – 2,50	= + 0,14 mm
\emptyset 3,15 – 5,00	= + 0,18 mm
\emptyset 6,30 – 10,0	= + 0,22 mm
\emptyset 12,50	= + 0,27 mm
Web thinning: to DIN 1412, form A	



Catalog no.	71607	71609
Tool material	HSS	HSS
Discount group	138	138
Cutting direction	right-hand	right-hand
Surface	bright	bright

d1	d2	l1	price per piece	
mm	mm	mm		
1.600	4.000	35.50	●	●
2.000	5.000	40.00	●	●
2.500	6.300	45.00	●	●
3.150	8.000	50.00	●	●
4.000	10.000	56.00	●	●
5.000	12.500	63.00	●	●
6.300	16.000	71.00	●	●
8.000	20.000	80.00	●	●