Center drills

Center drills without flat

DIN 333

Catalogue no. **71600**

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

Tool material	**HSS**
Surface	**bright**
Form	***A***
Cutting direction	**right-hand**
Point grinding	**Relieved cone**
Point angle °	**118**
Web thinned ≥Ø	**1.60**
Tolerance	

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

Center drills without flat

DIN 333

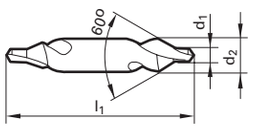
Catalogue no. **71601**

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

Tool material	**HSS**
Surface	**bright**
Form	***A***
Cutting direction	**left-hand**
Point grinding	**Relieved cone**
Point angle °	**118**
Web thinned ≥Ø	**1.60**
Tolerance	

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

Center drills without flat



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

d1 mm	d2 mm	l1 mm	Gross price/€	
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 without flat

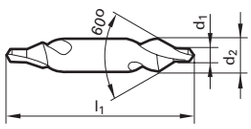
Stock std.	reinf. neck
Tool material	HSS
Surface	bright
Form	*A*
Cutting direction	right-hand
Point grinding	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Tolerance	

Catalogue 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.

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

Center drills without flat



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

d1 mm	d2 mm	l1 mm	Gross price/€
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 without flat

DIN 333

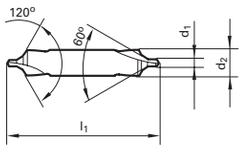
Catalogue no. **71604**

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 ≥Ø	**1.60**
Tolerance	

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

Center drills without flat



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

d1 mm	d2 mm	l1 mm	Gross price/€
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 without flat

DIN 333

Catalogue 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 inrelation to the body. 3. radiused form providing a protected centre hole.

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

Tool material	**HSS**
Surface	**bright**
Form	***R***
Cutting direction	**right-hand**
Point grinding	**Relieved cone**
Point angle °	**118**
Web thinned ≥Ø	**1.60**
Tolerance	

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

Center drills without flat

DIN 333

Catalogue no. **61602**

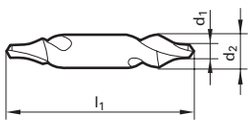
Special purpose drill for producing centre holes to DIN 332, sheet 1, form R (radiused). Special features of these tools are: 1. high fracture-resistant properties. 2. precise concentricity of the point in relation to the body. 3. radiused form providing a protected centre hole.

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

Tool material	**HSS**
Surface	**TiN**
Form	***R***
Cutting direction	**right-hand**
Point grinding	**Relieved cone**
Point angle °	**118**
Web thinned ≥Ø	**1.60**
Tolerance	

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

Center drills without flat



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

d1 mm	d2 mm	l1 mm	Gross price/€	
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 with flat

Catalogue 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 ≥Ø	**1.60**
Tolerance	

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

Center drills with flat

Catalogue 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:

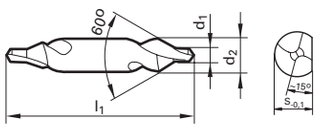
1. high fracture-resistant properties.
2. precise concentricity of the point in relation to the body.
3. radiused form providing a protected centre hole.

Stock std.

Tool material	**HSS**
Surface	**bright**
Form	***R***
Cutting direction	**right-hand**
Point grinding	**Relieved cone**
Point angle °	**118**
Web thinned ≥Ø	**1.60**
Tolerance	

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

Center drills with flat



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

d1 mm	d2 mm	l1 mm	Gross price/€	
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		●