

## Positioning Bushings • without collar, DIN 179 A EH 23112.



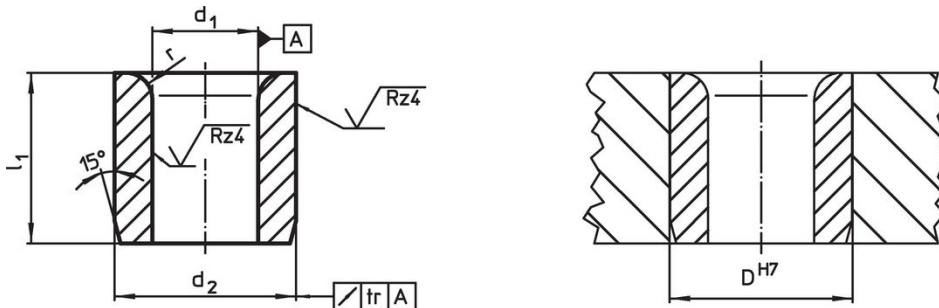
### Product Description

Positioning or drill bushings are used to drill repetitive holes in the same location to ensure repeatability. The hardened and ground positioning bushings can be used as wear-resistant guide for drills, shafts etc.

### Material


- Case-hardened steel, case-hardened


### Drawing



### Order information

Dimensions				Location hole	[g]	Art. No.
d <sub>1</sub> F7	l <sub>1</sub> [mm]	d <sub>2</sub> n6	r	D H7 [mm]		
2.0	6	5	1.0	5	0.7	<a href="#">23112.0520</a>
2.0	9	5	1.0	5	1.1	<a href="#">23112.0521</a>
2.1	6	5	1.0	5	0.7	<a href="#">23112.0522</a>
2.1	9	5	1.0	5	1.1	<a href="#">23112.0523</a>
2.5	6	5	1.0	5	0.7	<a href="#">23112.0524</a>
2.5	9	5	1.0	5	1.0	<a href="#">23112.0525</a>
3.0	8	6	1.0	6	1.9	<a href="#">23112.0530</a>
3.0	12	6	1.0	6	1.9	<a href="#">23112.0531</a>
3.0	16	6	1.0	6	2.6	<a href="#">23112.0532</a>
3.1	8	6	1.0	6	1.2	<a href="#">23112.0533</a>
3.1	12	6	1.0	6	1.9	<a href="#">23112.0534</a>
3.1	16	6	1.0	6	3.2	<a href="#">23112.0535</a>
3.5	8	7	1.0	7	2.4	<a href="#">23112.0536</a>
3.5	12	7	1.0	7	2.6	<a href="#">23112.0537</a>
3.5	16	7	1.0	7	3.6	<a href="#">23112.0538</a>
4.0	8	7	1.0	7	1.5	<a href="#">23112.0540</a>
4.0	12	7	1.0	7	3.0	<a href="#">23112.0541</a>
4.0	16	7	1.0	7	3.2	<a href="#">23112.0542</a>
4.1	8	8	1.0	8	2.2	<a href="#">23112.0543</a>
4.1	12	8	1.0	8	3.4	<a href="#">23112.0544</a>
4.1	16	8	1.0	8	4.6	<a href="#">23112.0545</a>
4.5	8	8	1.0	8	2.1	<a href="#">23112.0546</a>
4.5	12	8	1.0	8	3.1	<a href="#">23112.0547</a>
4.5	16	8	1.0	8	4.2	<a href="#">23112.0548</a>
5.0	8	8	1.0	8	1.8	<a href="#">23112.0550</a>
5.0	12	8	1.0	8	3.4	<a href="#">23112.0551</a>
5.0	16	8	1.0	8	3.7	<a href="#">23112.0552</a>
5.1	10	10	1.5	10	4.4	<a href="#">23112.0553</a>
5.1	16	10	1.5	10	7.1	<a href="#">23112.0554</a>
5.1	20	10	1.5	10	8.9	<a href="#">23112.0555</a>
5.5	10	10	1.5	10	4.1	<a href="#">23112.0556</a>

d <sub>1</sub> F7	Dimensions			r	Location hole D H7		Art. No.
	l <sub>1</sub>	d <sub>2</sub> n6	[mm]				
5.5	16	10	1.5	10	6.7	23112.0557	
5.5	20	10	1.5	10	8.4	23112.0558	
6.0	10	10	1.5	10	3.8	23112.0560	
6.0	16	10	1.5	10	6.1	23112.0561	
6.0	20	10	1.5	10	7.7	23112.0562	
6.1	10	12	1.5	12	6.3	23112.0563	
6.1	16	12	1.5	12	10.0	23112.0564	
6.1	20	12	1.5	12	13.0	23112.0565	
6.5	10	12	1.5	12	6.0	23112.0566	
6.5	16	12	1.5	12	9.7	23112.0567	
6.5	20	12	1.5	12	12.0	23112.0568	
7.0	10	12	1.5	12	5.6	23112.0570	
7.0	16	12	1.5	12	9.1	23112.0571	
7.0	20	12	1.5	12	11.0	23112.0572	
7.1	10	12	1.5	12	5.5	23112.0573	
7.1	16	12	1.5	12	9.0	23112.0574	
7.1	20	12	1.5	12	11.0	23112.0575	
7.5	10	12	1.5	12	5.1	23112.0576	
7.5	16	12	1.5	12	8.4	23112.0577	
7.5	20	12	1.5	12	11.0	23112.0578	
8.0	10	12	1.5	12	4.7	23112.0580	
8.0	16	12	1.5	12	7.6	23112.0581	
8.0	20	12	1.5	12	9.6	23112.0582	
8.1	12	15	2.0	15	11.0	23112.0583	
8.1	20	15	2.0	15	19.0	23112.0584	
8.1	25	15	2.0	15	24.0	23112.0585	
8.5	12	15	2.0	15	11.0	23112.0586	
8.5	20	15	2.0	15	18.0	23112.0587	
8.5	25	15	2.0	15	23.0	23112.0588	
9.0	12	15	2.0	15	10.0	23112.0590	
9.0	20	15	2.0	15	17.0	23112.0591	
9.0	25	15	2.0	15	22.0	23112.0592	
9.1	12	15	2.0	15	10.0	23112.0593	
9.1	20	15	2.0	15	17.0	23112.0594	
9.1	25	15	2.0	15	21.0	23112.0595	
9.5	12	15	2.0	15	9.5	23112.0596	
9.5	20	15	2.0	15	16.0	23112.0597	
9.5	25	15	2.0	15	20.0	23112.0598	
10.0	12	15	2.0	15	8.8	23112.0600	
10.0	20	15	2.0	15	15.0	23112.0601	
10.0	25	15	2.0	15	19.0	23112.0602	
10.1	12	18	2.0	18	16.0	23112.0603	
10.1	20	18	2.0	18	27.0	23112.0604	
10.1	25	18	2.0	18	33.0	23112.0605	
10.5	12	18	2.0	18	15.0	23112.0606	
10.5	20	18	2.0	18	26.0	23112.0607	
10.5	25	18	2.0	18	32.0	23112.0608	
11.0	12	18	2.0	18	14.0	23112.0610	
11.0	20	18	2.0	18	24.0	23112.0611	
11.0	25	18	2.0	18	31.0	23112.0612	
11.1	12	18	2.0	18	14.0	23112.0613	
11.1	20	18	2.0	18	24.0	23112.0614	
11.1	25	18	2.0	18	30.0	23112.0615	
11.5	12	18	2.0	18	13.0	23112.0616	
11.5	20	18	2.0	18	23.0	23112.0617	
11.5	25	18	2.0	18	29.0	23112.0618	
12.0	12	18	2.0	18	13.0	23112.0620	
12.0	20	18	2.0	18	22.0	23112.0621	
12.0	25	18	2.0	18	27.0	23112.0622	
12.1	16	22	2.0	22	32.0	23112.0623	
12.1	28	22	2.0	22	57.0	23112.0624	

d <sub>1</sub> F7	Dimensions			r	Location hole D H7 [mm]	 [g]	Art. No.
	l <sub>1</sub> [mm]	d <sub>2</sub> n6					
12.1	36	22		2.0	22	74.0	<a href="#">23112.0625</a>
12.5	16	22		2.0	22	31.0	<a href="#">23112.0626</a>
12.5	28	22		2.0	22	66.0	<a href="#">23112.0627</a>
12.5	36	22		2.0	22	69.0	<a href="#">23112.0628</a>
13.0	16	22		2.0	22	30.0	<a href="#">23112.0630</a>
13.0	28	22		2.0	22	53.0	<a href="#">23112.0631</a>
13.0	36	22		2.0	22	69.0	<a href="#">23112.0632</a>
14.0	16	22		2.0	22	27.0	<a href="#">23112.0640</a>
14.0	28	22		2.0	22	49.0	<a href="#">23112.0641</a>
14.0	36	22		2.0	22	63.0	<a href="#">23112.0642</a>
15.0	16	22		2.0	22	24.0	<a href="#">23112.0650</a>
15.0	28	22		2.0	22	44.0	<a href="#">23112.0651</a>
15.0	36	22		2.0	22	56.0	<a href="#">23112.0652</a>
16.0	16	26		2.0	26	45.0	<a href="#">23112.0660</a>
16.0	28	26		2.0	26	71.0	<a href="#">23112.0661</a>
16.0	36	26		2.0	26	92.0	<a href="#">23112.0662</a>
16.1	16	26		2.0	26	40.0	<a href="#">23112.0663</a>
16.1	28	26		2.0	26	71.0	<a href="#">23112.0664</a>
16.1	36	26		2.0	26	91.0	<a href="#">23112.0665</a>
16.5	16	26		2.0	26	39.0	<a href="#">23112.0666</a>
16.5	28	26		2.0	26	68.0	<a href="#">23112.0667</a>
16.5	36	26		2.0	26	88.0	<a href="#">23112.0668</a>
17.0	16	26		2.0	26	37.0	<a href="#">23112.0671</a>
17.0	28	26		2.0	26	65.0	<a href="#">23112.0672</a>
17.0	36	26		2.0	26	84.0	<a href="#">23112.0673</a>
18.0	16	26		2.0	26	33.0	<a href="#">23112.0681</a>
18.0	28	26		2.0	26	59.0	<a href="#">23112.0682</a>
18.0	36	26		2.0	26	76.0	<a href="#">23112.0683</a>
19.0	20	30		3.0	30	64.0	<a href="#">23112.0691</a>
19.0	36	30		3.0	30	117.0	<a href="#">23112.0692</a>
19.0	45	30		3.0	30	147.0	<a href="#">23112.0693</a>
20.0	20	30		3.0	30	59.0	<a href="#">23112.0701</a>
20.0	36	30		3.0	30	108.0	<a href="#">23112.0702</a>
20.0	45	30		3.0	30	136.0	<a href="#">23112.0703</a>
20.1	20	30		3.0	30	59.0	<a href="#">23112.0704</a>
20.1	36	30		3.0	30	108.0	<a href="#">23112.0705</a>
20.1	45	30		3.0	30	135.0	<a href="#">23112.0706</a>
22.0	20	30		3.0	30	49.0	<a href="#">23112.0721</a>
22.0	36	30		3.0	30	90.0	<a href="#">23112.0722</a>
22.0	45	30		3.0	30	113.0	<a href="#">23112.0723</a>
25.0	20	35		3.0	35	71.0	<a href="#">23112.0751</a>
25.0	36	35		3.0	35	130.0	<a href="#">23112.0752</a>
25.0	45	35		3.0	35	163.0	<a href="#">23112.0753</a>
30.0	25	42		3.0	42	129.0	<a href="#">23112.0801</a>
30.0	45	42		3.0	42	235.0	<a href="#">23112.0802</a>
30.0	56	42		3.0	42	293.0	<a href="#">23112.0803</a>

## Compliance

### RoHS compliant

Contains lead - compliant according to exceptions 6a / 6b / 6c.

### Contains SVHC substances >0,1% w/w

Contains lead - SVHC list [REACH] as of 27.06.2024.

### Contains Proposition 65 substances



Lead can cause cancer and reproductive harm from exposure  
<https://www.P65Warnings.ca.gov/>

### Free from Conflict Minerals

This product does not contain any substances designated as "conflict minerals" such as tantalum, tin, gold or tungsten from the Democratic Republic of Congo or adjacent countries.