Positioning Bushings • with collar, DIN 172 A
EH 23112.

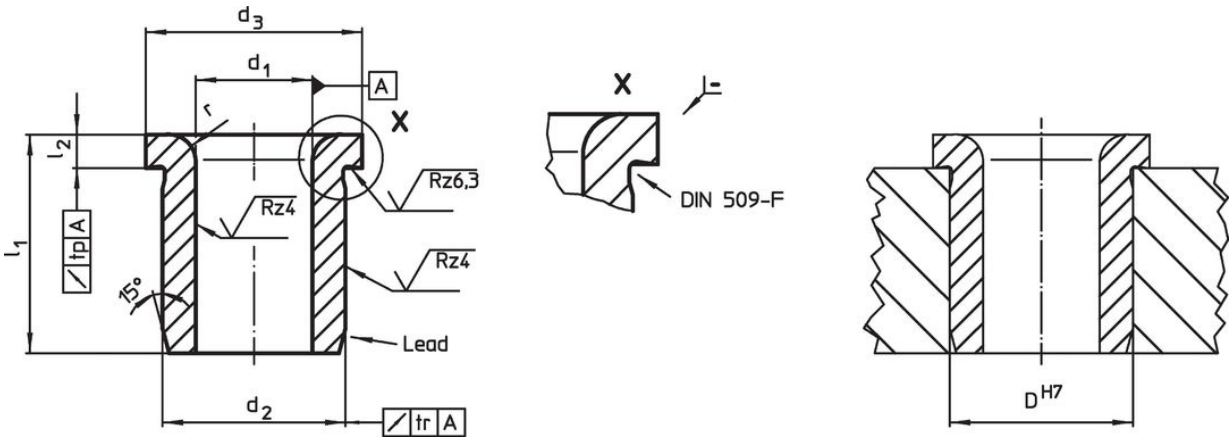
Product Description

Positioning or drill bushings are used to drill repetitive holes in the same location to ensure repeatabililty.
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		Art. No.
d_1 F7	l_1	d_2 n6	d_3	l_2	r	D H7		
[mm]						[mm]	[g]	
2.0	**6**	5	8	2.0	1.0	5	1.2	23112.0020
2.0	**9**	5	8	2.0	1.0	5	1.6	23112.0021
2.1	**6**	5	8	2.0	1.0	5	1.2	23112.0022
2.1	**9**	5	8	2.0	1.0	5	1.5	23112.0023
2.5	**6**	5	8	2.0	1.0	5	1.1	23112.0024
2.5	**9**	5	8	2.0	1.0	5	1.4	23112.0025
3.0	**8**	6	9	2.5	1.0	6	1.9	23112.0030
3.0	**12**	6	9	2.5	1.0	6	2.6	23112.0031
3.0	**16**	6	9	2.5	1.0	6	3.2	23112.0032
3.1	**8**	6	9	2.5	1.0	6	1.9	23112.0033
3.1	**12**	6	9	2.5	1.0	6	2.5	23112.0034
3.1	**16**	6	9	2.5	1.0	6	3.2	23112.0035
3.5	**8**	7	10	2.5	1.0	7	2.4	23112.0036
3.5	**12**	7	10	2.5	1.0	7	3.4	23112.0037
3.5	**16**	7	10	2.5	1.0	7	4.3	23112.0038
4.0	**8**	7	10	2.5	1.0	7	2.3	23112.0040
4.0	**12**	7	10	2.5	1.0	7	3.1	23112.0041
4.0	**16**	7	10	2.5	1.0	7	3.9	23112.0042
4.1	**8**	8	11	2.5	1.0	8	3.0	23112.0043
4.1	**12**	8	11	2.5	1.0	8	4.2	23112.0044
4.1	**16**	8	11	2.5	1.0	8	5.3	23112.0045
4.5	**8**	8	11	2.5	1.0	8	2.9	23112.0046
4.5	**12**	8	11	2.5	1.0	8	3.9	23112.0047
4.5	**16**	8	11	2.5	1.0	8	5.0	23112.0048
5.0	**8**	8	11	2.5	1.0	8	1.8	23112.0050
5.0	**12**	8	11	2.5	1.0	8	3.6	23112.0051
5.0	**16**	8	11	2.5	1.0	8	4.5	23112.0052

Dimensions						Location hole		Art. No.
d_1 F7	l_1	d_2 n6	d_3	l_2	r	D H7		
[mm]						[mm]	[g]	
5.1	**10**	10	13	3.0	1.5	10	5.5	23112.0053
5.1	**16**	10	13	3.0	1.5	10	8.2	23112.0054
5.1	**20**	10	13	3.0	1.5	10	10.0	23112.0055
5.5	**10**	10	13	3.0	1.5	10	5.3	23112.0056
5.5	**16**	10	13	3.0	1.5	10	7.9	23112.0057
5.5	**20**	10	13	3.0	1.5	10	9.6	23112.0058
6.0	**10**	10	13	3.0	1.5	10	4.9	23112.0060
6.0	**16**	10	13	3.0	1.5	10	7.3	23112.0061
6.0	**20**	10	13	3.0	1.5	10	8.8	23112.0062
6.1	**10**	12	15	3.0	1.5	12	7.7	23112.0063
6.1	**16**	12	15	3.0	1.5	12	12.0	23112.0064
6.1	**20**	12	15	3.0	1.5	12	14.0	23112.0065
6.5	**10**	12	15	3.0	1.5	12	7.4	23112.0066
6.5	**16**	12	15	3.0	1.5	12	11.0	23112.0067
6.5	**20**	12	15	3.0	1.5	12	14.0	23112.0068
7.0	**10**	12	15	3.0	1.5	12	7.0	23112.0070
7.0	**16**	12	15	3.0	1.5	12	10.0	23112.0071
7.0	**20**	12	15	3.0	1.5	12	13.0	23112.0072
7.1	**10**	12	15	3.0	1.5	12	6.9	23112.0073
7.1	**16**	12	15	3.0	1.5	12	10.0	23112.0074
7.1	**20**	12	15	3.0	1.5	12	13.0	23112.0075
7.5	**10**	12	15	3.0	1.5	12	6.5	23112.0076
7.5	**16**	12	15	3.0	1.5	12	9.7	23112.0077
7.5	**20**	12	15	3.0	1.5	12	12.0	23112.0078
8.0	**10**	12	15	3.0	1.5	12	6.0	23112.0080
8.0	**16**	12	15	3.0	1.5	12	9.0	23112.0081
8.0	**20**	12	15	3.0	1.5	12	11.0	23112.0082
8.1	**12**	15	18	3.0	2.0	15	13.0	23112.0083
8.1	**20**	15	18	3.0	2.0	15	25.0	23112.0084
8.1	**25**	15	18	3.0	2.0	15	26.0	23112.0085
8.5	**12**	15	18	3.0	2.0	15	13.0	23112.0086
8.5	**20**	15	18	3.0	2.0	15	20.0	23112.0087
8.5	**25**	15	18	3.0	2.0	15	25.0	23112.0088
9.0	**12**	15	18	3.0	2.0	15	12.0	23112.0090
9.0	**20**	15	18	3.0	2.0	15	19.0	23112.0091
9.0	**25**	15	18	3.0	2.0	15	23.0	23112.0092
9.1	**12**	15	18	3.0	2.0	15	12.0	23112.0093
9.1	**20**	15	18	3.0	2.0	15	19.0	23112.0094
9.1	**25**	15	18	3.0	2.0	15	23.0	23112.0095
9.5	**12**	15	18	3.0	2.0	15	11.0	23112.0096
9.5	**20**	15	18	3.0	2.0	15	18.0	23112.0097
9.5	**25**	15	18	3.0	2.0	15	22.0	23112.0098
10.0	**12**	15	18	3.0	2.0	15	10.0	23112.0100
10.0	**20**	15	18	3.0	2.0	15	17.0	23112.0101
10.0	**25**	15	18	3.0	2.0	15	20.0	23112.0102
10.1	**12**	18	22	4.0	2.0	18	19.0	23112.0103
10.1	**20**	18	22	4.0	2.0	18	30.0	23112.0104
10.1	**25**	18	22	4.0	2.0	18	37.0	23112.0105
10.5	**12**	18	22	4.0	2.0	18	19.0	23112.0106
10.5	**20**	18	22	4.0	2.0	18	29.0	23112.0107
10.5	**25**	18	22	4.0	2.0	18	36.0	23112.0108
11.0	**12**	18	22	4.0	2.0	18	18.0	23112.0110
11.0	**20**	18	22	4.0	2.0	18	28.0	23112.0111
11.0	**25**	18	22	4.0	2.0	18	34.0	23112.0112
11.1	**12**	18	22	4.0	2.0	18	18.0	23112.0113
11.1	**20**	18	22	4.0	2.0	18	28.0	23112.0114
11.1	**25**	18	22	4.0	2.0	18	34.0	23112.0115
11.5	**12**	18	22	4.0	2.0	18	17.0	23112.0116
11.5	**20**	18	22	4.0	2.0	18	26.0	23112.0117
11.5	**25**	18	22	4.0	2.0	18	33.0	23112.0118
12.0	**12**	18	22	4.0	2.0	18	16.0	23112.0120

Dimensions						Location hole		Art. No.
d_1 F7	l_1	d_2 n6	d_3	l_2	r	D H7		
[mm]						[mm]	[g]	
12.0	**20**	18	22	4.0	2.0	18	25.0	23112.0121
12.0	**25**	18	22	4.0	2.0	18	31.0	23112.0122
12.1	**16**	22	26	4.0	2.0	22	37.0	23112.0123
12.1	**28**	22	26	4.0	2.0	22	62.0	23112.0124
12.1	**36**	22	26	4.0	2.0	22	78.0	23112.0125
12.5	**16**	22	26	4.0	2.0	22	36.0	23112.0126
12.5	**28**	22	26	4.0	2.0	22	60.0	23112.0127
12.5	**36**	22	26	4.0	2.0	22	76.0	23112.0128
13.0	**16**	22	26	4.0	2.0	22	34.0	23112.0130
13.0	**28**	22	26	4.0	2.0	22	58.0	23112.0131
13.0	**36**	22	26	4.0	2.0	22	73.0	23112.0132
14.0	**16**	22	26	4.0	2.0	22	32.0	23112.0140
14.0	**28**	22	26	4.0	2.0	22	198.0	23112.0141
14.0	**36**	22	26	4.0	2.0	22	67.0	23112.0142
15.0	**16**	22	26	4.0	2.0	22	29.0	23112.0150
15.0	**28**	22	26	4.0	2.0	22	48.0	23112.0151
15.0	**36**	22	26	4.0	2.0	22	61.0	23112.0152
16.0	**16**	26	30	4.0	2.0	26	45.0	23112.0160
16.0	**28**	26	30	4.0	2.0	26	76.0	23112.0161
16.0	**36**	26	30	4.0	2.0	26	97.0	23112.0162
16.1	**16**	26	30	4.0	2.0	26	45.0	23112.0163
16.1	**28**	26	30	4.0	2.0	26	76.0	23112.0164
16.1	**36**	26	30	4.0	2.0	26	96.0	23112.0165
16.5	**16**	26	30	4.0	2.0	26	44.0	23112.0166
16.5	**28**	26	30	4.0	2.0	26	73.0	23112.0167
16.5	**36**	26	30	4.0	2.0	26	93.0	23112.0168
17.0	**16**	26	30	4.0	2.0	26	42.0	23112.0171
17.0	**28**	26	30	4.0	2.0	26	70.0	23112.0172
17.0	**36**	26	30	4.0	2.0	26	89.0	23112.0173
18.0	**16**	26	30	4.0	2.0	26	39.0	23112.0181
18.0	**28**	26	30	4.0	2.0	26	64.0	23112.0182
18.0	**36**	26	30	4.0	2.0	26	82.0	23112.0183
19.0	**20**	30	34	5.0	3.0	30	71.0	23112.0191
19.0	**36**	30	34	5.0	3.0	30	125.0	23112.0192
19.0	**45**	30	34	5.0	3.0	30	154.0	23112.0193
20.0	**20**	30	34	5.0	3.0	30	67.0	23112.0201
20.0	**36**	30	34	5.0	3.0	30	117.0	23112.0202
20.0	**45**	30	34	5.0	3.0	30	143.0	23112.0203
20.1	**20**	30	34	5.0	3.0	30	66.0	23112.0204
20.1	**36**	30	34	5.0	3.0	30	115.0	23112.0205
20.1	**45**	30	34	5.0	3.0	30	142.0	23112.0206
22.0	**20**	30	34	5.0	3.0	30	56.0	23112.0221
22.0	**36**	30	34	5.0	3.0	30	96.0	23112.0222
22.0	**45**	30	34	5.0	3.0	30	120.0	23112.0223
25.0	**20**	35	39	5.0	3.0	35	80.0	23112.0251
25.0	**36**	35	39	5.0	3.0	35	138.0	23112.0252
25.0	**45**	35	39	5.0	3.0	35	171.0	23112.0253
30.0	**25**	42	46	5.0	3.0	42	139.0	23112.0301
30.0	**45**	42	46	5.0	3.0	42	245.0	23112.0302
30.0	**56**	42	46	5.0	3.0	42	303.0	23112.0303

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 23.01.2024.

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.