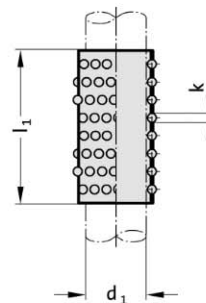


## Ball cage, small dimension Guide bush for ball bearing, small dimension



206.51.



### Material:

Cage: Brass  
Balls: Steel hardened (DIN 5401)

### 206.51. Ball cage, small dimension

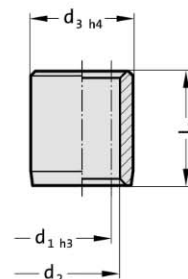
$d_1$	3	4	5	6	8
$k$	1	1	1	1	1
$l_1$	Total numbers of balls				
10	21	21	29	36	
15	35	35	49	61	61
20	49	49	69	69	69
25		64	89	89	89
30			109	109	109
40					149

### Ordering Code (example):

Ball cage, small dimension	=206.51.
Guide diameter $d_1$	5 mm = 005.
Length $l_1$	30 mm = 030
Order No	=206.51. 005.030



206.54.



### Material:

Roller bearing steel 100 Cr 6  
Hardness: hardened to 60 + 4 HRC  
Remarks: available in stainless steel on request

### Execution:

Guide bush bores  $d_2$  fine-honed to IT3

### Note:

Assembly guide lines / Dimensional requirements and tolerances at the end of chapter D.

### Ordering Code (example):

Guide bush for ball bearing, small dimension	=206.54.
Guide diameter $d_1$	5 mm = 005.
Length $l_1$	10 mm = 010
Order No	=206.54. 005.010

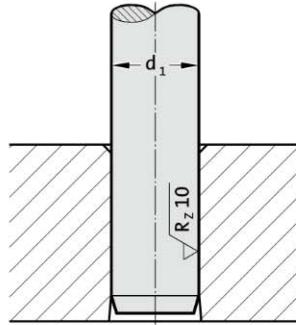
### 206.54. Guide bush for ball bearing, small dimension

$d_1$	3	4	5	6	8
$d_2$	5	6	7	8	10
$d_3$	7	8	10	11	14
$l_1$					
10	●	●	●		
15	●	●	●	●	●
20	●	●	●	●	●
25		●	●	●	●
30			●	●	●
35				●	●
40					●

## Assembly of Guide Elements – Dimensional Requirements and Tolerances

202.17. / 202.19. /  
202.22. / 202.23. /  
202.24. / 202.29.

Guide pillar-  
DIN 9825/ISO 9182-  
2 ~DIN 9825/  
~ISO 9182-2  
(press fit)



202.17. / 202.19. / 202.22. / 202.23. / 202.24. /  
202.29.

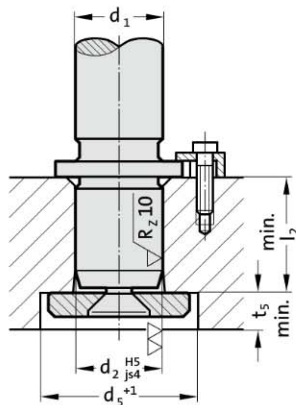
Pillar $\varnothing d_1^*$	Retaining bore $d_1$ (recommended values based on experiences)
3-80	in grey cast iron: $d_1$
	—
	—
	—
	in steel: $d_1$
	—
	—
	—

\* Pillars of  $d_1 = 50$  mm and over should be frozen in dry ice before fitting



2021.46. / 2021.44.

Demountable guide  
pillar with collar  
DIN 9825/  
~ISO 9182-5  
(transition fit)



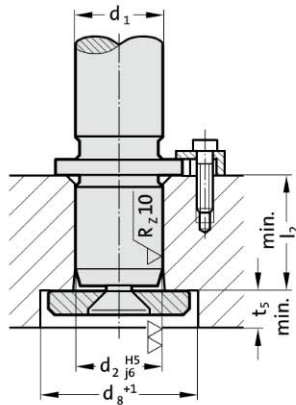
2021.46. / 2021.44.

Pillar $\varnothing d_1$	Retaining bore $d_2^{H5}$	$d_5^{+1}$	$l_2$	$t_5$
15/16	15/16 <sup>+0,008</sup>	24	20,5	6,5
19/20	19/20 <sup>+0,009</sup>	27	23,5	6,5
24/25	24/25 <sup>+0,009</sup>	34	30,5	6,5
30/32	30/32 <sup>+0,011</sup>	42	37,5	6,5
38/40	38/40 <sup>+0,011</sup>	52	37,5	6,5
48/50	48/50 <sup>+0,013</sup>	62	47,5	6,5
60/63	60/63 <sup>+0,013</sup>	72	47,5	6,5
80	80 <sup>+0,013</sup>	95	60,5	12,5



2021.29.

Guide pillar with  
collar  
(transition fit)



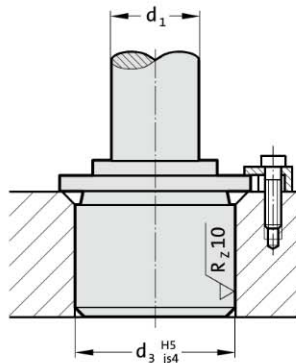
2021.29.

Pillar $\varnothing d_1$	Retaining bore $d_2^{H5}$	$d_8^{+1}$	$l_2$	$t_5$
15/16	15/16 <sup>+0,008</sup>	24	20,5	6,5
19/20	19/20 <sup>+0,009</sup>	27	23,5	6,5
24/25	24/25 <sup>+0,009</sup>	34	30,5	6,5
30/32	30/32 <sup>+0,011</sup>	42	37,5	6,5
38/40	38/40 <sup>+0,011</sup>	52	37,5	6,5
48/50	48/50 <sup>+0,013</sup>	62	47,5	6,5
60/63	60/63 <sup>+0,013</sup>	72	47,5	6,5
80	80 <sup>+0,013</sup>	95	60,5	12,5



2021.39.

Liner bush  
DIN 9825/ISO 9182-4  
(transition fit)



2021.39.

Pillar $\varnothing d_1$	Retaining bore $d_3^{H5}$
19/20	32 <sup>+0,011</sup>
24/25	40 <sup>+0,011</sup>
30/32	48 <sup>+0,011</sup>
38/40	58 <sup>+0,013</sup>
48/50	70 <sup>+0,013</sup>
60/63	85 <sup>+0,015</sup>

