

## **Guide Bush for Ball Cage** (Short type)



Code: G38

Ø Ø Ø

d3

30 30 34

32 40

40 48

48 55

58 58 65

70 80

21

22

25

26

30

31

40

38

46

48

56

58

68

71

70

85 85

32

40

48

35

35

35

42

52

d4 d6 mm

46.8

48.8

56.8

64.8

74.8

8.98

101.8

95

23 12

23 12

23 12

30 12

37 15

47 18

60 20



## **Guide Bush for Ball Cage** (Long type)



Code: G37

G38 guide bushes work without problem at dies, cuttings under 0.5 mm sheet metal thickness and where cutting space is low and when 200 stamp per minute are exceeded. It is not resistant to the lateral loads. They are preferred in cases that precison should be increased.

> d mm d1 d2

15

16

19

20

24

25

32

30

38

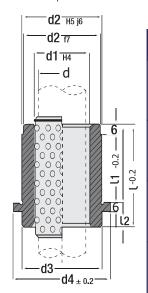
40

48 65

50

60 80

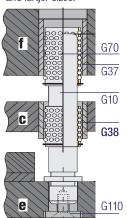
63



Clamping Detail	Clam	ping	Detail
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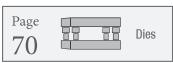
4 pcs. clamp for d = 38 mmand larger sizes.

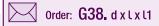


	80	80	92	105	105	118	121.8	60	20
١	<b>Note:</b> Two different products in section (d)								
а	are to avoid reverse closing of dies during								
n	mounting by using three pcs. main								
dimensions and one pcs. auxiliary									
(d= Ø15 -19 - 24 - 32 - 38 - 48 - 60 mm)									
dimensions at same die, is avoided reverse									
closing of die plate. Thus, symmetrical die									
С	closure is ensured.								

Example: In the same die  $(\emptyset 20 \times 3 - \emptyset 19 \times 1) = 4 \text{ pieces}$ 

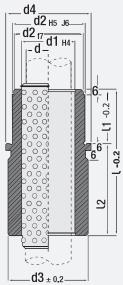
Note: Should be ordered with G70.





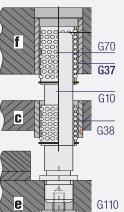
Material: 1.7131 (16MnCr5) Hardness: 58 - 62 HRC

High precision guide bushes for ball cage: Despite providing high reliability at high speeds, contacting balls from one point, brings the system to precision status against impacts and side loads. This disadvantage is compensated to give product diameters up to a certain point in the upper tolerance, the working surface should be precise.



Clamping	Detail





Note: Should be ordered with G70.

	ø d	l mm	ø d1	ø d2	ø d3	ø d4	ø d6	l1 mm	l2 mm
	15	43 59	21	30	32	34	46.8	23	20
	16		22						36
	19	43 59	25	32	39	40	48.8	23	20
	20		26						36
	24	59 79	30	40	46	48	56.8	23	36
	25		31						56
	32	75 93	40	48	53	55	64.8	30	45
	30		38						63
	38	38 82 40 108	46	58	63	65	74.8	37	45
	40		48	36	03	03			71
	48	97 127 116 150	56	70 77	80	8.	47	50	
	50		58	70	,,	00	86.8	4/	80
	60		68	85	92	95	101.8	60	56
	63		71	65	<b>J</b>	90			90
	80	120 150	92	105	115	118	121.8	60	60 90

Order: G37. dxlxl1

Material: 1.7131 (16MnCr5) Hardness: 58 - 62 HRC