

















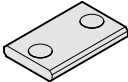


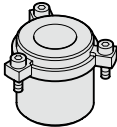
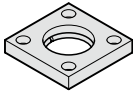
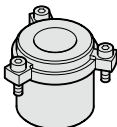





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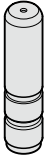
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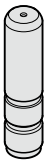
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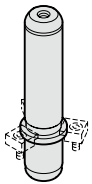
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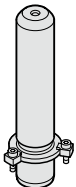
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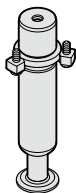
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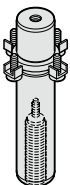
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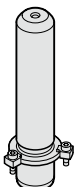
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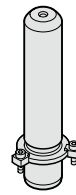
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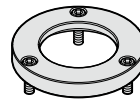
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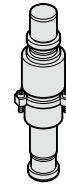
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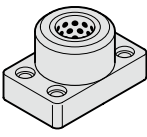

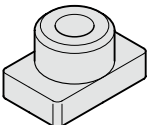
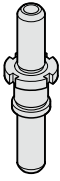
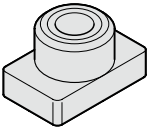
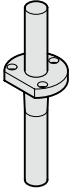
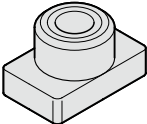

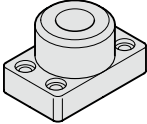

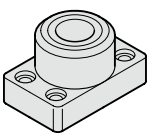
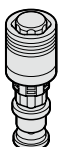
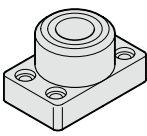
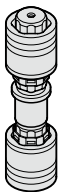
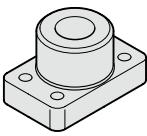


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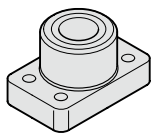


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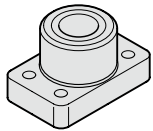
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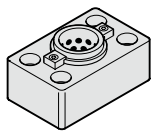
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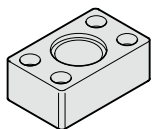
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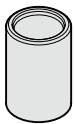
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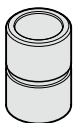
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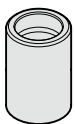
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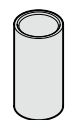
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2051.72. **D106**

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2061.47. **D109**

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206.71. **D110**

Ball cage with circlip groove, Brass



2060.61. **D111**

Ball cage with circlip groove, Aluminium



2060.41. **D112**

Ball cage with circlip groove, plastic



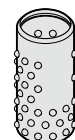
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Ball cage with assembly aid, Brass



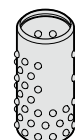
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Ball cage with assembly aid, Aluminium



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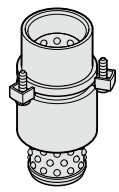
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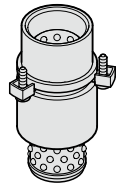
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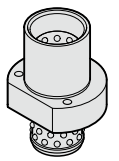
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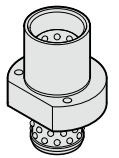
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Headed guide bush with ball cage retainer



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2091.68. **D121**

Flanged guide bush with ball cage retainer



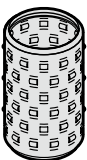
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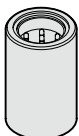
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Circlip DIN 471



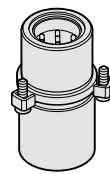
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Roller cage with assembly aid, Brass



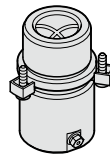
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Recirculating ball bush ~ISO9448-3



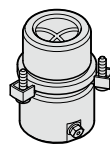
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Recirculating ball bush with collar ~ISO9448-7



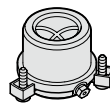
2081.81. **D127**

Headed guide bush, bronze coated, ISO 9448-6



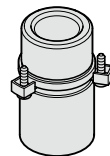
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Headed guide bush, bronze coated, ISO 9448-6



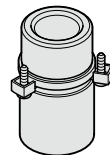
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Headed guide bush, bronze coated, ISO 9448-6



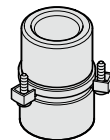
2081.31. **D130**

Headed guide bush, sintered ferrite carbonitrided with long-term lubrication, ISO 9448-6



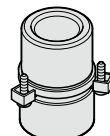
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Headed guide bush, sintered ferrite carbonitrided with long-term lubrication, ISO 9448-6



2081.33. **D132**

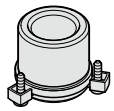
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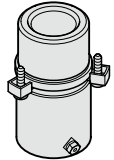
Headed guide bush, sintered ferrite carbonitrided with long-term lubrication, ISO 9448-6

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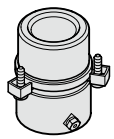
2081.35. **D134**

Headed guide bush, sintered ferrite carbonitrided with long-term lubrication, ISO 9448-6



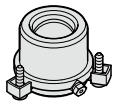
2081.91. **D135**

Headed guide bush ECO-LINE, bronzeplated, ISO 9448-6



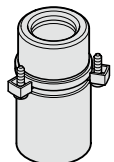
2081.94. **D136**

Headed guide bush ECO-LINE, bronzeplated, ISO 9448-6



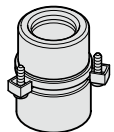
2081.95. **D137**

Headed guide bush ECO-LINE, bronzeplated, ISO 9448-6



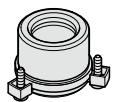
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Headed guide bush ECO-LINE, Bronze with solid lubricant rings, ISO 9448-6



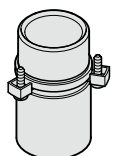
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Headed guide bush ECO-LINE, Bronze with solid lubricant rings, ISO 9448-6



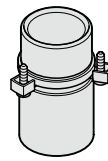
2081.75. **D140**

Headed guide bush ECO-LINE, Bronze with solid lubricant rings, ISO 9448-6



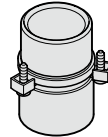
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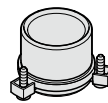
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Headed guide bush for ball bearing, ISO 9448-7



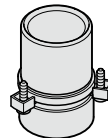
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Headed guide bush for ball bearing, ISO 9448-7



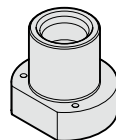
2081.47. **D144**

Headed guide bush for ball bearing, ISO 9448-7



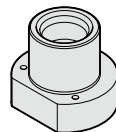
2081.49. **D145**

Headed guide bush for ball bearing, ISO 9448-7



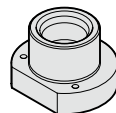
2091.31. **D146**

Flanged guide bush, sintered ferrite carbonitrided with long-term lubrication, ISO 9448-4



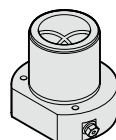
2091.32. **D147**

Flanged guide bush, sintered ferrite carbonitrided with long-term lubrication, ISO 9448-4



2091.34. **D148**

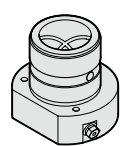
Flanged guide bush, sintered ferrite carbonitrided with long-term lubrication, ISO 9448-4



2091.91. **D149**

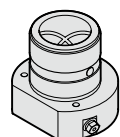
Flanged guide bush ECO-LINE, bronzeplated, ISO 9448-4

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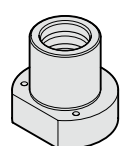
2091.92. **D150**

Flanged guide bush ECO-LINE,
bronzeplated, ISO 9448-4



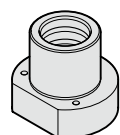
2091.94. **D151**

Flanged guide bush ECO-LINE,
bronzeplated, ISO 9448-4



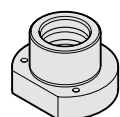
2091.71. **D152**

Flanged guide bush ECO-LINE,
Bronze with solid lubricant rings,
ISO 9448-4



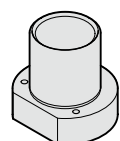
2091.72. **D153**

Flanged guide bush ECO-LINE,
Bronze with solid lubricant rings,
ISO 9448-4



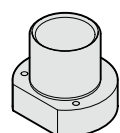
2091.74. **D154**

Flanged guide bush ECO-LINE,
Bronze with solid lubricant rings,
ISO 9448-4



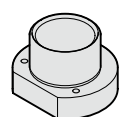
2091.44. **D155**

Flanged guide bush for ball bearing,
ISO 9448-5



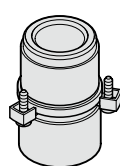
2091.45. **D156**

Flanged guide bush for ball bearing,
ISO 9448-5



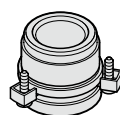
2091.46. **D157**

Flanged guide bush for ball bearing,
ISO 9448-5



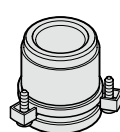
210.31. **D158**

Headed guide bush, sintered ferrite
carbonitrided with long-term
lubrication, ~AFNOR



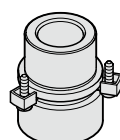
210.34. **D159**

Headed guide bush, sintered ferrite
carbonitrided with long-term
lubrication, ~AFNOR



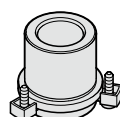
210.35. **D160**

Headed guide bush, sintered ferrite
carbonitrided with long-term
lubrication, ~AFNOR



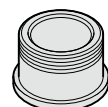
210.44. **D162-163**

Headed guide bush for ball bearing,
~AFNOR



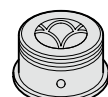
210.46. **D164-165**

Headed guide bush for ball bearing,
~AFNOR



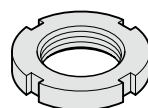
210.45. **D166**

Guide bush with collar, for ball
bearing, ~AFNOR



210.85. **D167**







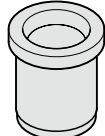

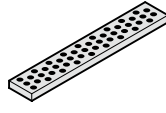

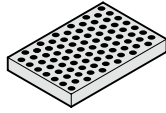

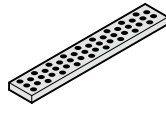

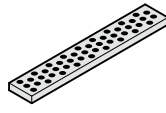
Guide bush with collar, bronze
coated, ~AFNOR



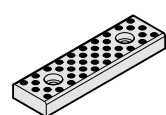
207.48. **D168**

Slotted nut

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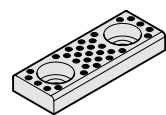
		D170			D179
	Oilless guide elements			Guide bush with collar, Bronze with solid lubricant, NAAMS	
	2053.70.	D171		2086.71.	D180
	Thrust washer, Bronze with solid lubricant			Guide bush with collar, Bronze with solid lubricant, NAAMS	
	2052.70.	D172-173		2102.70.	D181
	Guide bush, Bronze with solid lubricant			Guide bush with collar, Bronze with solid lubricant, CNOMO	
	2085.70.	D174		2102.71.	D182
	Guide bush with collar, Bronze with solid lubricant			Guide bush with collar, Bronze, CNOMO	
	2085.71.	D175		2961.71.	D183
	Guide bush with collar, Bronze with solid lubricant			Flat guide bar, Bronze with solid lubricant	
	2086.70.	D176		2961.76.	D184
	Guide bush with collar, Bronze with solid lubricant			Flat guide bar, Bronze with solid lubricant	
	2085.72.	D177		2961.77.	D185
	Guide bush with collar, Bronze with solid lubricant			Flat guide bar, Bronze with solid lubricant	
	2082.70.	D178		2961.73.	D186
	Guide bush with collar, Bronze with solid lubricant, DIN 9834/ISO 9448			Flat guide bar with two sliding surfaces, Bronze with solid lubricant	

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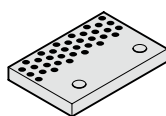
2961.70. **D187**

Flat guide bar, Bronze with solid lubricant



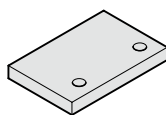
2961.75. **D188**

Flat guide bar, Bronze with solid lubricant



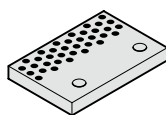
2961.74. **D189**

Retaining plate, Bronze with solid lubricant, VDI 3357



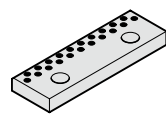
2961.79. **D190**

Retaining plate, Steel, VDI 3357



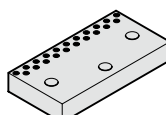
2961.81. **D191**

Retaining plate, Steel with solid lubricant, VDI 3357



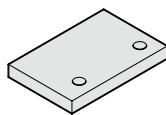
2961.78. **D192**

Retaining plate, Bronze with solid lubricant



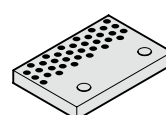
2961.82. **D193**

Retaining plate, Steel with solid lubricant, NAAMS



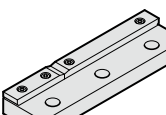
2961.79.45. **D194**

Retaining plate, Steel, CNOMO



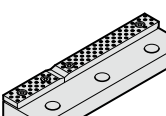
2961.81.45. **D195**

Retaining plate, Bronze with solid lubricant, CNOMO



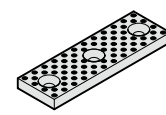
2961.30.55. **D196-197**

Retaining plate with sliding pad, Steel / Steel with sinterlayer, according to VW



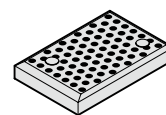
2961.74.55. **D198-199**

Retaining plate with sliding pad, Steel / Bronze with solid lubricant, according to VW



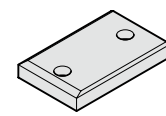
2960.72. **D200**

Sliding pad, small dimension, Bronze with solid lubricant



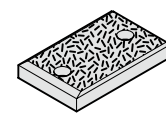
2960.71. **D202-203**

Sliding pad, Bronze with solid lubricant, VDI 3357 / ISO 9183-1



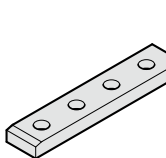
2960.87. **D204-205**

Sliding pad, Steel, VDI 3357



2960.30. **D206-207**

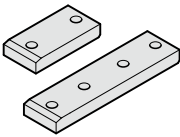
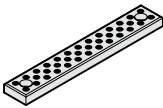
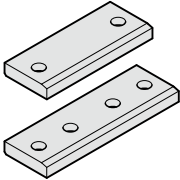
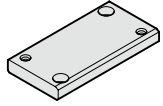
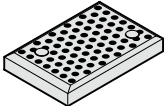
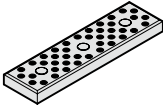
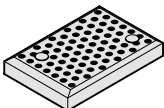
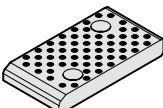
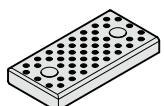
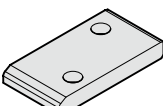
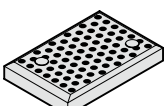
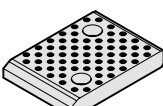
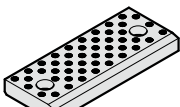
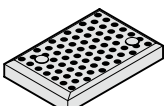
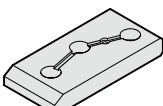
Sliding pad, Steel with sinterlayer, VDI 3357



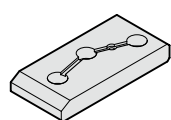
2960.31. **D208**

Sliding pad, Steel with sinterlayer, VDI 3357

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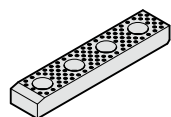
	2960.32. Sliding pad, Steel with sinterlayer, VDI 3357	D209		2962.78. Sliding pad, Bronze with solid lubricant	D220-221
	2960.33. Sliding pad, Steel with sinterlayer, VDI 3357	D210		2962.84.45. Sliding pad, Steel, CNOMO	D222
	2960.70. Sliding pad, Bronze with solid lubricant	D212-213		2962.85. Sliding pad, Steel with solid lubricant	D223
	2960.85. Sliding pad, Bronze with solid lubricant	D214		2960.79. Sliding pad, Bronze with solid lubricant, NAAMS	D224
	2960.86. Sliding pad, Bronze with solid lubricant	D215		2960.80. Sliding pad, Steel, NAAMS	D225
	2960.76. Sliding pad, Bronze with solid lubricant	D216		2960.74. Sliding pad, Bronze with solid lubricant, AFNOR/ISO 9183-2	D226-227
	2960.77. Sliding pad, Bronze with solid lubricant, VDI 3357	D217			
	2962.78.45. Sliding pad, Bronze with solid lubricant, CNOMO	D218		2960.44.45. Sliding pad, Steel with oil groove, CNOMO	D230-231

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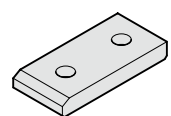
2960.54.45. **D232**

Sliding pad, Bronze with oil groove, CNOMO



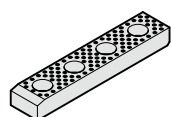
2960.81. **D234-235**

Sliding pad, Bronze with solid lubricant, VDI 3357



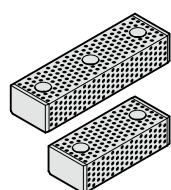
2960.88. **D236-237**

Sliding pad, Steel, VDI 3357



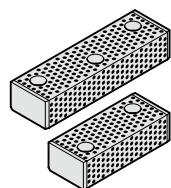
2960.93. **D238**

Sliding pad, Bronze with solid lubricant, VDI 3357



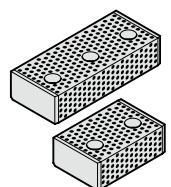
2962.75. **D239**

Guide bar with two sliding surfaces, Bronze with solid lubricant, VDI 3357



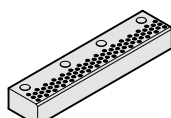
2962.75.45. **D240**

Guide bar with two sliding surfaces, Bronze with solid lubricant, CNOMO



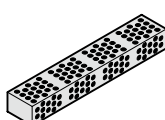
2962.76. **D241**

Guide bar with three sliding surfaces, Bronze with solid lubricant



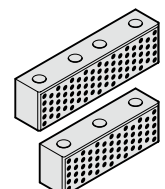
2962.77. **D242**

Guide bar with two sliding surfaces, Bronze with solid lubricant



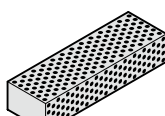
2962.74. **D243**

Guide bar with four sliding surfaces, Bronze with solid lubricant



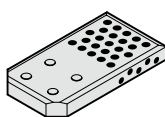
2962.79. **D244**

Guide bar with one sliding surfaces, Bronze with solid lubricant



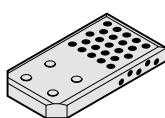
2962.80. **D245**

Guide bar with three sliding surfaces, Bronze with solid lubricant



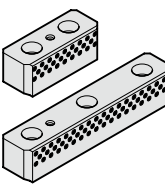
2960.73. **D246**

Guide bracket, Steel with solid lubricant, VDI 3387



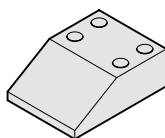
2960.89. **D247**

Guide bracket, Bronze with solid lubricant, VDI 3387



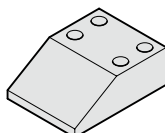
2966.72. **D248**

Slide centre guide, Bronze with solid lubricant



2960.90. **D249**

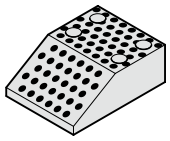
Overrun Cam, Steel hardened, VDI 3357



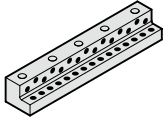
2960.91. **D250**

Overrun Cam, Steel hardened and gas nitrided, VDI 3357

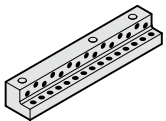
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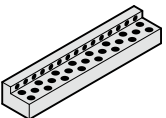
2960.92. **D251**
Overrun Cam, Bronze with solid lubricant, VDI 3357



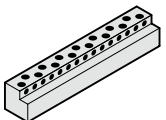
2962.70. **D252**
Angled guide gib, Bronze with solid lubricant



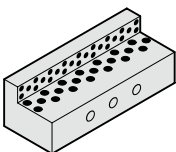
2962.70.45. **D253**
Angled guide gib, Bronze with solid lubricant, CNOMO



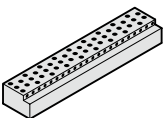
2962.71. **D254**
Angled guide gib, Bronze with solid lubricant



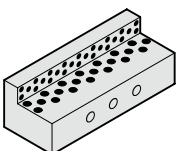
2962.72. **D255**
Angled guide gib, Bronze with solid lubricant



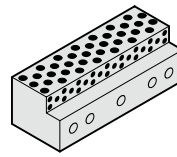
2962.73. **D256**
Angled guide gib, Bronze with solid lubricant, VDI 3357



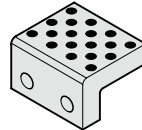
2962.81. **D257**
Angled guide gib, Bronze with solid lubricant



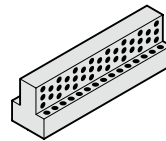
2962.82. **D258**
Angled guide gib, Bronze with solid lubricant



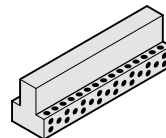
2962.83. **D259**
Angled guide gib, Bronze with solid lubricant



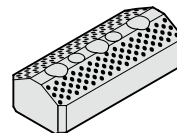
2962.86. **D260**
Angled guide gib, Bronze with solid lubricant



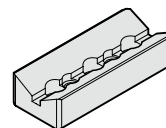
2964.77. **D261**
T-Guide bar, Bronze with solid lubricant



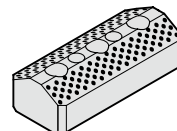
2964.78. **D261**
T-Guide bar, Bronze with solid lubricant



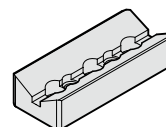
2963.82. **D262**
Sliding block, Bronze with solid lubricant, NAAMS



2963.83. **D262**
Prismatic guide, Steel, NAAMS

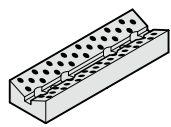


2963.84. **D263**
Sliding block, Bronze with solid lubricant, VDI 3357



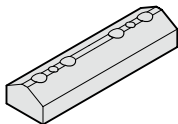
2963.85. **D263**
Prismatic guide, Steel, VDI 3357

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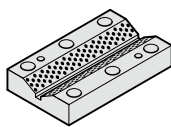
2963.70. **D264**

Prismatic guide, Bronze with solid lubricant



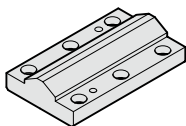
2963.71. **D264**

Sliding block, Steel



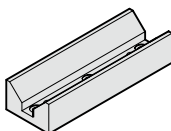
2963.72. **D265**

Prismatic guide, Bronze with solid lubricant



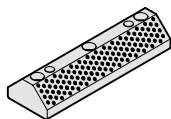
2963.73. **D265**

Sliding block, Steel



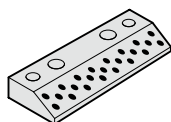
2963.81. **D266**

Prismatic guide, Steel



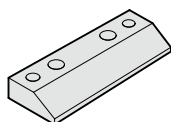
2963.80. **D267**

Sliding block, Bronze with solid lubricant



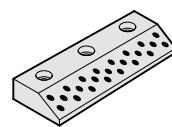
2965.81. **D268**

Single-sided prismatic guide, Bronze with solid lubricant



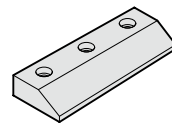
2965.83. **D269**

Single-sided prismatic sliding block, Steel



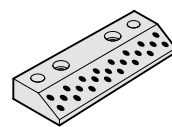
2965.80.45. **D270**

Single-sided prismatic guide, Bronze with solid lubricant, CNOMO



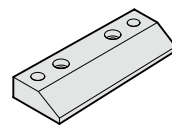
2965.82.45. **D271**

Single-sided prismatic sliding block, Steel, CNOMO



2965.80. **D272**

Single-sided prismatic guide, Bronze with solid lubricant

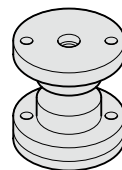


2965.82. **D273**

Single-sided prismatic sliding block, Steel

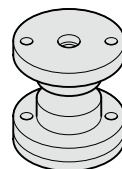
D274-277

Oilless guide elements - Mounting examples



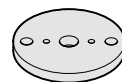
2441.11.0. **D278**

Centering unit with adjusting washer



2441.11. **D279**

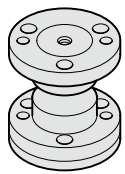
Centering unit



2441.11.3. **D280**

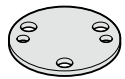
Adjusting washer

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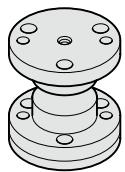
2441.13.45. **D281**

Centering unit, CNOMO



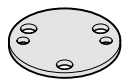
2441.13.3.45. **D282**

Adjusting washer, CNOMO



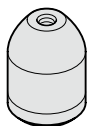
2441.13. **D283**

Centering unit, CNOMO



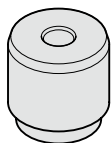
2441.13.3. **D284**

Adjusting washer, CNOMO



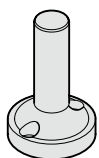
2445.10. **D285**

Centering pin



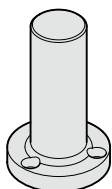
2445.11. **D286**

Centering pin to Mercedes-Benz Standard



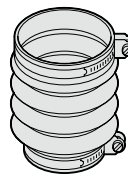
2446.10.55. **D287**

Pressure bolt with base, according to VW



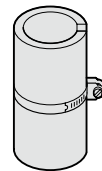
2446.11.55. **D288**

Air pin, according to VW standard



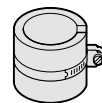
206.91. **D289**

Concertina shroud with spacer bush



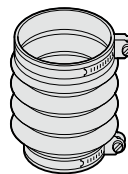
206.94. **D290**

Spacer tube



206.93. **D290**

Spacer bush



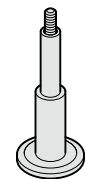
206.92. **D291**

Concertina shroud with spacer tube



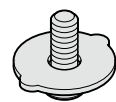
241.18. **D292**

Helical spring for ball cage retention



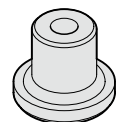
202.91. **D293**

Cage retainer



202.92.1. **D294**

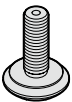
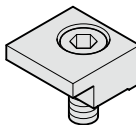
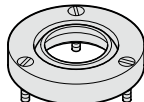
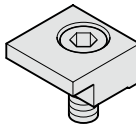
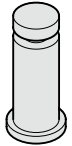
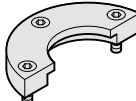
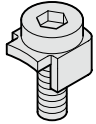
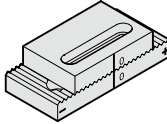
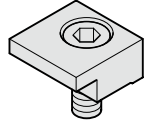
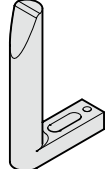
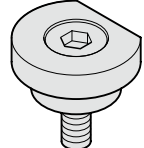
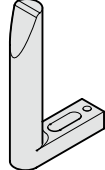
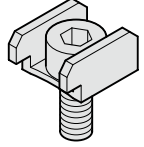
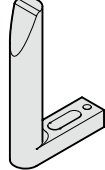
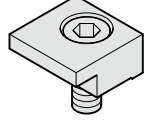
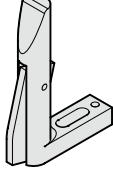
Cage retainer



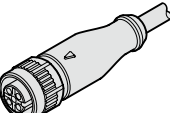
202.93. **D295**

Cage retainer

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	206.95./2061.95. Pillar wiper	D297		2072.48.45. Screw clamp with screw, CNOMO	D303
	244.00.2. Lifter pin for press tool strips	D298		2073.45. Securing flange with screws, CNOMO	D303
	207.45 Screw clamp with screw	D300		2444.12 / 2444.13 Spacer plate toothed, with adjusting plate	D304
	2072.45. Screw clamp with screw	D300		2443.10. Guide	D305
	2071.45 Screw clamp with screw	D301		2443.10.20. Guide to Mercedes-Benz Standard - unhardened	D306
	2072.47 Screw clamp with screw, NAAMS	D302		2443.10.20. .1 Guide to Mercedes-Benz Standard - hardened	D307
	2072.46.30. Screw clamp with screw, GM Standard	D302		2443.12. Guide with part position control and spring	D308

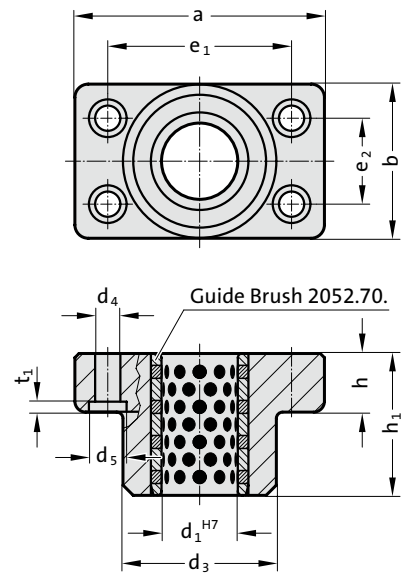
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	2018.00.60.08.030	D310		D317-319
	Inductive proximity switch		Ball guides - calculation table	
	2018.00.60.23.01.	D311		D320-327
	Cable - straight		Guide elements - Installation guidelines, dimension tables	
	2018.00.60.23.02.	D311		
	Cable, 90° connector			
	2443.14.55.	D313		
	Position monitor for boards			
	2443.14.00.60.18.044	D314		
	Inductive proximity switch			
	2443.14.00.60.23.01.	D315		
	Cable - straight			
	2443.14.00.60.23.02.	D315		
	Cable, 90° connector			

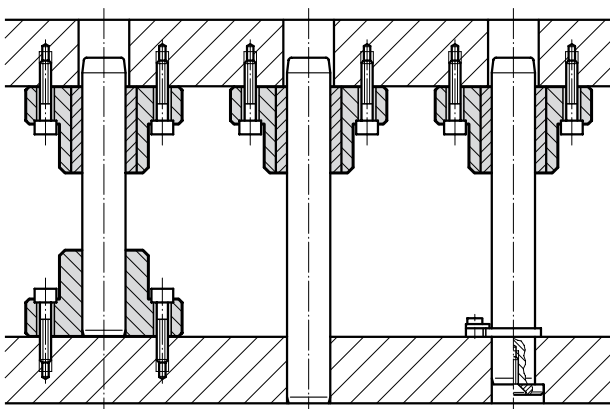
GUIDE BEARING WITH SOLID LUBRICANT



2031.70.



Mounting example



Material:

Basic body: Special cast iron

Guide bush 2052.70.: Bronze with solid lubricant, oilless lubricating

Execution:

Face and top machined.

Note:

- ☞ Notes on sliding type guides at the beginning of chapter D.
- ☞ Matching guide combinations, see selection matrix at the beginning of chapter D.

2031.70. Guide bearing with solid lubricant

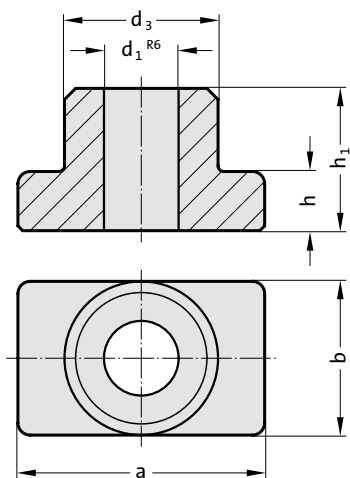
d_1	19 20	24 25	30 32	38 40	50	63	80
d_3	45	50	65	80	96	110	130
d_4	9	9	11	13.5	17.5	17.5	22
a	85	90	115	130	160	180	215
b	45	50	65	80	96	110	130
e_1	64	68	83	95	118	132	160
e_2	24	28	34	45	55	62	75
h	18	22	25	30	35	35	40
h_1	37	47	60	77	95	120	120
t_1	3	3	3	3	4	4	10

Ordering Code (example):

Guide bearing with solid lubricant = 2031.70.
 Diameter of conduit d_1 32 mm = 032
 Order No = 2031.70. 032

RETENTION BEARING

2031.01.



Material:

Special cast iron

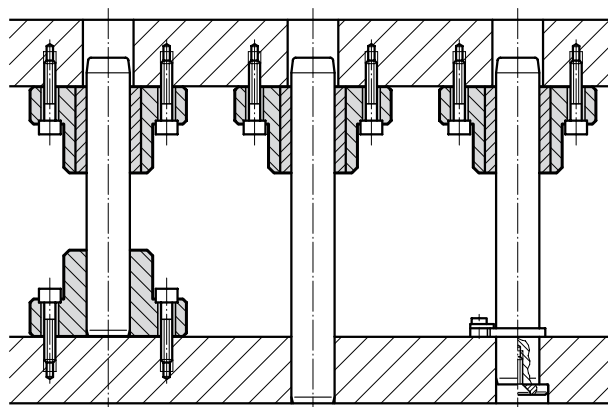
Execution:

Face and top machined. Hole fine bored to d_1^{R6} fit.

Note:

Check squareness of pillars after press-fitting.

Mounting example



2031.01. Retention bearing

d_1	15 16	19 20	24 25	30 32	38 40	48 50	60 63	80
d_3	35	45	50	65	80	96	110	130
a	70	85	90	115	130	160	180	215
b	35	45	50	65	80	96	110	130
h	18	18	22	25	30	35	35	40
h_1	30	37	47	60	77	95	120	120

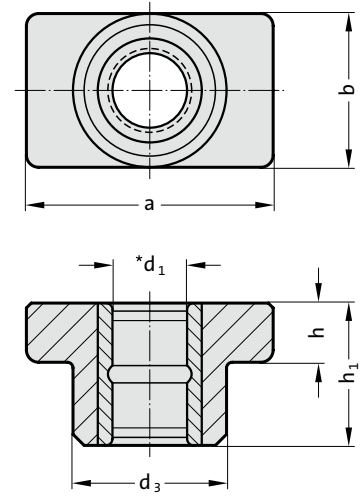
Ordering Code (example):

Retention bearing = 2031.01.
 Diameter of conduit d_1 32 mm = 032
 Order No = 2031.01. 032

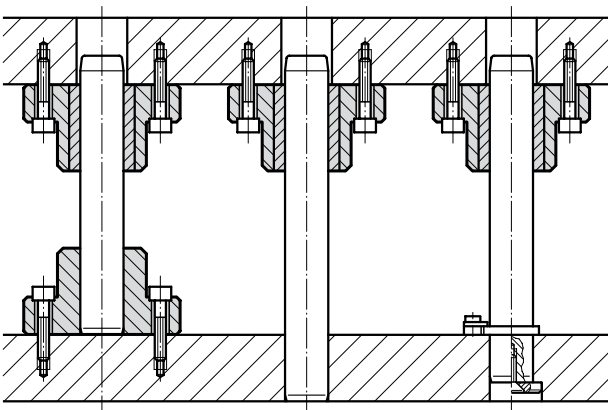
GUIDE BEARING, SINTERED GUIDE



2031.31.



Mounting example



Material:

Basic body: Special cast iron

Guide bush 2051.32.: Sintered ferrite of high purity, carbonitrided, long-term lubrication

Execution:

Face and top machined. Bores honed.

Note:

- ☞ Notes on sliding type guides at the beginning of chapter D.
- ☞ Bearing clearance see pairing classification at the beginning of chapter D.
- ☞ Matching guide combinations, see selection matrix at the beginning of chapter D.

Tolerance range:

yellow = .10

green = .20

red = .30

2031.31. Guide bearing, sintered guide

d_1	15 16	19 20	24 25	30 32	38 40	48 50	60 63	80
d_3	35	45	50	65	80	96	110	130
a	70	85	90	115	130	160	180	215
b	35	45	50	65	80	96	110	130
h	18	18	22	25	30	35	35	40
h_1	30	37	47	60	77	95	120	120

Ordering Code (example):

Guide bearing, sintered guide = 2031.31.

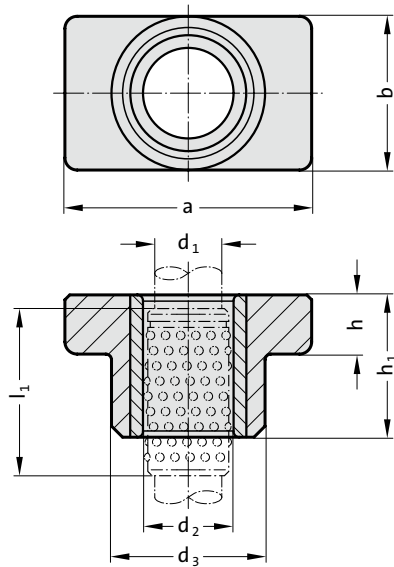
Diameter of conduit d_1 32 mm = 032.

Classification TOL yellow = 10

Order No = 2031.31.032.10

GUIDE BEARING FOR BALL BEARING GUIDE

2031.41.



Material:

Basic body: Special cast iron

Guide bush 2061.44.: Tool steel, Hardness: 62 ± 2 HRC

Execution:

Face and top machined. Bores honed.

Note:

- ☞ Notes on ball bearing type guides at the beginning of chapter D.
- ☞ Preloading see pairing classification at the beginning of chapter D
- ☞ Matching guide combinations, see selection matrix at the beginning of chapter D.

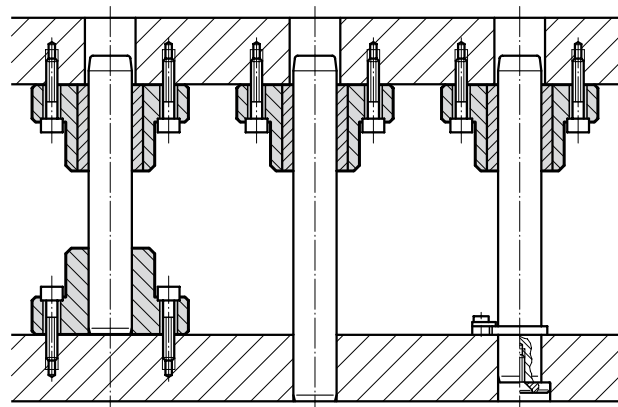
Tolerance range:

yellow = .10

green = .20

red = .30

Mounting example



2031.41. Guide bearing for ball bearing guide

d ₁	15 16	19 20	24 25	30 32	38 40	48 50	60 63
d ₂	21 22	25 26	30 31	38 40	46 48	56 58	68 71
d ₃	35	45	50	65	80	96	110
a	70	85	90	115	130	160	180
b	35	45	50	65	80	96	110
h	18	18	22	25	30	35	35
h ₁	30	37	47	60	77	95	120
l ₁	44	44	56	71	95	120	140
l*	45	45	56	71	95	120	140

*l = Nominal ordering length of ball cage - preferred length

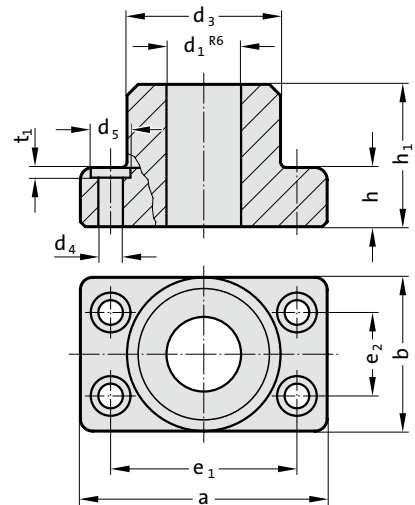
Ordering Code (example):

Guide bearing for ball bearing guide	=	2031.41.
Diameter of conduit d ₁	32 mm =	032.
Classification TOL	yellow =	10
Order No	=	2031.41. 032. 10

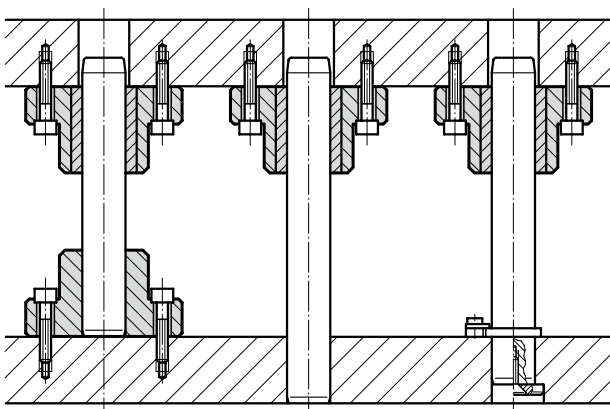
RETENTION BEARING WITH SCREW HOLES



2031.02.



Mounting example



Material:

Special cast iron

Execution:

Face and top machined. Hole fine bored to d_1^{R6} fit.

Note:

Check squareness of pillars after press-fitting.

2031.02. Retention bearing with screw holes

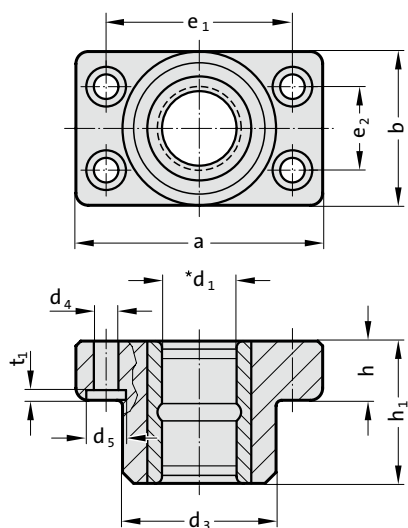
d_1	15 16	19 20	24 25	30 32	38 40	48 50	60 63	80
d_3	35	45	50	65	80	96	110	130
d_4	6.6	9	9	11	14	18	18	22
d_5	11	15	15	18	20	26	26	33
t_1	3	3	3	3	3	4	4	4
a	70	85	90	115	130	160	180	215
b	35	45	50	65	80	96	110	130
e_1	53	64	68	83	95	118	132	160
e_2	19	24	28	34	45	55	62	75
h	18	18	22	25	30	35	35	40
h_1	30	37	47	60	77	95	120	120

Ordering Code (example):

Retention bearing with screw holes = 2031.02.
 Diameter of conduit d_1 32 mm = 032
 Order No = 2031.02. 032

GUIDE BEARING WITH SCREW HOLES, SINTERED GUIDE

2031.34.



Material:

Basic body: Special cast iron

Guide bush 2051.32.: Sintered ferrite of high purity, carbonitrided, long-term lubrication

Execution:

Face and top machined. Bores honed.

Note:

- ☞ Notes on sliding type guides at the beginning of chapter D.
- ☞ Bearing clearance see pairing classification at the beginning of chapter D.
- ☞ Matching guide combinations, see selection matrix at the beginning of chapter D.

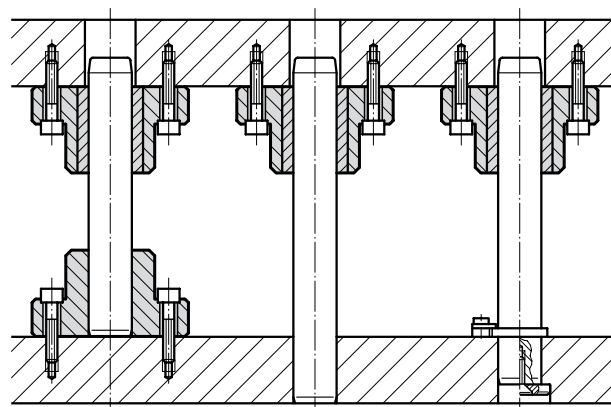
Tolerance range:

yellow = .10

green = .20

red = .30

Mounting example



2031.34. Guide bearing with screw holes, sintered guide

d_1	15 16	19 20	24 25	30 32	38 40	48 50	60 63	80
d_3	35	45	50	65	80	96	110	130
d_4	6.6	9	9	11	14	18	18	22
d_5	11	15	15	18	20	26	26	33
t_1	3	3	3	3	3	4	4	4
a	70	85	90	115	130	160	180	215
b	35	45	50	65	80	96	110	130
e_1	53	64	68	83	95	118	132	160
e_2	19	24	28	34	45	55	62	75
h	18	18	22	25	30	35	35	40
h_1	30	37	47	60	77	95	120	120

Ordering Code (example):

Guide bearing with screw holes, sintered guide = 2031.34.

Diameter of conduit d_1 32 mm = 032.

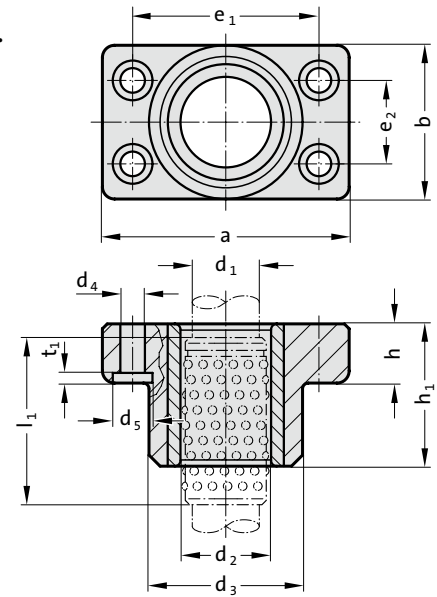
Classification TOL yellow = 10

Order No = 2031.34. 032. 10

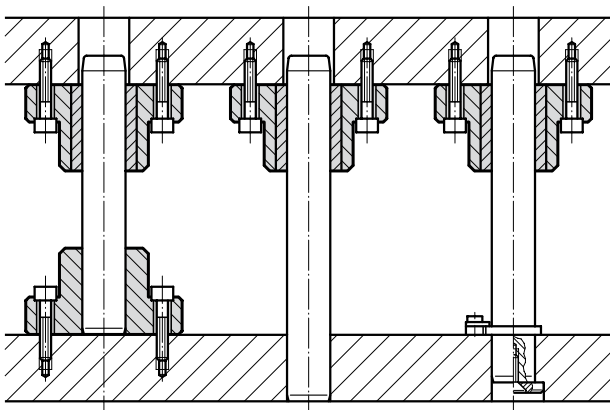
GUIDE BEARING WITH SCREW HOLES, FOR BALL BEARING GUIDE



2031.42.



Mounting example



Material:

Basic body: Special cast iron

Guide bush 2061.44.: Tool steel, Hardness: 62 ± 2 HRC

Execution:

Face and top machined. Bores honed.

Note:

- ☞ Notes on ball bearing type guides at the beginning of chapter D.
- ☞ Preloading see pairing classification at the beginning of chapter D
- ☞ Matching guide combinations, see selection matrix at the beginning of chapter D.

Tolerance range:

yellow = .10

green = .20

red = .30

2031.42. Guide bearing with screw holes, for ball bearing guide

d ₁	15 16	19 20	24 25	30 32	38 40	48 50	60 63
d ₂	21 22	25 26	30 31	38 40	46 48	56 58	68 71
d ₃	35	45	50	65	80	96	110
d ₄	6.6	9	9	11	14	18	18
d ₅	11	15	15	18	20	26	26
t ₁	3	3	3	3	3	4	4
a	70	85	90	115	130	160	180
b	35	45	50	65	80	96	110
e ₁	53	64	68	83	95	118	132
e ₂	19	24	28	34	45	55	62
h	18	18	22	25	30	35	35
h ₁	30	37	47	60	77	95	120
l ₁	44	44	56	70	95	120	140
l*	45	45	56	71	95	120	140

*l = Nominal ordering length of ball cage - preferred length

Ordering Code (example):

Guide bearing with screw holes, for ball bearing guide = 2031.42.

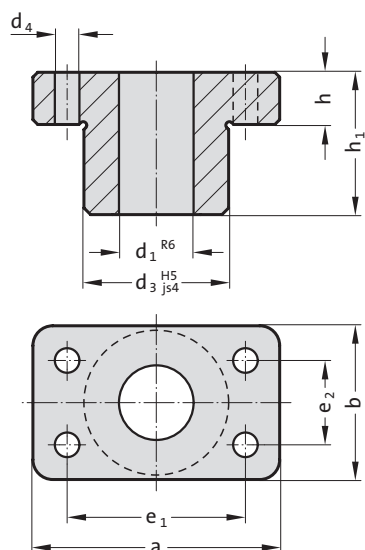
Diameter of conduit d₁ 32 mm = 032.

Classification TOL yellow = 10

Order No = 2031.42. 032. 10

RETENTION BEARING, LOW BUILD HEIGHT

2031.04.



Material:

Special cast iron

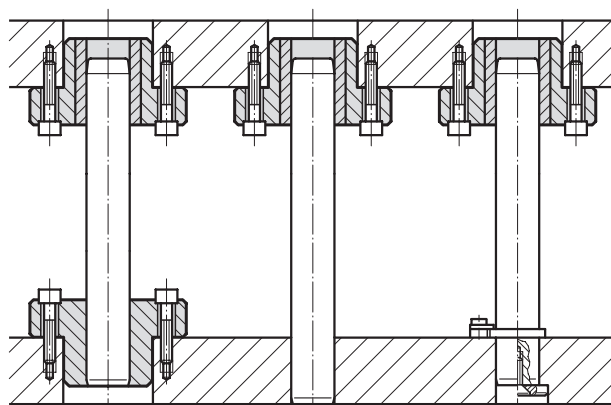
Execution:

Both faces machined to dims. h; O. D. d₃ turned.
Hole fine bored to d₁^{R6} - fit.

Note:

Check squareness of pillars after press-fitting.

Mounting example



2031.04. Retention bearing, low build height

d ₁	15 16	19 20	24 25	30 32	38 40	48 50	60 63	80
d ₃	32	42	47	62	77	93	107	127
d ₄	7	9	9	11	14	18	18	22
a	70	85	90	115	130	160	180	215
b	35	45	50	65	80	96	110	130
e ₁	53	64	68	83	95	118	132	160
e ₂	19	24	28	34	45	55	62	75
h	16	16	20	23	28	33	33	38
h ₁	30	37	47	60	77	95	120	120

Ordering Code (example):

Retention bearing, low build height = 2031.04.

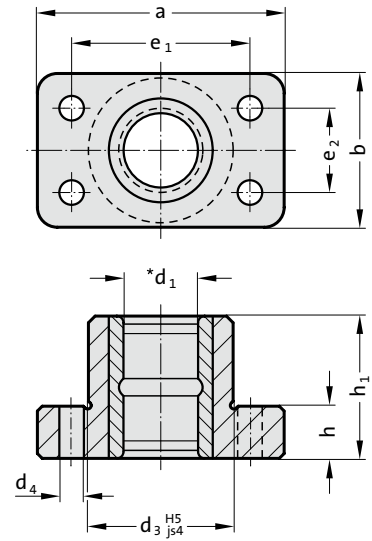
Diameter of conduit d₁ 32 mm = 032

Order No = 2031.04. 032

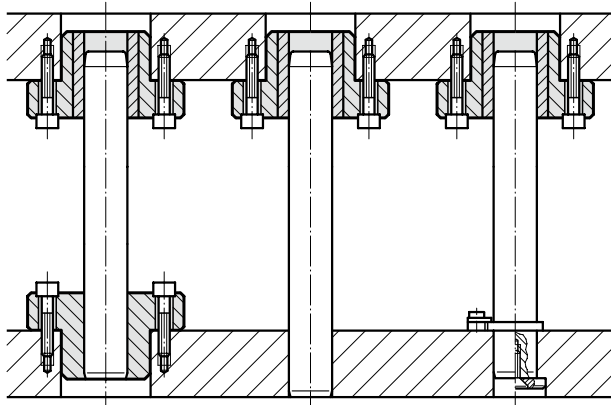
GUIDE BEARING, LOW BUILD HEIGHT, SINTERED GUIDE



2031.38.



Mounting example



Material:

Basic body: Special cast iron

Guide bush 2051.32.: Sintered ferrite of high purity, carbonitrided, long-term lubrication

Execution:

Both faces machined to dims. h ; O. D. d_3 turned. Bores honed.

Note:

- ☞ Notes on sliding type guides at the beginning of chapter D.
- ☞ Bearing clearance see pairing classification at the beginning of chapter D.
- ☞ Matching guide combinations, see selection matrix at the beginning of chapter D.

Tolerance range:

yellow = .10

green = .20

red = .30

2031.38. Guide bearing, low build height, sintered guide

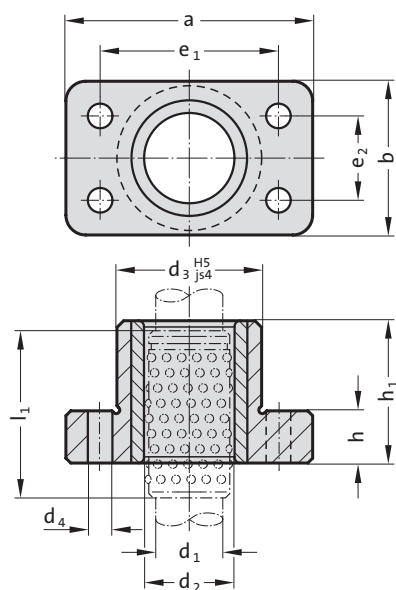
d_1	15 16	19 20	24 25	30 32	38 40	48 50	60 63	80
d_3	32	42	47	62	77	93	107	127
d_4	7	9	9	11	14	18	18	22
a	70	85	90	115	130	160	180	215
b	35	45	50	65	80	96	110	130
e_1	53	64	68	83	95	118	132	160
e_2	19	24	28	34	45	55	62	75
h	16	16	20	23	28	33	33	38
h_1	30	37	47	60	77	95	120	120

Ordering Code (example):

Guide bearing, low build height, sintered guide	= 2031.38.
Diameter of conduit d_1	32 mm = 032.
Classification TOL	yellow = 10
Order No	= 2031.38. 032. 10

GUIDE BEARING LOW BUILD HEIGHT, FOR BALL BEARING GUIDE

2031.44.



Material:

Basic body: Special cast iron

Guide bush 2061.44.: Tool steel, Hardness: 62 ± 2 HRC

Execution:

Both faces machined to dims. h; O. D. d₃ turned.

Bores honed.

Note:

- ☞ Notes on ball bearing type guides at the beginning of chapter D.
- ☞ Preloading see pairing classification at the beginning of chapter D
- ☞ Matching guide combinations, see selection matrix at the beginning of chapter D.

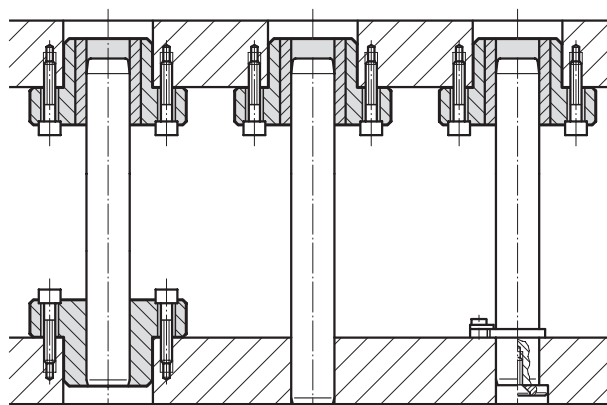
Tolerance range:

yellow = .10

green = .20

red = .30

Mounting example



2031.44. Guide bearing low build height, for ball bearing guide

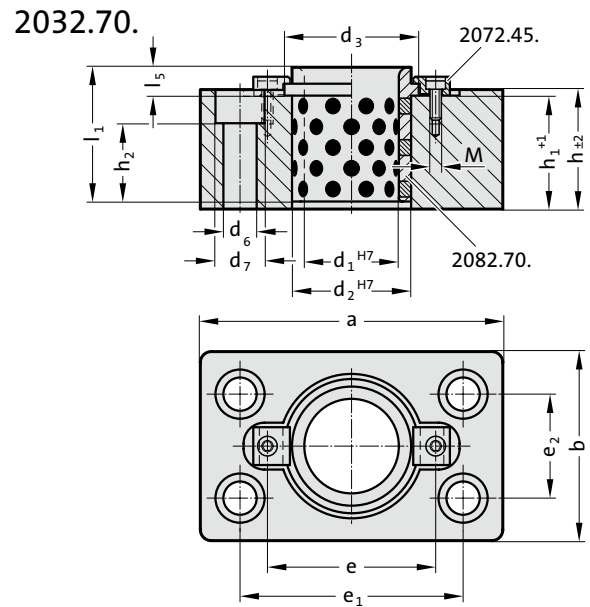
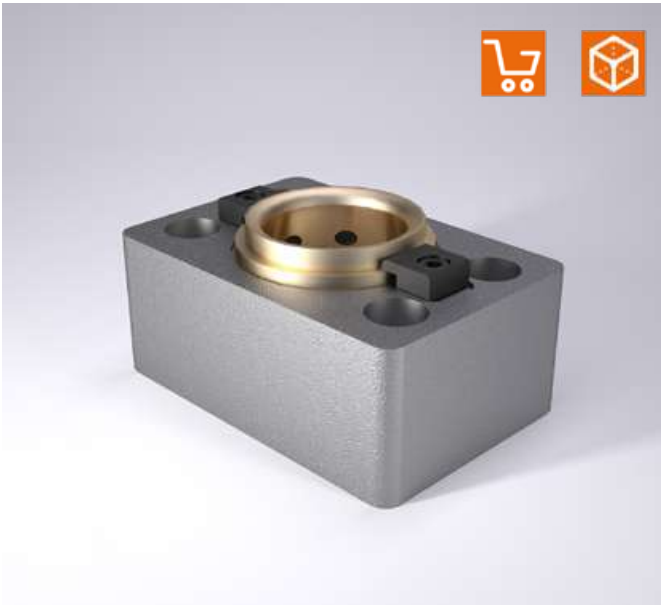
d ₁	19 20	24 25	30 32	38 40	48 50
d ₂	25 26	30 31	38 40	46 48	56 58
d ₃	42	47	62	77	93
d ₄	9	9	11	14	18
a	85	90	115	130	160
b	45	50	65	80	96
e ₁	64	68	83	95	118
e ₂	24	28	34	45	55
h	16	20	23	28	33
h ₁	37	47	60	77	95
l ₁	44	56	70	95	120
l*	45	56	71	95	120

*l = Nominal ordering length of ball cage - preferred length

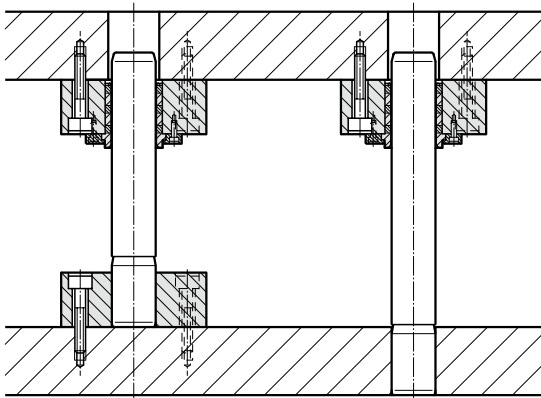
Ordering Code (example):

Guide bearing low build height, for ball bearing guide	= 2031.44.
Diameter of conduit d ₁	32 mm = 032.
Classification TOL	yellow = 10
Order No	= 2031.44. 032. 10

GUIDE BEARING WITH HEADED GUIDE BUSH WITH SOLID LUBRICANT



Mounting example



Material:

Basic body: Steel, St 37

Guide bush 2082.70.: Bronze with solid lubricant, oilless lubricating

Execution:

Face machined.

Note:

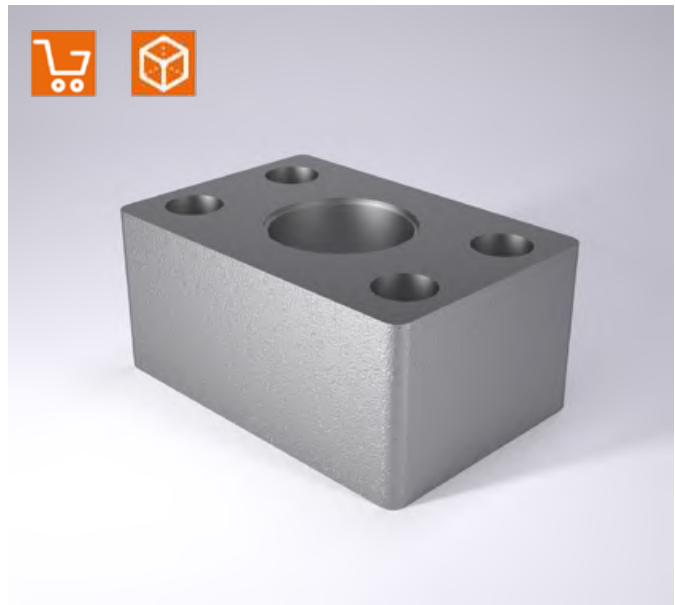
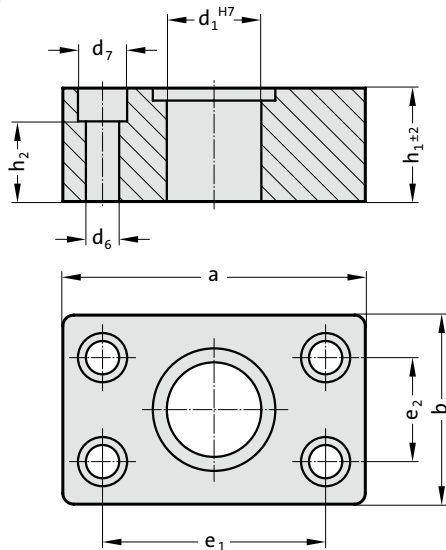
- ☞ Notes on sliding type guides at the beginning of chapter D.
- ☞ Matching guide combinations, see selection matrix at the beginning of chapter D.

2032.70. Guide bearing with headed guide bush with solid lubricant

Order No	d ₁	a	b	h	h ₁	d ₂	d ₃	l ₁	l ₅	d ₆	d ₇	h ₂	e	e ₁	e ₂	M
2032.70.050	50	160	100	60	57	63	71	71	17	17.5	26	40	89	118	55	M6
2032.70.063	63	180	125	70	67	80	90	80	19	17.5	26	50	123	132	62	M10
2032.70.080	80	215	145	90	87	100	112	100	22	22	33	66	143	160	75	M10
2032.70.100	100	230	170	110	107	125	140	125	21	22	33	86	168	168	110	M10
2032.70.125	125	270	205	140	137	160	180	160	30	26	40	112	203	203	142	M10
2032.70.160	160	315	250	180	177	200	220	200	32	26	40	152	243	243	170	M10

RETENTION BEARING FOR GUIDE PILLARS FOR LARGE TOOLS

2032.02.



Material:

Steel, St 37

Execution:

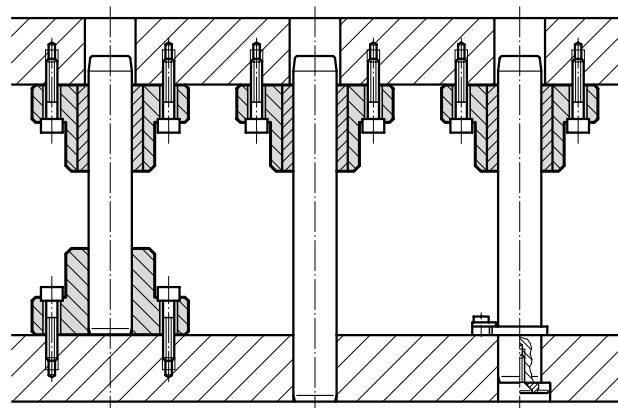
Face machined. Hole fine bored to d_1^{H7} fit.

Note:

For guide pillars with mounting diameter r6.

Check squareness of pillars after press-fitting.

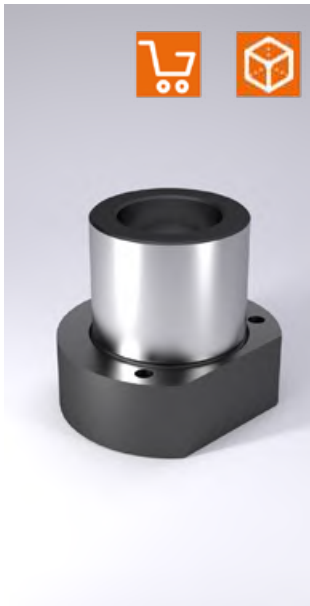
Mounting example



2032.02. Retention bearing for guide pillars for large tools

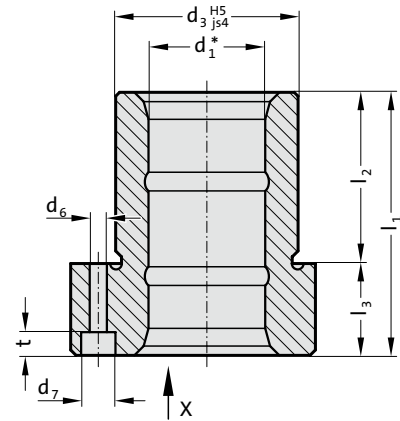
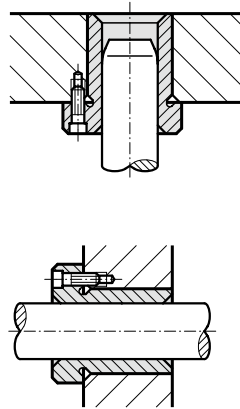
Order No	d_1	a	b	h_1	d_6	d_7	h_2	e_1	e_2
2032.02.050	50	160	100	70	17.5	26	40	118	55
2032.02.063	63	180	125	80	17.5	26	50	132	62
2032.02.080	80	215	145	100	22	33	66	160	75
2032.02.100	100	230	170	125	22	33	86	168	110
2032.02.125	125	270	205	140	26	40	112	203	142
2032.02.160	160	315	250	180	26	40	152	243	170

FLANGED GUIDE BUSH, SINTERED FERRITE CARBONITRIDED WITH LONG-TERM LUBRICATION, ISO 9448-4



Mounting example

2091.31.



Material:

Sintered ferrite of high purity, carbonitrided, long-term lubrication

Execution:

Bearing surfaces and outside diameter precision ground.

Note:

The guide bush is fixed by means of 3 screws to DIN EN ISO 4762.

The screws are not contained in the scope of delivery.

☞ Notes on sliding type guides at the beginning of chapter D.

*☞ Bearing clearance see pairing classification at the beginning of chapter D.

☞ Matching guide combinations, see selection matrix at the beginning of chapter D.

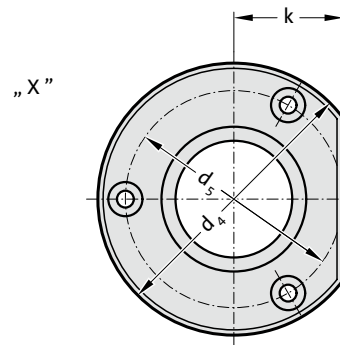
☞ Assembly guide lines / Dimensional requirements and tolerances at the end of chapter D.

Tolerance range:

yellow = .10

green = .20

red = .30



2091.31. Flanged guide bush, sintered ferrite carbonitrided with long-term lubrication, ISO 9448-4

d ₁	19 20	24 25	30 32	38 40	48 50	60 63	80
d ₃	32	40	48	58	70	85	105
d ₄	50	63	72	85	104	120	148
d ₅	40	50	58	70	86	100	125
d ₆	4.5	5.5	5.5	6.6	9	9	11
d ₇	8	10	10	11	15	15	18
k	18	23	28	33	38	46	56
l ₁	52	62	72	77	102	102	125
l ₂	37	37	47	47	60	60	75
l ₃	15	25	25	30	42	42	50
t	4.6	5.7	5.7	6.8	9	9	11

Ordering Code (example):

Flanged guide bush, sintered ferrite carbonitrided with long-term lubrication, ISO 9448-4

= 2091.31.

Diameter of conduit d₁ 38 mm = 038.

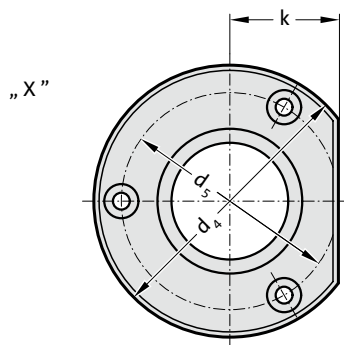
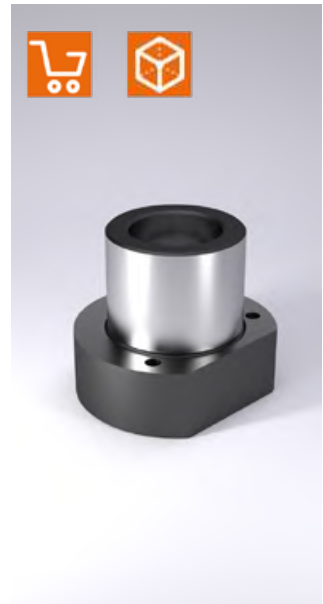
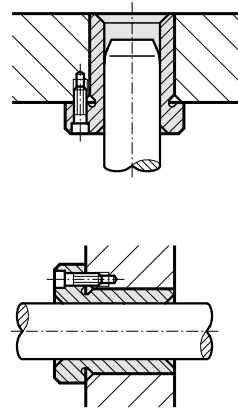
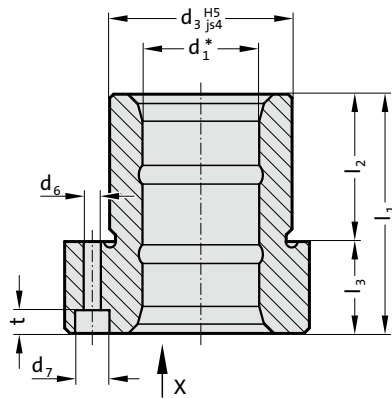
Classification TOL yellow = 10

Order No = 2091.31.038.10

FLANGED GUIDE BUSH, SINTERED FERRITE CARBONITRIDED WITH LONG-TERM LUBRICATION, ISO 9448-4

2091.32.

Mounting example



Material:

Sintered ferrite of high purity, carbonitrided, long-term lubrication

Execution:

Bearing surfaces and outside diameter precision ground.

Note:

The guide bush is fixed by means of 3 screws up to $\varnothing 16$: with screws to DIN 6912, from $\varnothing 19$: with screws to DIN EN ISO 4762.

The screws are not contained in the scope of delivery.

Notes on sliding type guides at the beginning of chapter D.

* Bearing clearance see pairing classification at the beginning of chapter D.

Matching guide combinations, see selection matrix at the beginning of chapter D.

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

Tolerance range:

yellow = .10

green = .20

red = .30

2091.32. Flanged guide bush, sintered ferrite carbonitrided with long-term lubrication, ISO 9448-4

d_1	15 16	19 20	24 25	30 32	38 40	48 50	60 63
d_3	28	32	40	48	58	70	85
d_4	45	50	63	72	85	104	120
d_5	35	40	50	58	70	86	100
d_6	4.5	4.5	5.5	5.5	6.6	9	9
d_7	8	8	10	10	11	15	15
k	15	18	23	28	33	38	46
l_1	36	45	55	62	67	89	89
l_2	30	30	30	37	37	47	47
l_3	6	15	25	25	30	42	42
t	3.4	4.6	5.7	5.7	6.8	9	9

Ordering Code (example):

Flanged guide bush, sintered ferrite carbonitrided with long-term lubrication, ISO 9448-4

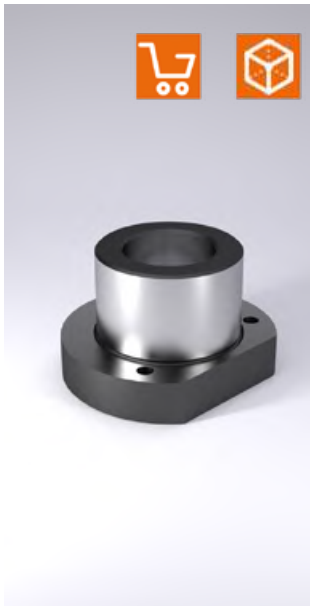
= 2091.32.

Diameter of conduit d_1 32 mm = 032.

Classification TOL yellow = 10

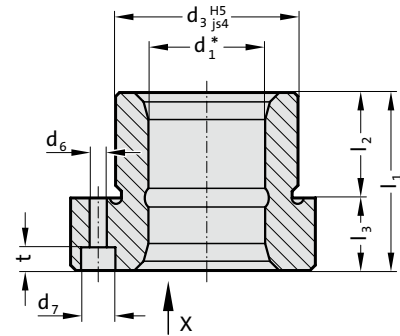
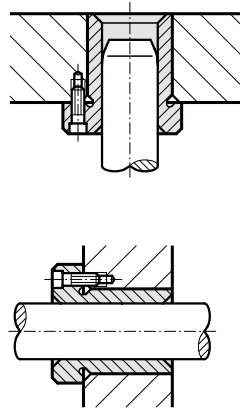
Order No = 2091.32. 032. 10

FLANGED GUIDE BUSH, SINTERED FERRITE CARBONITRIDED WITH LONG-TERM LUBRICATION, ISO 9448-4



Mounting example

2091.34.



Material:

Sintered ferrite of high purity, carbonitrided, long-term lubrication

Execution:

Bearing surfaces and outside diameter precision ground.

Note:

The guide bush is fixed by means of 3 screws up to ø 16: with screws to DIN 6912, from ø 19: with screws to DIN EN ISO 4762. The screws are not contained in the scope of delivery.

☞ Notes on sliding type guides at the beginning of chapter D.

*☞ Bearing clearance see pairing classification at the beginning of chapter D.

☞ Matching guide combinations, see selection matrix at the beginning of chapter D.

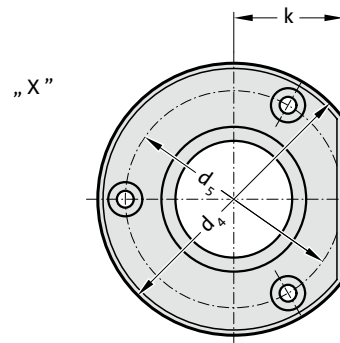
☞ Assembly guide lines / Dimensional requirements and tolerances at the end of chapter D.

Tolerance range:

yellow = .10

green = .20

red = .30



2091.34. Flanged guide bush, sintered ferrite carbonitrided with long-term lubrication, ISO 9448-4

d ₁	15 16	19 20	24 25	30 32	38 40	48 50
d ₃	28	32	40	48	58	70
d ₄	45	50	63	72	85	104
d ₅	35	40	50	58	70	86
d ₆	4.5	4.5	5.5	5.5	6.6	9
d ₇	8	8	10	10	11	15
k	15	18	23	28	33	38
l ₁	29	38	38	45	55	62
l ₂	23	23	23	30	30	37
l ₃	6	15	15	15	25	25
t	3.4	4.6	5.7	5.7	6.8	9

Ordering Code (example):

Flanged guide bush, sintered ferrite carbonitrided with long-term lubrication, ISO 9448-4

= 2091.34.

Diameter of conduit d₁ 30 mm = 030.

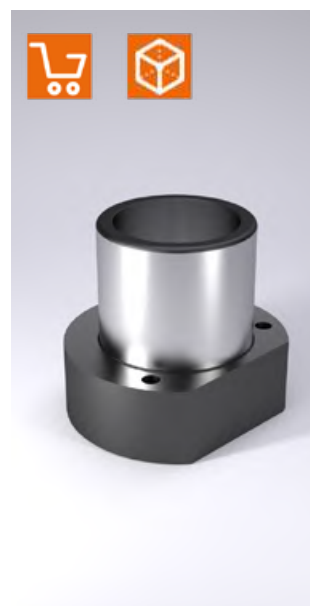
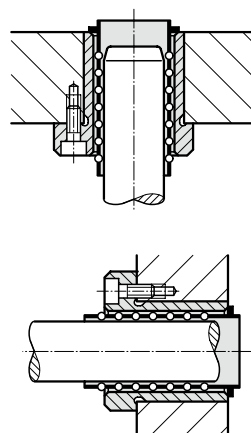
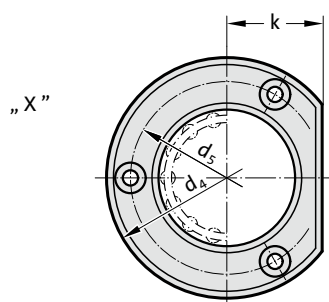
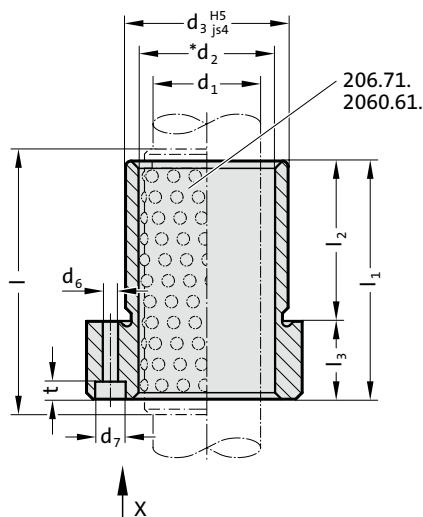
Classification TOL yellow = 10

Order No = 2091.34. 030. 10

FLANGED GUIDE BUSH FOR BALL BEARING, ISO 9448-5

2091.44.

Mounting example



Material:

Tool steel, hardened 62 ± 2 HRC

Execution:

Bearing surfaces honed,
outside diameter precision ground.

Note:

The guide bush is fixed by means of 3 screws to DIN EN ISO 4762.
The screws are not contained in the scope of delivery.

☞ Notes on ball bearing type guides at the beginning of chapter D.

*☞ Preloading see pairing classification at the beginning of chapter D

☞ Matching guide combinations, see selection matrix at the beginning of chapter D.

☞ Ball guide capacity calculations at the end of chapter D.

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

Tolerance range:

yellow = .10

green = .20

red = .30

2091.44. Flanged guide bush for ball bearing, ISO 9448-5

d_1	19 20	24 25	30 32	38 40	48 50	60 63	80
d_3	32	40	48	58	70	85	105
d_4	50	63	72	85	104	120	148
d_5	40	50	58	70	86	100	125
d_6	4.5	5.5	5.5	6.6	9	9	11
d_7	8	10	10	11	15	15	18
l_1	52	62	72	77	102	102	125
l_2	37	37	47	47	60	60	75
l_3	15	25	25	30	42	42	50
l^*	71	71	80	95	120	120	140

Ordering Code (example):

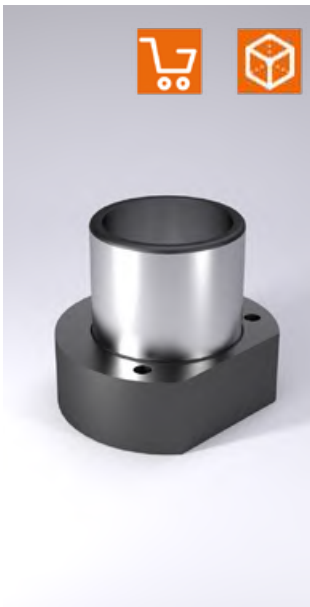
Flanged guide bush for ball bearing, ISO 9448-5 = 2091.44.

Diameter of conduit d_1 38 mm = 038.

Classification TOL yellow = 10

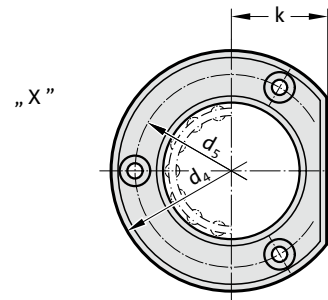
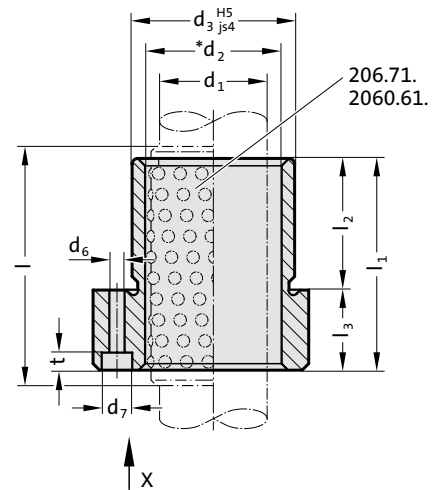
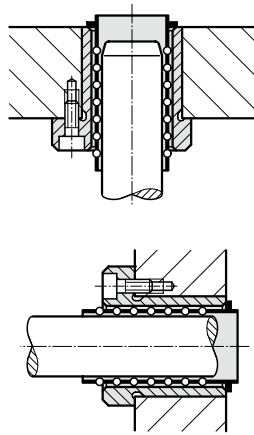
Order No = 2091.44. 038. 10

FLANGED GUIDE BUSH FOR BALL BEARING, ISO 9448-5



Mounting example

2091.45.



Material:

Tool steel, hardened 62 ± 2 HRC

Execution:

Bearing surfaces honed,
outside diameter precision ground.

Note:

The guide bush is fixed by means of 3 screws up to $\varnothing 16$: with screws to DIN 6912, from $\varnothing 19$: with screws to DIN EN ISO 4762.

The screws are not contained in the scope of delivery.

☞ Notes on ball bearing type guides at the beginning of chapter D.

*☞ Preloading see pairing classification at the beginning of chapter D

☞ Matching guide combinations, see selection matrix at the beginning of chapter D.

☞ Ball guide capacity calculations at the end of chapter D.

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

Tolerance range:

yellow = .10

green = .20

red = .30

2091.45. Flanged guide bush for ball bearing, ISO 9448-5

d_1	15 16	19 20	24 25	30 32	38 40	48 50	60 63
d_3	28	32	40	48	58	70	85
d_4	45	50	63	72	85	104	120
d_5	35	40	50	58	70	86	100
d_6	4.5	4.5	5.5	5.5	6.6	9	9
d_7	8	8	10	10	11	15	15
k	15	18	23	28	33	38	46
l_1	36	45	55	62	67	89	89
l_2	30	30	30	37	37	47	47
l_3	6	15	25	25	30	42	42
t	3.4	4.6	5.7	5.7	6.8	9	9
l^*	45	56	71	71	80	95	95

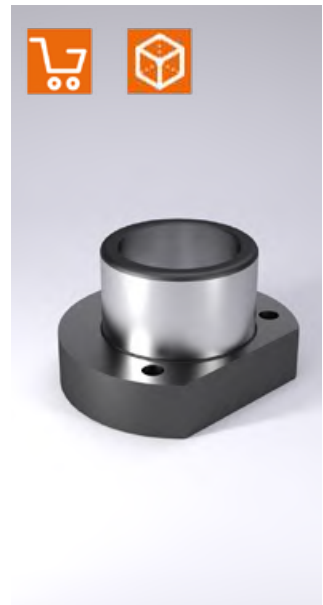
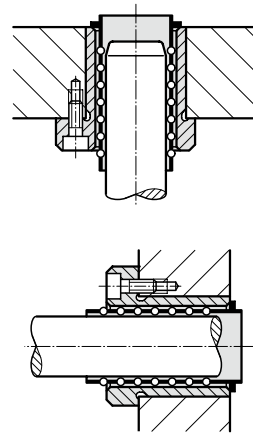
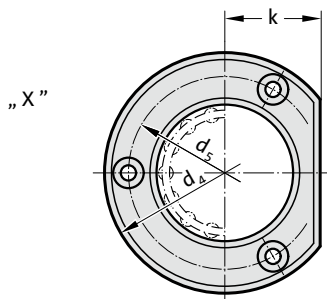
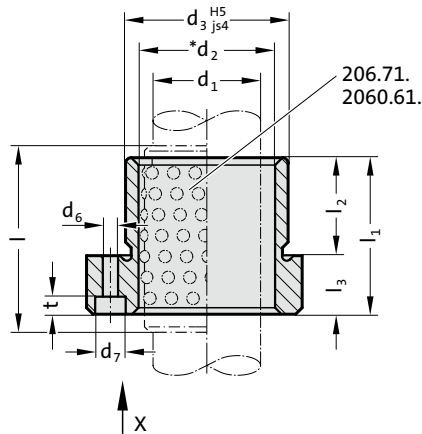
Ordering Code (example):

Flanged guide bush for ball bearing, ISO 9448-5 = 2091.45.
 Diameter of conduit d_1 32 mm = 032.
 Classification TOL yellow = 10
 Order No = 2091.45. 032. 10

FLANGED GUIDE BUSH FOR BALL BEARING, ISO 9448-5

2091.46.

Mounting example



Material:

Tool steel, hardened 62 ± 2 HRC


Execution:

Bearing surfaces honed,
outside diameter precision ground.


Note:


The guide bush is fixed by means of 3 screws up to $\varnothing 16$: with screws to DIN 6912, from $\varnothing 19$: with screws to DIN EN ISO 4762.


The screws are not contained in the scope of delivery.

 Notes on ball bearing type guides at the beginning of chapter D.

*  Preloading see pairing classification at the beginning of chapter D

 Matching guide combinations, see selection matrix at the beginning of chapter D.

 Ball guide capacity calculations at the end of chapter D.

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

Tolerance range:

yellow = .10

green = .20

red = .30

2091.46. Flanged guide bush for ball bearing, ISO 9448-5

d ₁	12	15 16	19 20	24 25	30 32	38 40	48 50
d ₃	26	28	32	40	48	58	70
d ₄	43	45	50	63	72	85	104
d ₅	33	35	40	50	58	70	86
d ₆	4.5	4.5	4.5	5.5	5.5	6.6	9
d ₇	8	8	8	10	10	11	15
k	13	15	18	23	28	33	38
l ₁	25	29	38	38	45	55	62
l ₂	16	23	23	23	30	30	37
l ₃	9	6	15	15	15	25	25
t	4.6	3.4	4.6	5.7	5.7	6.8	9
l*	40	45	45	45	56	63	80

Ordering Code (example):

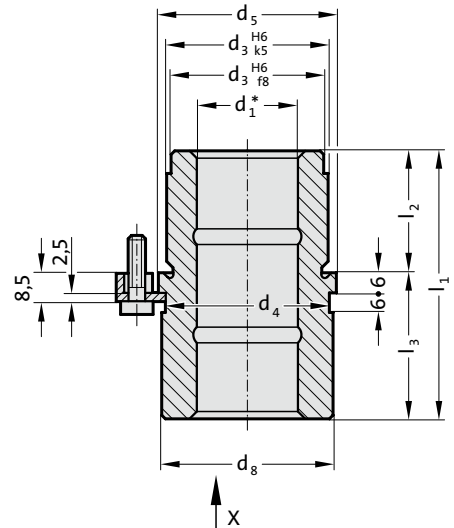
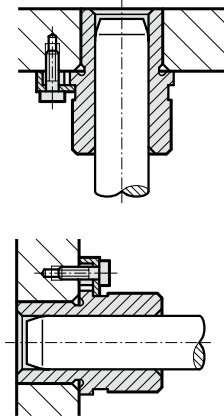
Flanged guide bush for ball bearing, ISO 9448-5	=	2091.46.
Diameter of conduit d ₁	25 mm =	025.
Classification TOL	yellow =	10
Order No	=	2091.46. 025. 10

HEADED GUIDE BUSH, SINTERED FERRITE CARBONITRIDED WITH LONG-TERM LUBRICATION, ~AFNOR



Mounting example

210.31.



Material:

Sintered ferrite of high purity, carbonitrided, long-term lubrication

Execution:

Bearing surfaces and outside diameter precision ground.

Note:

The attachment is with 3 Screw clamp, from $\varnothing d_1 = 38$ with 4 Screw clamp, which are included in delivery (Order No: 207.45 - Screw clamp incl. socket cap screw DIN 6912, Head $\varnothing 13$).

☞ Notes on sliding type guides at the beginning of chapter D.

*☞ Bearing clearance see pairing classification at the beginning of chapter D.

☞ Matching guide combinations, see selection matrix at the beginning of chapter D.

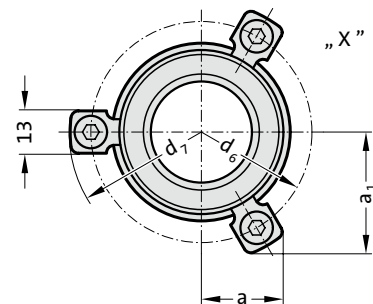
☞ Assembly guide lines / Dimensional requirements and tolerances at the end of chapter D.

Tolerance range:

yellow = .10

green = .20

red = .30



210.31. Headed guide bush, sintered ferrite carbonitrided with long-term lubrication, ~AFNOR

d_1	19.20	25	32	40	50
d_3	32	40	50	63	80
d_4	32	40	50	63	80
d_5	36	45	56	70	90
d_6	49	57	67	81	101
d_7	61.7	69.7	79.7	93.7	113.7
d_8	35	43.5	53	67	87
a	19.9	21.9	24.4	36	43
a_1	28.6	32.1	36.4	36	43
l_1	66	70	83	98	120
l_2	30	30	38	48	61
l_3	36	40	45	50	59

Ordering Code (example):

Headed guide bush, sintered ferrite carbonitrided with long-term lubrication, ~AFNOR

= 210.31.

Diameter of conduit d_1

32 mm = 032.

Classification TOL

yellow = 10

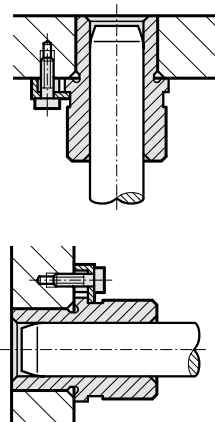
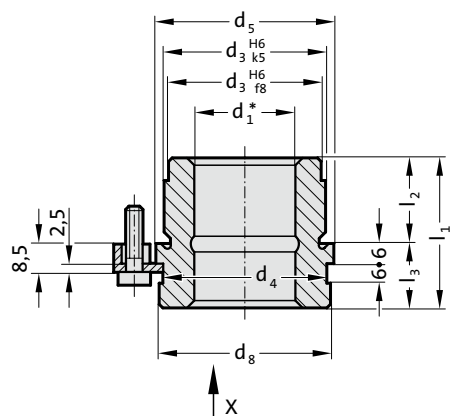
Order No

= 210.31.032.10

HEADED GUIDE BUSH, SINTERED FERRITE CARBONITRIDED WITH LONG-TERM LUBRICATION, ~AFNOR

210.34.

Mounting example



Material:

Sintered ferrite of high purity, carbonitrided, long-term lubrication

Execution:

Bearing surfaces and outside diameter precision ground.

Note:

The attachment is with 3 Screw clamp, from $\varnothing d_1 = 38$ with 4 Screw clamp, which are included in delivery (Order No: 207.45 - Screw clamp incl. socket cap screw DIN 6912, Head $\varnothing 13$).

☞ Notes on sliding type guides at the beginning of chapter D.

*☞ Bearing clearance see pairing classification at the beginning of chapter D.

☞ Matching guide combinations, see selection matrix at the beginning of chapter D.

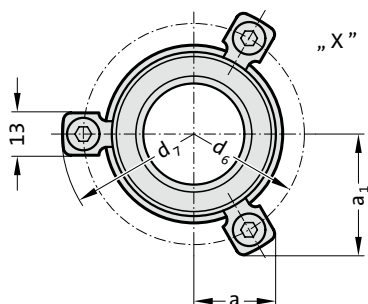
☞ Assembly guide lines / Dimensional requirements and tolerances at the end of chapter D.

Tolerance range:

yellow = .10

green = .20

red = .30



210.34. Headed guide bush, sintered ferrite carbonitrided with long-term lubrication, ~AFNOR

d_1	19 20	25	32	40	50
d_3	32	40	50	63	80
d_4	32	40	50	63	80
d_5	36	45	56	70	90
d_6	49	57	67	81	101
d_7	61.7	69.7	79.7	93.7	113.7
d_8	35	43.5	53	67	87
a	19.9	21.9	24.4	36	43
a_1	28.6	32.1	36.4	36	43
l_1	42	50	63	76	96
l_2	30	38	48	61	78
l_3	12	12	15	15	18

Ordering Code (example):

Headed guide bush, sintered ferrite carbonitrided with long-term lubrication, ~AFNOR

= 210.34.

Diameter of conduit d_1 32 mm = 032.

Classification TOL yellow = 10

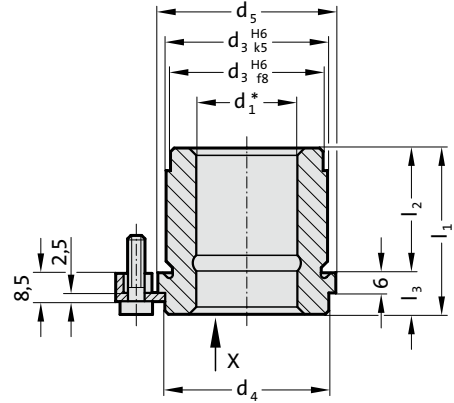
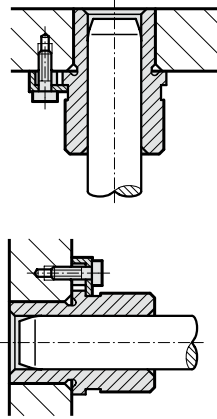
Order No = 210.34. 032. 10

HEADED GUIDE BUSH, SINTERED FERRITE CARBONITRIDED WITH LONG-TERM LUBRICATION, ~AFNOR



Mounting example

210.35.



Material:

Sintered ferrite of high purity, carbonitrided, long-term lubrication

Execution:

Bearing surfaces and outside diameter precision ground.

Note:

The attachment is with 3 Screw clamp, from $\varnothing d_1 = 38$ with 4 Screw clamp, which are included in delivery (Order No: 207.45 - Screw clamp incl. socket cap screw DIN 6912, Head $\varnothing 13$).

Notes on sliding type guides at the beginning of chapter D.

* Bearing clearance see pairing classification at the beginning of chapter D.

Matching guide combinations, see selection matrix at the beginning of chapter D.

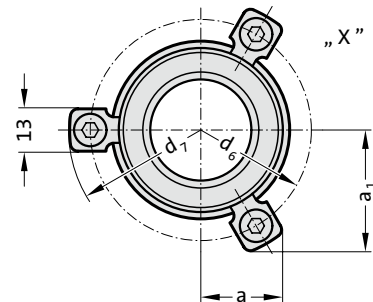
Assembly guide lines / Dimensional requirements and tolerances at the end of chapter D.

Tolerance range:

yellow = .10

green = .20

red = .30



210.35. Headed guide bush, sintered ferrite carbonitrided with long-term lubrication, ~AFNOR

d_1	19 20	25	32	40	50
d_3	32	40	50	63	80
d_4	32	40	50	63	80
d_5	36	45	56	70	90
d_6	49	57	67	81	101
d_7	61.7	69.7	79.7	93.7	113.7
a	19.9	21.9	24.4	36	43
a_1	28.6	32.1	36.4	36	43
l_1	28	32	37	44	44
l_2	16	20	25	32	32
l_3	12	12	12	12	12

Ordering Code (example):

Headed guide bush, sintered ferrite carbonitrided with long-term lubrication, ~AFNOR

= 210.35.

Diameter of conduit d_1 32 mm = 032.

Classification TOL yellow = 10

Order No = 210.35.032.10