

OILLESS GUIDE ELEMENTS



OILLESS GUIDE ELEMENTS

DESCRIPTION

Low-maintenance sliding elements are used in the tool & die building as well as the machine building industries, for both linear and rotary motion applications. The material for these sliding elements is made of a base material (see chart), and an overlapping network of solid lubricant deposits. These deposits are embedded in a uniform geometric pattern in order to achieve the optimum lubrication coverage in the direction of the movement. The allowable directional movements can be found on the catalogue pages, and are marked with symbols.

The optimum sliding conditions are achieved when the sliding elements are combined with a hardened and ground opposing surface, which are a minimum of 100 HB harder than the base material. A surface roughness of approx. Rz6.3 is optimal. Suitable product combinations of guide pillars and low-maintenance guide bushings can be found in the selection matrix at the beginning of chapter D.

It is recommended to lightly lubricate the sliding surfaces of the low-maintenance sliding elements with lithium saponified grease, before usage. The solid lubricant will only be distributed from the pockets in the sliding zone during operation. In general, 25-35 % of the sliding surface is embedded with solid lubricant deposits, but deviations are possible due to the shape and size of a particular component. The size and arrangement of the solid lubricant deposits may also vary within the various products and sizes.

A repair of the slide elements is possible. The sliding surface is usually re-ground.

Advantages of oilless guide elements

- Low-maintenance, with optimum conditions maintenance-free
- low friction
- good emergency sliding properties
- „Stick - Slip“ effects are eliminated
- extremely wide temperature resistance – hot and cold
- damping properties in presence of vibration

Surface pressure, temperature, speed and lubrication

max. surface pressing [N/cm ²]	Temperature [C°]	Speed [m/min.]	PV value [N/cm ² × m/min]	Lubrication
5000	80	30	10000	Initial

PV value

The permissible bearing load is determined from the pressure and the PV value, which defines the bearing wear.

The PV value is the product of surface pressure (P) and running velocity (V). Please keep in mind, that the maximum allowed speed and surface pressing can not be reached at the same time (see PV diagram)

Calculation for the existing bushing load:

$$PV = P \times V \text{ (N/cm}^2 \times \text{m/min)}$$

$$P = F/A \text{ (N/cm}^2)$$

$$F = \text{Loading force (N)}$$

$$A = \text{Projection surface of the guide bushing/sliding surface [cm}^2]$$

$$V = \text{Sliding speed [m/min]}$$

Sliding speed with lifting motion:

$$V = 2 \times H \times nf/1000 \text{ [m/min]}$$

$$H = \text{Stroke [mm]}$$

$$nf = \text{Number of strokes [H/min]}$$

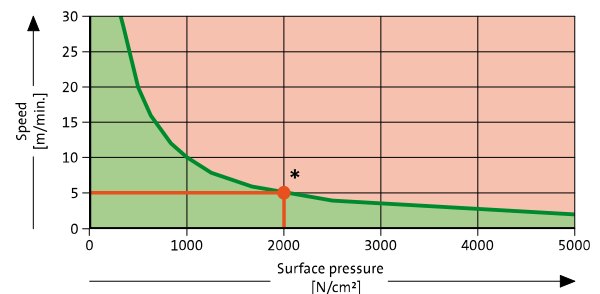
Characteristics for base material

chemical composition	Cu 60–66% Al 5,0–7,5% Fe 2,0–4,0% Mn 2,5–5,0% Zn 17,5–31,5%
specific density [kg/dm ³]	8,2
Tensile strength Rm [N/mm ²]	750-800
Brinell hardness HB 10	180–210
Yield point Rp 0.2 [N/mm ²]	450–550
Elongation to fracture A5 [%]	5–8
Elasticity module [kN/mm ²]	105–115
Co-efficient of friction	0,04–0,15
Thermal conductivity [W/(m × K)]	45–55
Heat expansion coefficient [K ⁻¹]	1,6–2,0 × 10 ⁻⁵
Electric conductance [m/(Ω × mm ²)]	7–8
alt. flexural strength [N/mm ²]	±150
ratio sliding surface to lubricant deposits (%)	25–30

Special version

Rebuilds and other specifications and designs upon request.

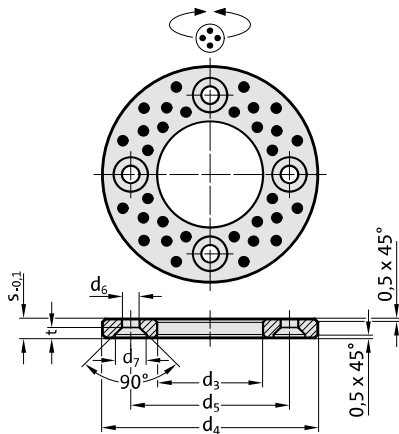
PV-diagramm



* Example: At a surface pressing of 2000 N/cm² is, because of the maximum PV-value of 10000 N/cm² × m/min. the maximum allowed speed 5 m/min.

THRUST WASHER, BRONZE WITH SOLID LUBRICANT

2053.70.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

For combination loads use together with Bushes 2052.70.
Screws not included.

Fixing:

- from $d_3 = 10,2$ 2 X M3
- from $d_3 = 20,2$ 2 X M5
- from $d_3 = 40,2$ 2 X M6
- from $d_3 = 50,3$ 4 X M6
- from $d_3 = 60,3$ 4 X M8
- from $d_3 = 90,5$ 4 X M10

2053.70. Thrust washer, Bronze with solid lubricant

d_1	10	12	13	14	15	16	18	20	25	30	35	40	45	50	55	60	65	70	75	80	90	100	120
d_3	10.2	12.2	13.2	14.2	15.2	16.2	18.2	20.2	25.2	30.2	35.2	40.2	45.3	50.3	55.3	60.3	65.3	70.3	75.3	80.3	90.5	100.5	120.5
d_4	30	40	40	40	50	50	50	50	55	60	70	80	90	100	110	120	125	130	140	150	170	190	200
d_5	20	28	28	28	28	28	35	35	40	45	50	60	67.5	75	85	90	95	100	110	120	140	160	175
d_6	3.4	3.4	3.4	3.4	3.4	3.4	3.4	5.5	5.5	5.5	5.5	6.6	6.6	6.6	6.6	9	9	9	9	9	11	11	11
d_7	6.9	6.9	6.9	6.9	6.9	6.9	6.9	11.5	11.5	11.5	11.5	13.7	13.7	13.7	13.7	18.3	18.3	18.3	18.3	18.3	22.7	22.7	22.7
s	3	3	3	3	3	3	3	5	5	5	5	7	7	8	8	8	8	10	10	10	10	10	10
t	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3	3	3	3	3.6	3.6	3.6	3.6	4.6	4.6	4.6	4.6	4.6	5.9	5.9	5.9

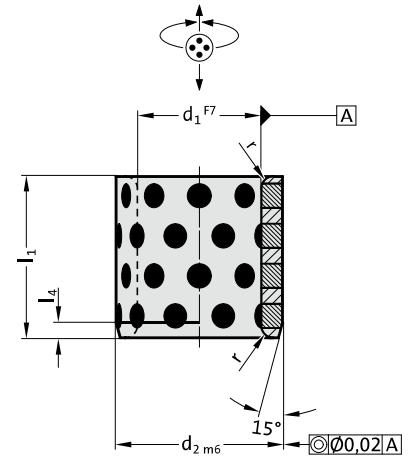
Ordering Code (example):

Thrust washer, Bronze with solid lubricant = 2053.70.
 Diameter of conduit d_1 40 mm = 040
 Order No = 2053.70. 040

GUIDE BUSH, BRONZE WITH SOLID LUBRICANT



2052.70.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Bushes can be used with radial or axial motion.

☞ 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.

Attention:

Note that press fitment reduces inside bush diameter.

2052.70. Guide bush, Bronze with solid lubricant

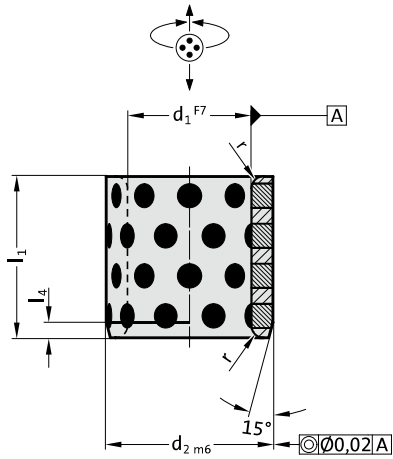
d ₁	8	10	10	12	13	14	15	16	18	19	20	20	20	24	25	25	25	28	30	30	30	31.5	32	35	35	38	40	40
d ₂	12	14	15	18	19	20	21	22	24	25	26	28	30	32	32	33	35	38	40	38	42	40	42	44	45	48	50	55
r	0.5	0.5	0.5	0.5	0.5	0.5	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	1.5	1.5	1.5	
l ₁	2	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
l ₂																												
8	●	●																										
10	●	●	●	●	●	●	●	●																				
12	●	●		●	●	●	●	●																				
15	●	●		●	●	●	●	●																				
16				●	●	●	●	●																				
20		●		●	●	●	●	●																				
25				●	●	●	●	●																				
30				●	●	●	●	●																				
35																												
37																												
40																												
47																												
50																												
60																												
70																												
77																												
80																												

Ordering Code (example):

Guide bush, Bronze with solid lubricant	=2052.70.
Diameter of conduit d ₁	40 mm = 040.
Outer diameter d ₂	55 mm = 055.
Installation length l ₁	25 mm = 025
Order No	=2052.70. 040. 055.025

GUIDE BUSH, BRONZE WITH SOLID LUBRICANT

2052.70.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Bushes can be used with radial or axial motion.

☞ 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.

Attention:

Note that press fitment reduces inside bush diameter.

2052.70. Guide bush, Bronze with solid lubricant

	45	45	45	50	50	55	60	60	63	65	70	70	75	75	80	80	85	90	100	110	120	125	130	140	150	160
d_1	45	45	45	50	50	55	60	60	63	65	70	70	75	75	80	80	85	90	100	110	120	125	130	140	150	160
d_2	55	56	60	62	65	70	74	75	75	80	85	90	90	95	96	100	100	110	120	130	140	145	150	160	170	180
r	1.5	1.5	1.5	1.5	1.5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
l_2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
l_1																										
30	●	●	●	●	●			●	●																	
35	●	●	●	●	●			●	●			●														
40	●	●	●	●	●	●	●	●	●			●			●	●										
50	●	●	●	●	●	●	●	●	●			●	●		●	●										
60	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
70			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
80			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
100				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
120						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
130																										
140																										
150																										

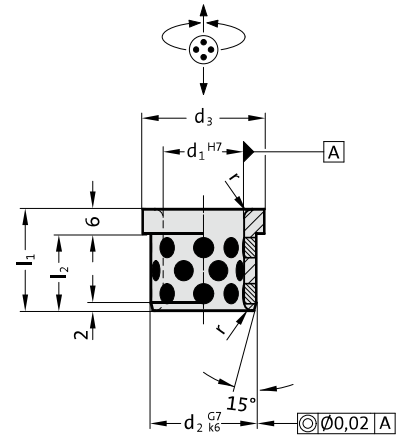
Ordering Code (example):

Guide bush, Bronze with solid lubricant		= 2052.70.
Diameter of conduit d_1	40 mm =	040.
Outer diameter d_2	55 mm =	055.
Installation length l_1	25 mm =	025
Order No		= 2052.70. 040. 055.025

GUIDE BUSH WITH COLLAR, BRONZE WITH SOLID LUBRICANT



2085.70.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Bushes can be used with radial or axial motion.

Bushes can also be fitted with Loctite.

☞ 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.

2085.70. Guide bush with collar, Bronze with solid lubricant

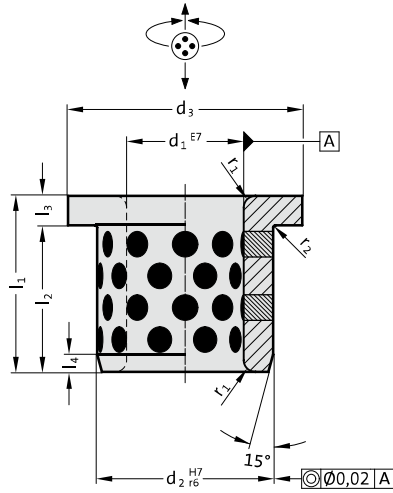
d ₁	12	16	20	24
d ₂	16	20	26	30
d ₃	18	24	28	35
r	2	2	2	2
l ₁ , l ₂				
20 14	●	●	●	●
25 19	●	●	●	●
30 24	●	●	●	●

Ordering Code (example):

Guide bush with collar, Bronze with solid lubricant	=	2085.70.
Diameter of conduit d ₁	20 mm =	020.
Length l ₁	20 mm =	020
Order No	=	2085.70. 020. 020

GUIDE BUSH WITH COLLAR, BRONZE WITH SOLID LUBRICANT

2085.71.



Material:

Bronze with solid lubricant, oilless lubricating

Attention:

Note that press fitment reduces inside bush diameter.

Note:

Bushes can be used with radial or axial motion.

☞ 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.

2085.71. Guide bush with collar, Bronze with solid lubricant

d ₁	10	12	13	14	15	16	20	25	30	31.5	35	40	45	50	55	60	63	70	75	80	90	100	120						
d ₂	14	18	19	20	21	22	30	35	40	40	45	50	55	60	65	75	75	85	90	100	110	120	140						
d ₃	22	25	26	27	28	29	40	45	50	50	60	65	70	75	80	90	85	105	110	120	130	150	170						
l ₃	2	3	3	3	3	3	5	5	5	5	5	5	5	5	5	7.5	7.5	7.5	7.5	10	10	10	10						
l ₄	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4						
r ₁	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3						
r ₂	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8						
l ₁																													
l ₂																													
15	13	12	12	12	12	12	10	10																					
20	18	17	17	17	17	17	15	15	15	15	15	15																	
25						22	22	20	20	20																			
30							27	27	25	25	25	25	25	25	25														
35									30	30																			
40								35	35	35	35	35	35	35	35	32.5													
50										45	45	45	45	45	42.5	42.5	42.5												
60												55	55	55	55	55	55	55	55	55	55	55	55	55					
67.5														60	60	60	60	60	60	60	60	60	60	60	60				
80																72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5		
100																		90	90	90	90	90	90	90	90	90	90	90	90

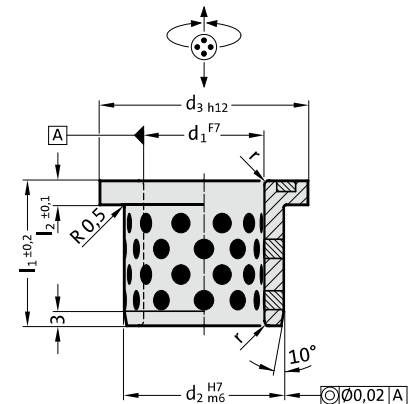
Ordering Code (example):

Guide bush with collar, Bronze with solid lubricant	=	2085.71.
Diameter of conduit d ₁	35 mm =	035.
Length l ₁	20 mm =	020
Order No	=	2085.71. 035. 020

GUIDE BUSH WITH COLLAR, BRONZE WITH SOLID LUBRICANT



2086.70.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Bushes can be used with radial or axial motion.

☞ 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.

Attention:

Note that press fitment reduces inside bush diameter.

2086.70. Guide bush with collar, Bronze with solid lubricant

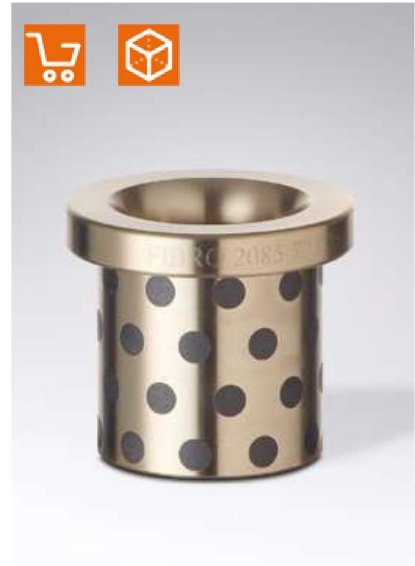
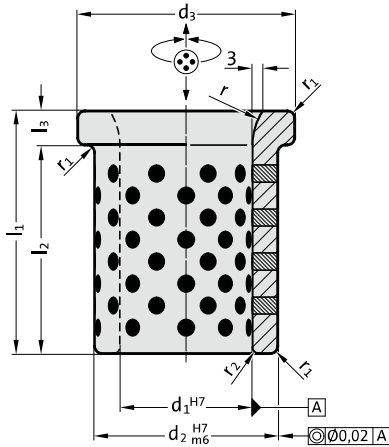
d ₁	12	16	20	25	30	40	50	60
d ₂	18	22	28	33	38	50	62	75
d ₃	25	30	36	43	48	60	75	90
r	1	1	1	1	1	2	2	3
l ₁	15	20	25	30	35	45	55	65
l ₂	4	5	5	5	5	5	6	7

Ordering Code (example):

Guide bush with collar, Bronze with solid lubricant	=	2086.70.
Diameter of conduit d ₁	30 mm =	030.
total length l ₁	35 mm =	035
Order No	=	2086.70. 030. 035

GUIDE BUSH WITH COLLAR, BRONZE WITH SOLID LUBRICANT

2085.72.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Bushes can be used with radial or axial motion.

☞ 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.

Attention:

Note that press fitment reduces inside bush diameter.

2085.72. Guide bush with collar, Bronze with solid lubricant

d_1	25	30	40	50	60	65	65	80	80	100	100
d_2	35	40	55	65	75	80	80	100	100	120	120
d_3	45	50	65	75	85	90	90	110	110	130	130
r	10	20	20	20	20	20	20	20	20	20	20
r_1	1	1	2	2	2	2	2	2	2	2	2
r_2	2	2	2	2	2	2	2	2	2	3	3
l_3	7	10	10	10	10	10	10	10	10	10	10
l_2	33	40	60	70	70	70	110	90	130	90	130
l_1	40	50	70	80	80	80	120	100	140	100	140

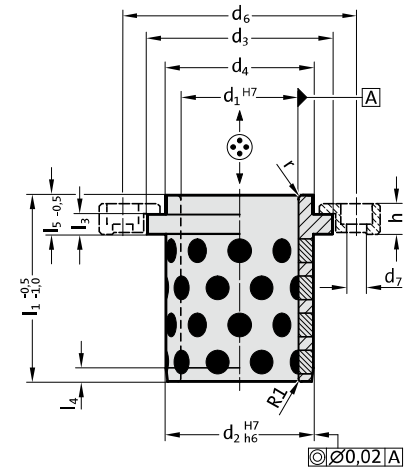
Ordering Code (example):

Guide bush with collar, Bronze with solid lubricant = 2085.72.
 Diameter of conduit d_1 60 mm = 060.
 Length l_1 80 mm = 080
 Order No = 2085.72. 060. 080

GUIDE BUSH WITH COLLAR, BRONZE WITH SOLID LUBRICANT, DIN 9834/ISO 9448



2082.70.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

☞ 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.

Fixing:

(to be ordered separately)

Screw clamps with screws,

up to $\varnothing d_1 = 50$ - 2072.45.10 (M6 X 16 DIN EN ISO 4762)

from $\varnothing d_1 = 60$ - 2072.45.16 (M10 X 20 DIN EN ISO 4762)

Attention:

Bushes can only be used with axial motion!

2082.70. Guide bush with collar, Bronze with solid lubricant, DIN 9834/ISO 9448

d_1	24 25	30 32	38 40	48 50	60 63	80	100	125	160
d_2	32	40	50	63	80	100	125	160	200
d_3	40	50	63	71	90	112	140	180	220
d_4	32	40	50	63	80	100	125	160	200
d_6	58	66	79	89	123	143	168	203	243
d_7	7	7	7	7	11.5	11.5	11.5	11.5	11.5
l_1	40	50	63	71	80	100	125	160	200
l_3	6.3	6.3	6.3	6.3	10	10	10	10	10
l_4	3	4	5	6.3	8	10	12.5	16	16
l_5	10	12	15	17	19	22	21	30	32
h	10	10	10	10	16	16	16	16	16
r	3	3	3	5	6	8	10	12	18

Ordering Code (example):

Guide bush with collar, Bronze with solid lubricant,
DIN 9834/ISO 9448

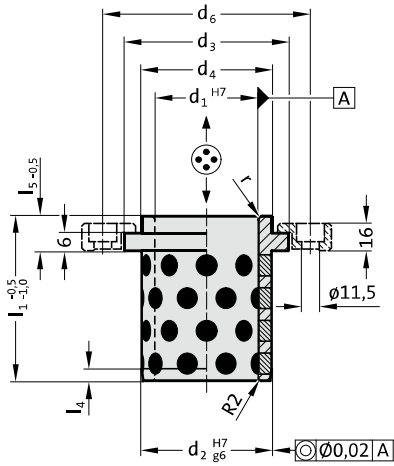
= 2082.70.

Diameter of conduit d_1 50 mm = 050

Order No = 2082.70. 050

GUIDE BUSH WITH COLLAR, BRONZE WITH SOLID LUBRICANT, NAAMS

2082.71.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

☞ 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.

Fixing:

(to be ordered separately)

Screw clamps with screws 2072.46 (M10 x 20 DIN EN ISO 4762)

Attention:

Bushes can only be used with axial motion!

2082.71. Guide bush with collar, Bronze with solid lubricant, NAAMS

d ₁	25	32	40	50	63	80	100	125
d ₂	32	40	50	63	80	100	125	160
d ₃	40	50	63	71	90	112	140	180
d ₄	32	40	50	63	80	100	125	160
d ₆	75	83	93	106	123	143	168	203
l ₁	40	50	63	71	80	100	125	160
l ₄	3	4	5	6.3	8	10	12.5	16
l ₅	10	10	13	15	17	20	19	28
r	3	3	3	5	6	8	10	12

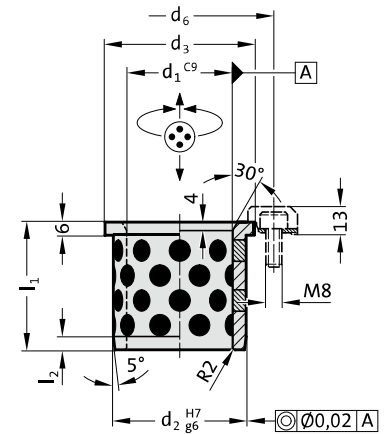
Ordering Code (example):

Guide bush with collar, Bronze with solid lubricant, NAAMS	=	2082.71.
Diameter of conduit d ₁	63 mm =	063
Order No	=	2082.71. 063

GUIDE BUSH WITH COLLAR, BRONZE WITH SOLID LUBRICANT, NAAMS



2086.71.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Bushes can be used with radial or axial motion.

☞ 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.

Fixing:

(to be ordered separately)

Screw clamps with screws 2072.47 (M8 x 20 DIN EN ISO 4762)

2086.71. Guide bush with collar, Bronze with solid lubricant, NAAMS

d ₁	25	32	40	50	63	80	100	125
d ₂	32	40	50	63	80	100	125	160
d ₃	40	50	63	71	90	112	140	180
d ₆	29	34	40,5	44,5	54	65	79	99
l ₁	40	50	55	63	75	90	115	138
l ₂	4	4	5	6	8	10	12	12

Ordering Code (example):

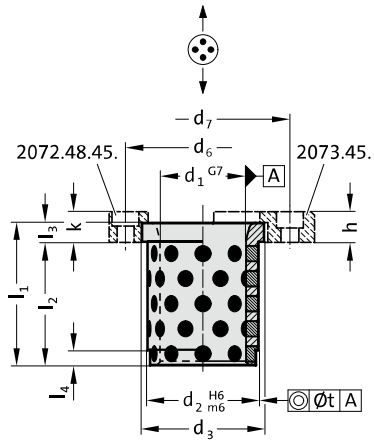
Guide bush with collar, Bronze with solid lubricant, NAAMS = 2086.71.

Diameter of conduit d₁ 63 mm = 063

Order No = 2086.71. 063

GUIDE BUSH WITH COLLAR, BRONZE WITH SOLID LUBRICANT, CNOMO

2102.70.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

☞ 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.

Fixing:

(to be ordered separately)

Screw clamps with screws 2072.48.45. or
Securing flange 2073.45.

Attention:

Bushes can only be used with axial motion!

Note that press fitment reduces inside bush diameter.

2102.70. Guide bush with collar, Bronze with solid lubricant, CNOMO

d ₁	20	25	32	40	50	63	80	100
d ₂	28	35	44	52	63	80	100	125
d ₃	32	40	50	60	71	90	112	140
d ₆	-	-	-	75	90	111	133	162
d ₇	48	56	65	82	98	115	144	170
l ₁	32	40	50	63	80	100	125	160
l ₂	28	35	44	55	70	88	109	140
l ₃	4	5	6	8	10	12	16	20
l ₄	3	5	8	8	8	10	10	10
h	10	10	12	12	16	20	25	32
k	-	-	-	12	16	20	25	32
t	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02

Ordering Code (example):

Guide bush with collar, Bronze with solid lubricant, CNOMO = 2102.70.

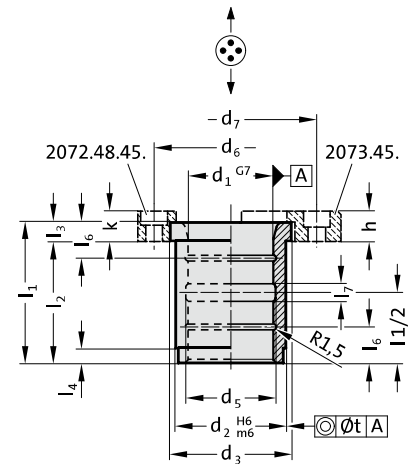
Diameter of conduit d₁ 50 mm = 050

Order No = 2102.70. 050

GUIDE BUSH WITH COLLAR, BRONZE, CNOMO



2102.71.



Material:

Bronze

Note:

☞ 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.

Fixing:

(to be ordered separately)

Screw clamps with screws 2072.48.45. or

Securing flange 2073.45.

Attention:

Bushes can only be used with axial motion!

Note that press fitment reduces inside bush diameter.

2102.71. Guide bush with collar, Bronze, CNOMO

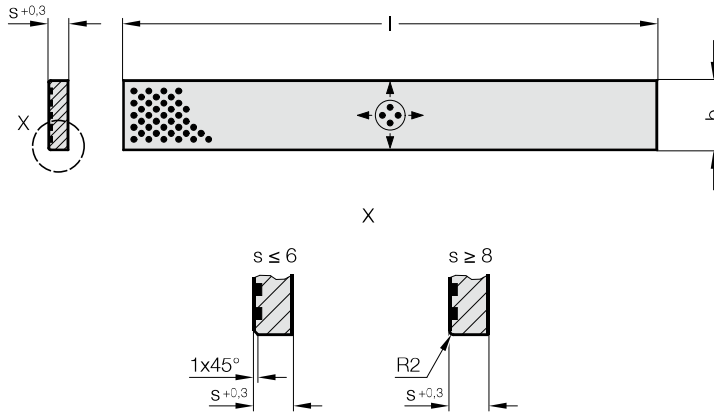
d ₁	20	25	32	40	50	63	80	100
d ₂	28	35	44	52	63	80	100	125
d ₃	32	40	50	60	71	90	112	140
d ₅	22	27	34	42	52	65	82	102
d ₆	-	-	-	75	90	111	133	162
d ₇	48	56	65	82	98	115	144	170
l ₁	32	40	50	63	80	100	125	160
l ₂	28	35	44	55	70	88	109	140
l ₃	4	5	6	8	10	12	16	20
l ₄	3	5	8	8	8	10	10	10
l ₆	-	-	12	16	20	25	32	40
l ₇	5	5	5	8	10	12	16	20
h	10	10	12	12	16	20	25	32
k	-	-	-	12	16	20	25	32
t	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02

Ordering Code (example):

Guide bush with collar, Bronze, CNOMO = 2102.71.
 Diameter of conduit d₁ 50 mm = 050
 Order No = 2102.71. 050

FLAT GUIDE BAR, BRONZE WITH SOLID LUBRICANT

2961.71.



2961.71. Flat guide bar, Bronze with solid lubricant

Order No	b	s	l	305	605	1,005
2961.71.020.004.	20	4		●		
2961.71.025.005.	25	5		●		
2961.71.030.004.	30	4		●		
2961.71.030.006.	30	6		●	●	
2961.71.030.008.	30	8		●	●	
2961.71.030.010.	30	10		●	●	●
2961.71.030.012.	30	12		●	●	●
2961.71.035.010.	35	10		●	●	●
2961.71.040.005.	40	5		●	●	
2961.71.040.006.	40	6		●	●	
2961.71.040.008.	40	8		●	●	●
2961.71.040.010.	40	10		●	●	●
2961.71.040.012.	40	12		●	●	●
2961.71.040.016.	40	16			●	●
2961.71.050.010.	50	10		●	●	●
2961.71.050.012.	50	12			●	●
2961.71.050.020.	50	20			●	●
2961.71.060.012.	60	12			●	●
2961.71.060.016.	60	16			●	●
2961.71.080.010.	80	10		●	●	●
2961.71.080.012.	80	12			●	●
2961.71.080.016.	80	16			●	●
2961.71.080.020.	80	20			●	●
2961.71.080.025.	80	25			●	●
2961.71.100.016.	100	16			●	●
2961.71.100.020.	100	20			●	●
2961.71.100.025.	100	25			●	●
2961.71.125.020.	125	20			●	●
2961.71.125.025.	125	25			●	●
2961.71.160.025.	160	25			●	●

Material:

Bronze with solid lubricant, oilless lubricating

Execution:

Sliding faces ground.

Ordering Code (example):

Flat guide bar, Bronze with solid lubricant	=	2961.71.
Width b	50 mm =	050.
Thickness s	10 mm =	010.
Length l	1005 mm =	1005
Order No	=	2961.71. 050. 010. 1005

FLAT GUIDE BAR, BRONZE WITH SOLID LUBRICANT



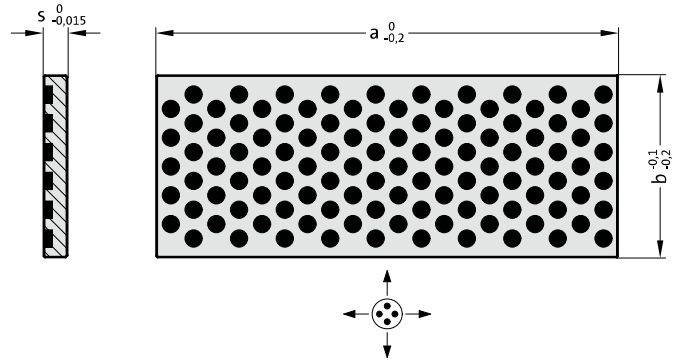
2961.76.

Material:

Bronze with solid lubricant, oilless lubricating

Execution:

Sliding faces ground.

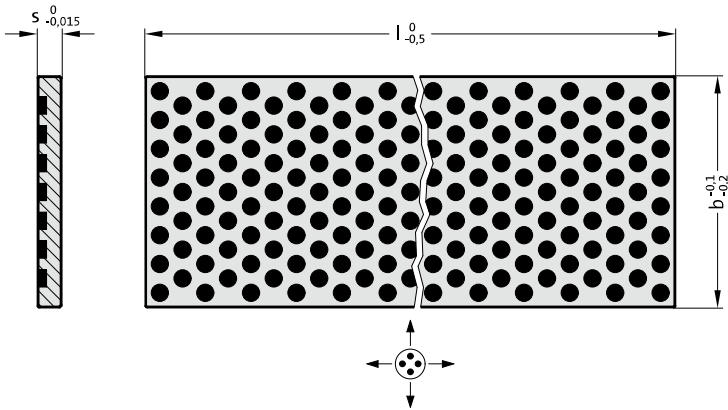


2961.76. Flat guide bar, Bronze with solid lubricant

Order No	b	s	a
2961.76.025.005.050	25	5	50
2961.76.025.005.071	25	5	71
2961.76.025.005.090	25	5	90
2961.76.025.006.050	25	6	50
2961.76.025.006.063	25	6	63
2961.76.025.006.080	25	6	80
2961.76.025.006.100	25	6	100
2961.76.025.006.125	25	6	125
2961.76.040.005.050	40	5	50
2961.76.040.005.071	40	5	71
2961.76.040.005.090	40	5	90
2961.76.040.006.080	40	6	80
2961.76.040.006.100	40	6	100
2961.76.040.006.125	40	6	125
2961.76.040.006.160	40	6	160
2961.76.040.006.200	40	6	200
2961.76.063.006.080	63	6	80
2961.76.063.006.100	63	6	100
2961.76.063.006.125	63	6	125
2961.76.063.006.160	63	6	160
2961.76.063.008.125	63	8	125
2961.76.063.008.160	63	8	160
2961.76.063.008.200	63	8	200
2961.76.063.008.250	63	8	250
2961.76.063.008.315	63	8	315

FLAT GUIDE BAR, BRONZE WITH SOLID LUBRICANT

2961.77.



Material:
Bronze with solid lubricant, oilless lubricating

Execution:
Sliding faces ground.

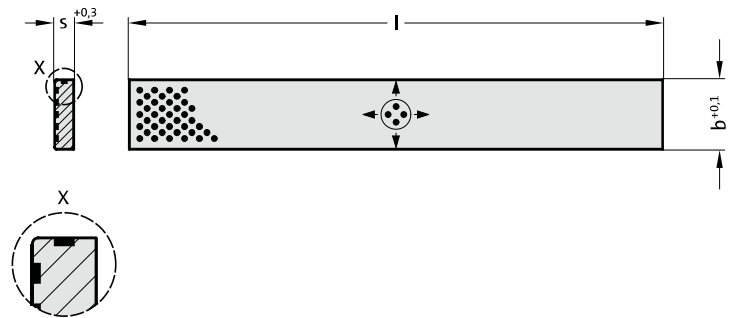
2961.77. Flat guide bar, Bronze with solid lubricant

Order No	b	s	l
2961.77.025.006.500	25	6	500
2961.77.040.006.500	40	6	500
2961.77.063.008.500	63	8	500
2961.77.080.010.500	80	10	500

FLAT GUIDE BAR WITH TWO SLIDING SURFACES, BRONZE WITH SOLID LUBRICANT



2961.73.



Material:

Bronze with solid lubricant, oilless lubricating

Execution:

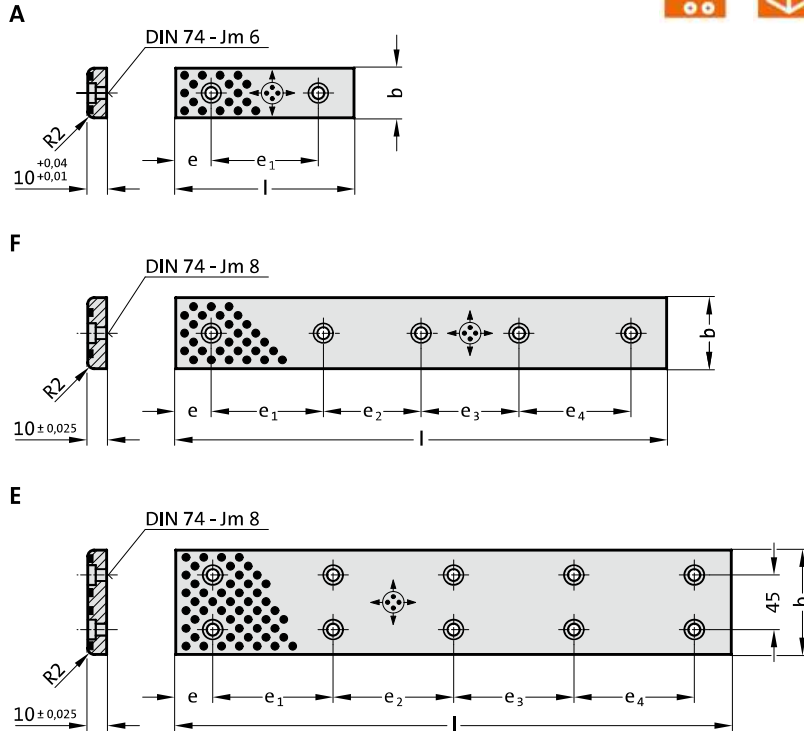
Sliding faces ground.

2961.73. Flat guide bar with two sliding surfaces, Bronze with solid lubricant

Order No	b	s	l
2961.73.025.005.0305	25	5	305
2961.73.030.006.0305	30	6	305
2961.73.035.010.0605	35	10	605
2961.73.040.008.0605	40	8	605
2961.73.040.012.0605	40	12	605
2961.73.050.010.0605	50	10	605
2961.73.060.016.0605	60	16	605
2961.73.080.012.0605	80	12	605
2961.73.080.020.0605	80	20	605
2961.73.100.020.0605	100	20	605

FLAT GUIDE BAR, BRONZE WITH SOLID LUBRICANT

2961.70.



Material:
Bronze with solid lubricant, oilless lubricating

Execution:
Sliding faces ground.

Note:
Screws are not included.

Fixing:
Use socket cap screws DIN 7984.

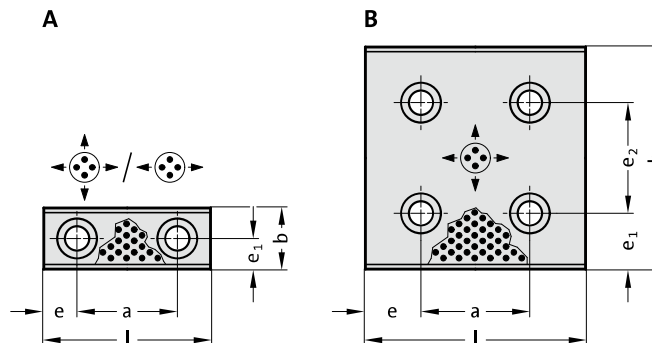
2961.70. Flat guide bar, Bronze with solid lubricant

Order No	Shape	b	l	e	e ₁	e ₂	e ₃	e ₄	Number of screw holes
2961.70.018.075	A	18	75	15	45	-	-	-	2
2961.70.018.100	A	18	100	25	50	-	-	-	2
2961.70.018.125	A	18	125	25	75	-	-	-	2
2961.70.018.150	A	18	150	25	100	-	-	-	2
2961.70.028.075	A	28	75	15	45	-	-	-	2
2961.70.028.100	A	28	100	25	50	-	-	-	2
2961.70.028.125	A	28	125	25	75	-	-	-	2
2961.70.028.150	A	28	150	25	100	-	-	-	2
2961.70.035.100	F	35	100	20	60	-	-	-	2
2961.70.035.150	F	35	150	20	55	55	-	-	3
2961.70.035.200	F	35	200	20	55	50	55	-	4
2961.70.035.250	F	35	250	20	70	70	70	-	4
2961.70.035.300	F	35	300	20	65	65	65	65	5
2961.70.035.350	F	35	350	20	80	75	75	80	5
2961.70.038.075	A	38	75	15	45	-	-	-	2
2961.70.038.100	A	38	100	25	50	-	-	-	2
2961.70.038.125	A	38	125	25	75	-	-	-	2
2961.70.038.150	A	38	150	25	100	-	-	-	2
2961.70.048.075	A	48	75	15	45	-	-	-	2
2961.70.048.100	A	48	100	25	50	-	-	-	2
2961.70.048.125	A	48	125	25	75	-	-	-	2
2961.70.048.150	A	48	150	25	100	-	-	-	2
2961.70.050.100	F	50	100	20	60	-	-	-	2
2961.70.050.150	F	50	150	20	55	55	-	-	3
2961.70.050.200	F	50	200	20	55	50	55	-	4
2961.70.050.250	F	50	250	20	70	70	70	-	4
2961.70.050.300	F	50	300	20	65	65	65	65	5
2961.70.050.350	F	50	350	20	80	75	75	80	5
2961.70.050.400	F	50	400	20	90	90	90	90	5
2961.70.075.150	E	75	150	20	110	-	-	-	4
2961.70.075.200	E	75	200	20	80	80	-	-	6
2961.70.075.250	E	75	250	20	105	105	-	-	6
2961.70.075.300	E	75	300	20	85	90	85	-	8
2961.70.075.400	E	75	400	20	120	120	120	-	8
2961.70.075.500	E	75	500	20	115	115	115	115	10

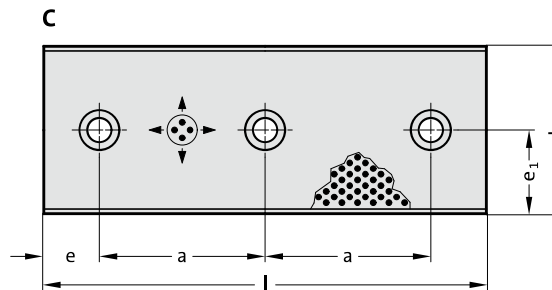
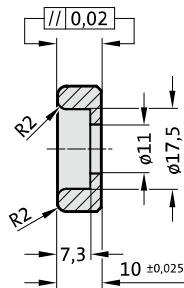
FLAT GUIDE BAR, BRONZE WITH SOLID LUBRICANT



2961.75.



2961.75.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Attention:

Direction of motion of flat guide bars with a width of $b = 28$ and 38 mm only in longitudinal direction.

Fixing:

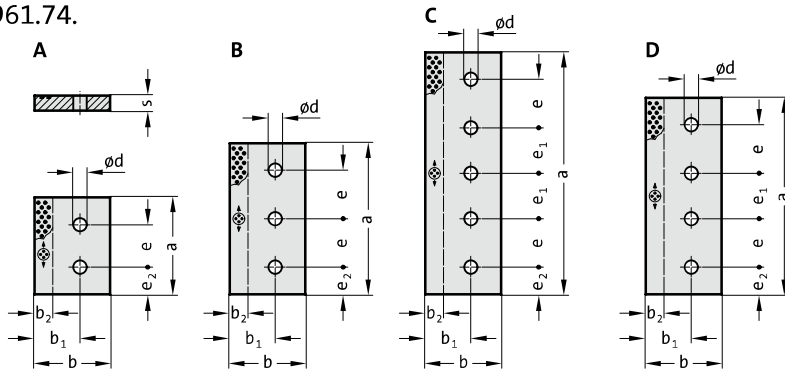
Use socket cap screws DIN 7984 M10.

2961.75. Flat guide bar, Bronze with solid lubricant

Order No	Shape	b	l	e	a	e ₁	e ₂	Number of screw holes
2961.75.028.075	A	28	75	15	45	14	-	2
2961.75.028.100	A	28	100	25	50	14	-	2
2961.75.028.125	A	28	125	25	75	14	-	2
2961.75.028.150	A	28	150	25	100	14	-	2
2961.75.038.075	A	38	75	15	45	19	-	2
2961.75.038.100	A	38	100	25	50	19	-	2
2961.75.038.125	A	38	125	25	75	19	-	2
2961.75.038.150	A	38	150	25	100	19	-	2
2961.75.048.075	A	48	75	15	45	24	-	2
2961.75.048.100	A	48	100	25	50	24	-	2
2961.75.048.125	A	48	125	25	75	24	-	2
2961.75.048.150	A	48	150	25	100	24	-	2
2961.75.048.200	A	48	200	50	100	24	-	2
2961.75.058.075	A	58	75	15	45	29	-	2
2961.75.058.100	A	58	100	25	50	29	-	2
2961.75.058.125	A	58	125	25	75	29	-	2
2961.75.058.150	A	58	150	25	100	29	-	2
2961.75.058.200	A	58	200	50	100	29	-	2
2961.75.075.075	A	75	75	15	45	37,5	-	2
2961.75.075.100	A	75	100	25	50	37,5	-	2
2961.75.075.125	A	75	125	25	75	37,5	-	2
2961.75.075.150	A	75	150	25	100	37,5	-	2
2961.75.075.200	C	75	200	25	75	37,5	-	3
2961.75.100.100	B	100	100	25	50	25	50	4
2961.75.100.125	B	100	125	25	75	25	50	4
2961.75.100.150	B	100	150	25	100	25	50	4
2961.75.100.200	B	100	200	25	150	25	50	4
2961.75.100.250	B	100	250	25	200	25	50	4
2961.75.125.150	B	125	150	25	100	37,5	50	4
2961.75.125.200	B	125	200	25	150	37,5	50	4
2961.75.125.250	B	125	250	25	200	37,5	50	4
2961.75.150.150	B	150	150	25	100	25	100	4
2961.75.150.200	B	150	200	25	150	25	100	4

RETAINING PLATE, BRONZE WITH SOLID LUBRICANT, VDI 3357

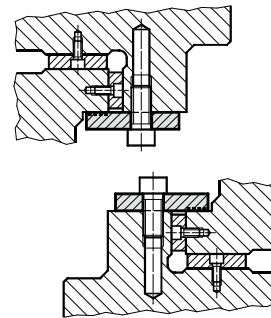
2961.74.



2961.74. Retaining plate, Bronze with solid lubricant, VDI 3357

Order No	Shape	b	s	a	b ₂	b ₁	d	e	e ₁	e ₂	Number of screw holes
2961.74.035.10.160	A	35	10	160	10	20	11	70	-	45	2
2961.74.035.10.200	A	35	10	200	10	20	11	110	-	45	2
2961.74.035.10.250	B	35	10	250	10	20	11	80	-	45	3
2961.74.045.15.160	A	45	15	160	15	30	13.5	70	-	45	2
2961.74.045.15.200	A	45	15	200	15	30	13.5	110	-	45	2
2961.74.045.15.250	B	45	15	250	15	30	13.5	80	-	45	3
2961.74.055.15.160	A	55	15	160	20	35	17.5	70	-	45	2
2961.74.055.15.200	A	55	15	200	20	35	17.5	110	-	45	2
2961.74.055.15.250	B	55	15	250	20	35	17.5	80	-	45	3
2961.74.075.25.160	A	75	25	160	25	40	17.5	70	-	45	2
2961.74.075.25.200	A	75	25	200	25	40	17.5	110	-	45	2
2961.74.075.25.250	B	75	25	250	25	40	17.5	80	-	45	3
2961.74.085.28.240	B	85	28	240	30	60	22	95	-	25	3
2961.74.085.28.300	D	85	28	300	30	60	22	85	80	25	4
2961.74.085.28.350	D	85	28	350	30	60	22	100	100	25	4
2961.74.085.28.400	D	85	28	400	30	60	22	115	120	25	4
2961.74.085.28.450	C	85	28	450	30	60	22	100	100	25	5
2961.74.085.30.160	A	85	30	160	30	60	22	70	-	45	2
2961.74.085.30.200	A	85	30	200	30	60	22	110	-	45	2
2961.74.085.30.250	B	85	30	250	30	60	22	80	-	45	3
2961.74.085.30.300	B	85	30	300	30	60	22	105	-	45	3
2961.74.085.30.350	B	85	30	350	30	60	22	130	-	45	3
2961.74.085.30.400	C	85	30	400	30	60	22	80	75	45	5
2961.74.100.25.160	A	100	25	160	30	60	17.5	70	-	45	2
2961.74.100.25.200	A	100	25	200	30	60	17.5	110	-	45	2
2961.74.100.25.250	B	100	25	250	30	60	17.5	80	-	45	3
2961.74.100.25.400	C	100	25	400	30	60	17.5	80	75	45	5
2961.74.100.30.160	A	100	30	160	30	60	22	70	-	45	2
2961.74.100.30.200	A	100	30	200	30	60	22	110	-	45	2
2961.74.100.30.250	B	100	30	250	30	60	22	80	-	45	3
2961.74.100.30.400	C	100	30	400	30	60	22	80	75	45	5
2961.74.125.25.160	A	125	25	160	30	75	17.5	70	-	45	2
2961.74.125.25.200	A	125	25	200	30	75	17.5	110	-	45	2
2961.74.125.25.250	B	125	25	250	30	75	17.5	80	-	45	3
2961.74.125.25.300	D	125	25	300	30	80	26	85	80	25	4
2961.74.125.25.350	D	125	25	350	30	80	26	100	100	25	4
2961.74.125.25.400.1	D	125	25	400	30	80	26	115	120	25	4
2961.74.125.25.400	C	125	25	400	30	75	17.5	80	75	45	5
2961.74.125.25.450	C	125	25	450	30	80	26	100	100	25	5
2961.74.125.25.500	C	125	25	500	30	80	26	110	115	25	5
2961.74.125.30.160	A	125	30	160	30	75	22	70	-	45	2
2961.74.125.30.200	A	125	30	200	30	75	22	110	-	45	2
2961.74.125.30.250	B	125	30	250	30	75	22	80	-	45	3
2961.74.125.30.300	B	125	30	300	30	75	22	105	-	45	3
2961.74.125.30.350	B	125	30	350	30	75	22	130	-	45	3
2961.74.125.30.400	C	125	30	400	30	75	22	80	75	45	5
2961.74.125.30.450	C	125	30	450	30	75	22	80	95	50	5
2961.74.125.30.500	C	125	30	500	30	75	22	80	120	50	5

Mounting example



Material:

Bronze with solid lubricant, oilless lubricating

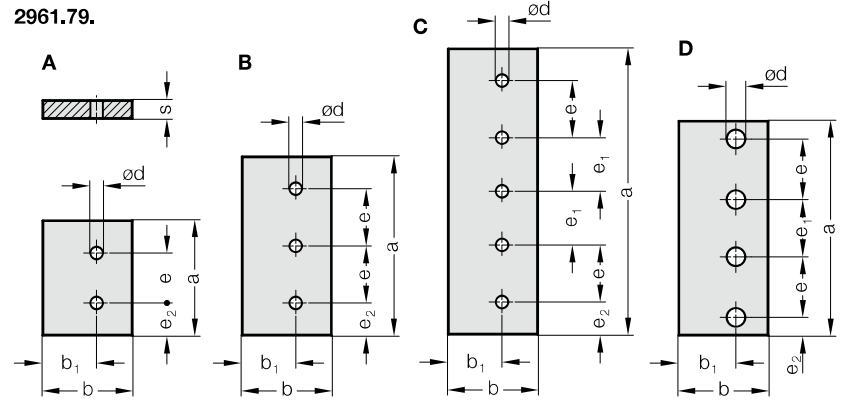
Note:

Screws are not included.

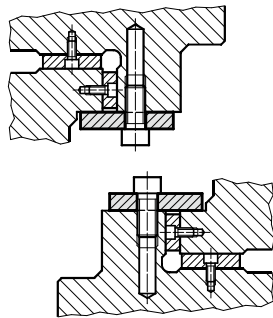
Fixing:

Use socket cap screws DIN EN ISO 4762.

RETAINING PLATE, STEEL, VDI 3357



Mounting example



Material:

Steel, surface hardened

Note:

Screws are not included.

Fixing:

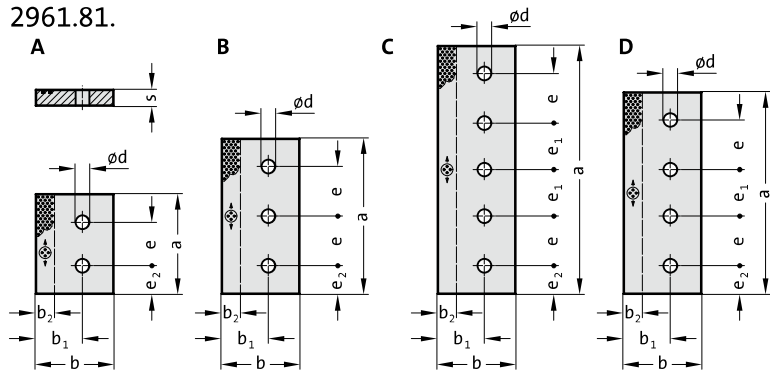
Use socket cap screws DIN EN ISO 4762.

2961.79. Retaining plate, Steel, VDI 3357

Order No	Shape	b	s	a	b ₁	d	e	e ₁	e ₂	Number of screw holes
2961.79.035.10.160	A	35	10	160	20	11	70	-	45	2
2961.79.035.10.200	A	35	10	200	20	11	110	-	45	2
2961.79.035.10.250	B	35	10	250	20	11	80	-	45	3
2961.79.045.15.160	A	45	15	160	30	13.5	70	-	45	2
2961.79.045.15.200	A	45	15	200	30	13.5	110	-	45	2
2961.79.045.15.250	B	45	15	250	30	13.5	80	-	45	3
2961.79.055.15.160	A	55	15	160	35	17.5	70	-	45	2
2961.79.055.15.200	A	55	15	200	35	17.5	110	-	45	2
2961.79.055.15.250	B	55	15	250	35	17.5	80	-	45	3
2961.79.075.25.160	A	75	25	160	40	17.5	70	-	45	2
2961.79.075.25.200	A	75	25	200	40	17.5	110	-	45	2
2961.79.075.25.250	B	75	25	250	40	17.5	80	-	45	3
2961.79.085.28.240	B	85	28	240	60	22	95	-	25	3
2961.79.085.28.300	D	85	28	300	60	22	85	80	25	4
2961.79.085.28.350	D	85	28	350	60	22	100	100	25	4
2961.79.085.28.400	D	85	28	400	60	22	115	120	25	4
2961.79.085.28.450	C	85	28	450	60	22	100	100	25	5
2961.79.085.30.160	A	85	30	160	60	22	70	-	45	2
2961.79.085.30.200	A	85	30	200	60	22	110	-	45	2
2961.79.085.30.250	B	85	30	250	60	22	80	-	45	3
2961.79.085.30.300	B	85	30	300	60	22	105	-	45	3
2961.79.085.30.350	B	85	30	350	60	22	130	-	45	3
2961.79.085.30.400	C	85	30	400	60	22	80	75	45	5
2961.79.100.25.160	A	100	25	160	60	17.5	70	-	45	2
2961.79.100.25.200	A	100	25	200	60	17.5	110	-	45	2
2961.79.100.25.250	B	100	25	250	60	17.5	80	-	45	3
2961.79.100.25.400	C	100	25	400	60	17.5	80	75	45	5
2961.79.100.30.160	A	100	30	160	60	22	70	-	45	2
2961.79.100.30.200	A	100	30	200	60	22	110	-	45	2
2961.79.100.30.250	B	100	30	250	60	22	80	-	45	3
2961.79.100.30.400	C	100	30	400	60	22	80	75	45	5
2961.79.125.25.160	A	125	25	160	75	17.5	70	-	45	2
2961.79.125.25.200	A	125	25	200	75	17.5	110	-	45	2
2961.79.125.25.250	B	125	25	250	75	17.5	80	-	45	3
2961.79.125.25.400	C	125	25	400	75	17.5	80	75	45	5
2961.79.125.25.300	D	125	25	300	80	26	85	80	25	4
2961.79.125.25.350	D	125	25	350	80	26	100	100	25	4
2961.79.125.25.400.1	D	125	25	400	80	26	115	120	25	4
2961.79.125.25.450	C	125	25	450	80	26	100	100	25	5
2961.79.125.25.500	C	125	25	500	80	26	110	115	25	5
2961.79.125.30.160	A	125	30	160	75	22	70	-	45	2
2961.79.125.30.200	A	125	30	200	75	22	110	-	45	2
2961.79.125.30.250	B	125	30	250	75	22	80	-	45	3
2961.79.125.30.300	B	125	30	300	75	22	105	-	45	3
2961.79.125.30.350	B	125	30	350	75	22	130	-	45	3
2961.79.125.30.400	C	125	30	400	75	22	80	75	45	5
2961.79.125.30.450	C	125	30	450	75	22	80	95	50	5
2961.79.125.30.500	C	125	30	500	75	22	80	120	50	5

RETAINING PLATE, STEEL WITH SOLID LUBRICANT, VDI 3357

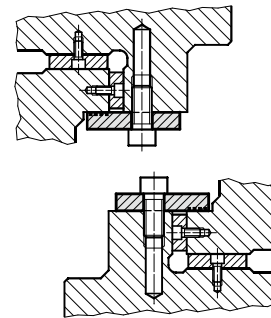
2961.81.



2961.81. Retaining plate, Steel with solid lubricant, VDI 3357

Order No	Shape	b	s	a	b ₂	b ₁	d	e	e ₁	e ₂	Number of screw holes
2961.81.035.10.160	A	35	10	160	10	20	11	70	-	45	2
2961.81.035.10.200	A	35	10	200	10	20	11	110	-	45	2
2961.81.035.10.250	B	35	10	250	10	20	11	80	-	45	3
2961.81.045.15.160	A	45	15	160	15	30	13.5	70	-	45	2
2961.81.045.15.200	A	45	15	200	15	30	13.5	110	-	45	2
2961.81.045.15.250	B	45	15	250	15	30	13.5	80	-	45	3
2961.81.055.15.160	A	55	15	160	20	35	17.5	70	-	45	2
2961.81.055.15.200	A	55	15	200	20	35	17.5	110	-	45	2
2961.81.055.15.250	B	55	15	250	20	35	17.5	80	-	45	3
2961.81.075.25.160	A	75	25	160	25	40	17.5	70	-	45	2
2961.81.075.25.200	A	75	25	200	25	40	17.5	110	-	45	2
2961.81.075.25.250	B	75	25	250	25	40	17.5	80	-	45	3
2961.81.085.28.240	B	85	28	240	30	60	22	95	-	25	3
2961.81.085.28.300	D	85	28	300	30	60	22	85	80	25	4
2961.81.085.28.350	D	85	28	350	30	60	22	100	100	25	4
2961.81.085.28.400	D	85	28	400	30	60	22	115	120	25	4
2961.81.085.28.450	C	85	28	450	30	60	22	100	100	25	5
2961.81.085.30.160	A	85	30	160	30	60	22	70	-	45	2
2961.81.085.30.200	A	85	30	200	30	60	22	110	-	45	2
2961.81.085.30.250	B	85	30	250	30	60	22	80	-	45	3
2961.81.085.30.300	B	85	30	300	30	60	22	105	-	45	3
2961.81.085.30.350	B	85	30	350	30	60	22	130	-	45	3
2961.81.085.30.400	C	85	30	400	30	60	22	80	75	45	5
2961.81.100.25.160	A	100	25	160	30	60	17.5	70	-	45	2
2961.81.100.25.200	A	100	25	200	30	60	17.5	110	-	45	2
2961.81.100.25.250	B	100	25	250	30	60	17.5	80	-	45	3
2961.81.100.25.400	C	100	25	400	30	60	17.5	80	75	45	5
2961.81.100.30.160	A	100	30	160	30	60	22	70	-	45	2
2961.81.100.30.200	A	100	30	200	30	60	22	110	-	45	2
2961.81.100.30.250	B	100	30	250	30	60	22	80	-	45	3
2961.81.100.30.400	C	100	30	400	30	60	22	80	75	45	5
2961.81.125.25.160	A	125	25	160	30	75	17.5	70	-	45	2
2961.81.125.25.200	A	125	25	200	30	75	17.5	110	-	45	2
2961.81.125.25.250	B	125	25	250	30	75	17.5	80	-	45	3
2961.81.125.25.300	D	125	25	300	30	80	26	85	80	25	4
2961.81.125.25.350	D	125	25	350	30	80	26	100	100	25	4
2961.81.125.25.400	C	125	25	400	30	75	17.5	80	75	45	5
2961.81.125.25.400.1	D	125	25	400	30	80	26	115	120	25	4
2961.81.125.25.450	C	125	25	450	30	80	26	100	100	25	5
2961.81.125.25.500	C	125	25	500	30	80	26	110	115	25	5
2961.81.125.30.160	A	125	30	160	30	75	22	70	-	45	2
2961.81.125.30.200	A	125	30	200	30	75	22	110	-	45	2
2961.81.125.30.250	B	125	30	250	30	75	22	80	-	45	3
2961.81.125.30.300	B	125	30	300	30	75	22	105	-	45	3
2961.81.125.30.350	B	125	30	350	30	75	22	130	-	45	3
2961.81.125.30.400	C	125	30	400	30	75	22	80	75	45	5
2961.81.125.30.450	C	125	30	450	30	75	22	80	95	50	5
2961.81.125.30.500	C	125	30	500	30	75	22	80	120	50	5

Mounting example



Material:

Steel, surface hardened. Sliding faces with embedded solid lubricant.

Note:

Screws are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762.

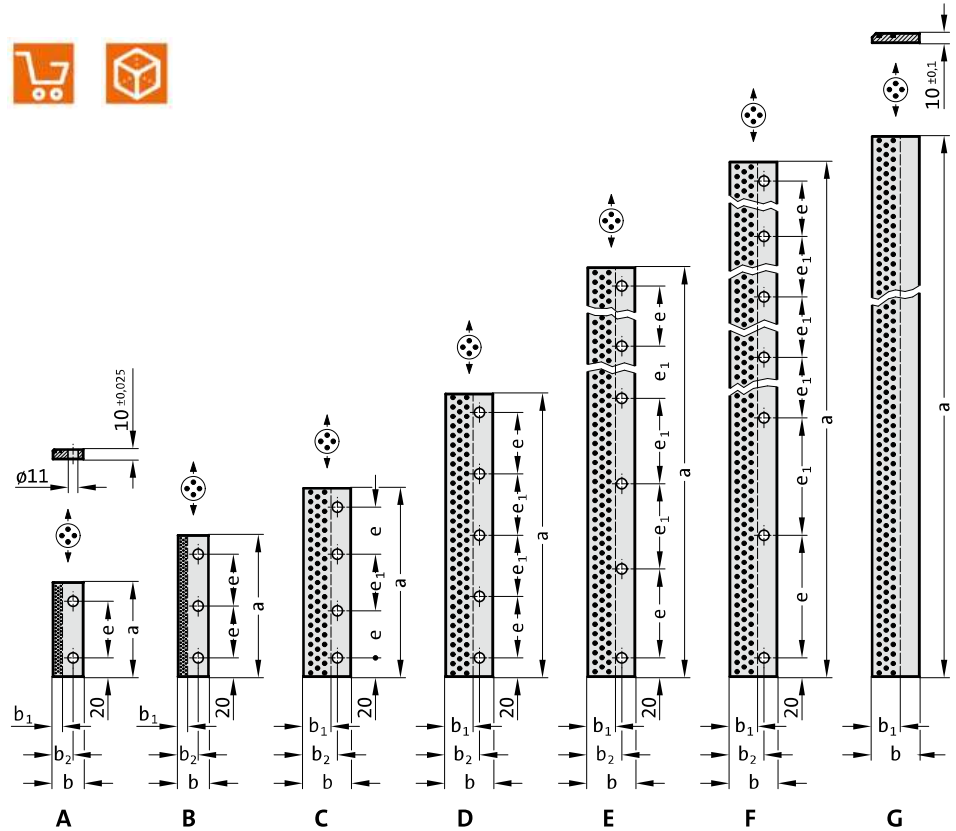
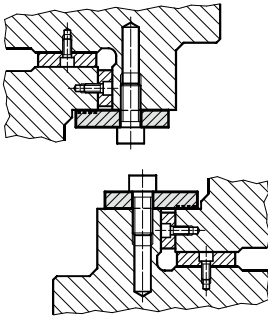
RETAINING PLATE, BRONZE WITH SOLID LUBRICANT



2961.78.



Mounting example



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

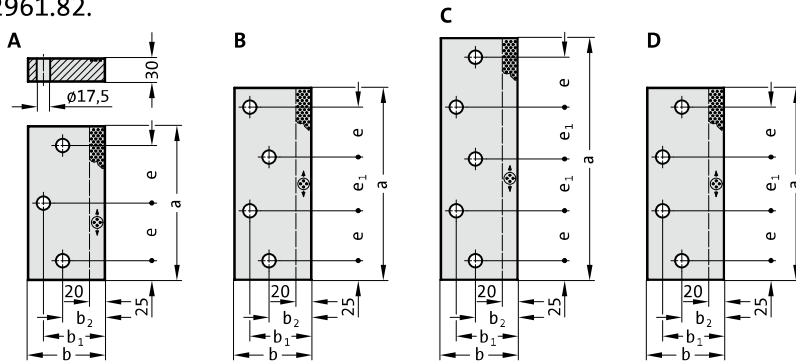
Use socket cap screws
DIN EN ISO 4762 M10.

2961.78. Retaining plate, Bronze with solid lubricant

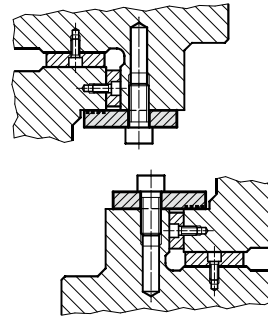
Order No	Shape	a	b	b ₁	b ₂	e	e ₁	Number of screw holes
2961.78.032.0100	A	100	32	10	21	60	-	2
2961.78.032.0150	B	150	32	10	21	55	-	3
2961.78.032.0160	B	160	32	10	21	60	-	3
2961.78.050.0200	C	200	50	30	36	50	60	4
2961.78.050.0250	C	250	50	30	36	70	70	4
2961.78.050.0300	D	300	50	30	36	65	65	5
2961.78.050.0350	D	350	50	30	36	80	75	5
2961.78.050.0400	D	400	50	30	36	90	90	5
2961.78.050.0500	E	500	50	30	36	95	90	6
2961.78.050.0600	E	600	50	30	36	115	110	6
2961.78.050.0800	F	800	50	30	36	130	125	7
2961.78.050.0605	G	605	50	30	36	-	-	-
2961.78.050.1005	G	1,005	50	30	36	-	-	-

RETAINING PLATE, STEEL WITH SOLID LUBRICANT, NAAMS

2961.82.



Mounting example



2961.82. Retaining plate, Steel with solid lubricant, NAAMS

Order No	Shape	b	a	b ₁	b ₂	e	e ₁	Number of screw holes
2961.82.075.200	A	75	200	55	40	75		3
2961.82.075.250	B	75	250	55	40	65	70	4
2961.82.075.250.1	D	75	250	55	40	65	70	4
2961.82.075.250.2	A	75	250	55	40	100		3
2961.82.075.315	C	75	315	55	40	65	67.5	5
2961.82.075.350	C	75	350	55	40	75	75	5
2961.82.075.400	C	75	400	55	40	90	85	5
2961.82.075.450	C	75	450	55	40	100	100	5
2961.82.100.200	A	100	200	80	55	75		3
2961.82.100.250	B	100	250	80	55	65	70	4
2961.82.100.250.1	D	100	250	80	55	65	70	4
2961.82.100.250.2	A	100	250	80	55	100		3
2961.82.100.315	C	100	315	80	55	65	67.5	5
2961.82.100.350	C	100	350	80	55	75	75	5
2961.82.100.400	C	100	400	80	55	90	85	5
2961.82.100.450	C	100	450	80	55	100	100	5
2961.82.125.200	A	125	200	105	65	75		3
2961.82.125.250	B	125	250	105	65	65	70	4
2961.82.125.250.1	D	125	250	105	65	65	70	4
2961.82.125.250.2	A	125	250	105	65	100		3
2961.82.125.315	C	125	315	105	65	65	67.5	5
2961.82.125.350	C	125	350	105	65	75	75	5
2961.82.125.400	C	125	400	105	65	90	85	5
2961.82.125.450	C	125	450	105	65	100	100	5
2961.82.150.200	A	150	200	130	65	75		3
2961.82.150.250	B	150	250	130	65	65	70	4
2961.82.150.250.1	D	150	250	130	65	65	70	4
2961.82.150.250.2	A	150	250	130	65	100		3
2961.82.150.315	C	150	315	130	65	65	67.5	5
2961.82.150.350	C	150	350	130	65	75	75	5
2961.82.150.400	C	150	400	130	65	90	85	5
2961.82.150.450	C	150	450	130	65	100	100	5

Material:

Steel, surface hardened. Sliding faces with embedded solid lubricant.

Note:

Screws are not included.

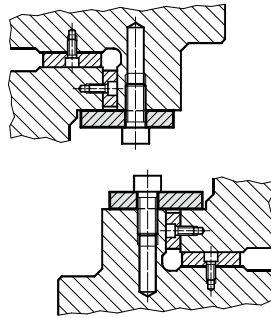
Fixing:

Use socket cap screws
DIN EN ISO 4762 M16.

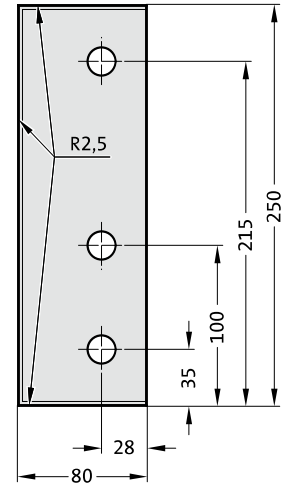
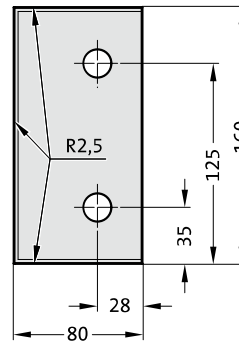
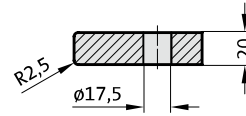
RETAINING PLATE, STEEL, CNOMO



Mounting example



2961.79.45.



Material:

Steel, surface hardened

Note:

Screws are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762 M16.

2961.79.45. Retaining plate, Steel, CNOMO

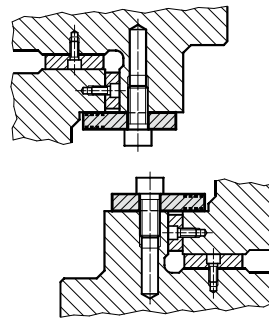
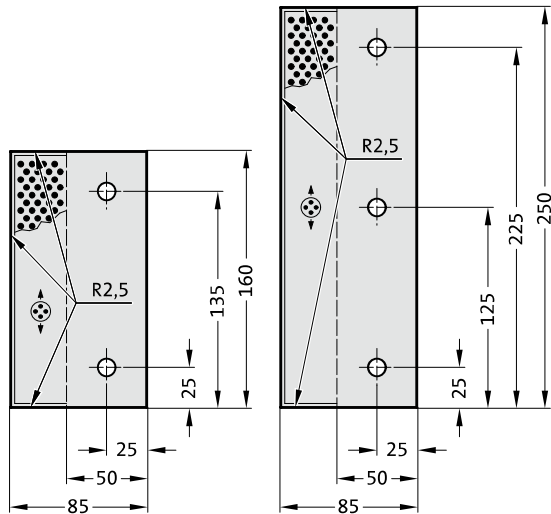
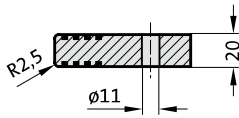
Order No	Number of screw holes
2961.79.45.080.20.160	2
2961.79.45.080.20.250	3

RETAINING PLATE, BRONZE WITH SOLID LUBRICANT, CNOMO

2961.81.45.



Mounting example



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762 M10.

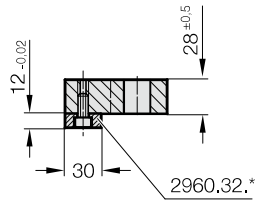
2961.81.45. Retaining plate, Bronze with solid lubricant, CNOMO

Order No	Number of screw holes
2961.81.45.085.20.160	2
2961.81.45.085.20.250	3

RETAINING PLATE WITH SLIDING PAD, STEEL / STEEL WITH SINTERLAYER, ACCORDING TO VW



2961.30.55.



Material:

Retaining plate: Steel

Sliding pad: Steel with sinterlayer

Execution:

The retaining plate with sliding pad consists of:

- Retaining plate
- Sliding pad 2960.32.*
- Cylindrical screw according to DIN EN ISO 4762 M8x16 (x2, x4)

Note:

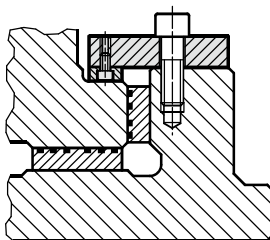
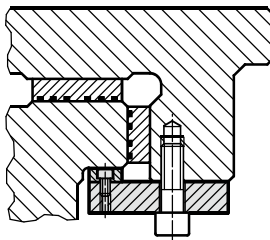
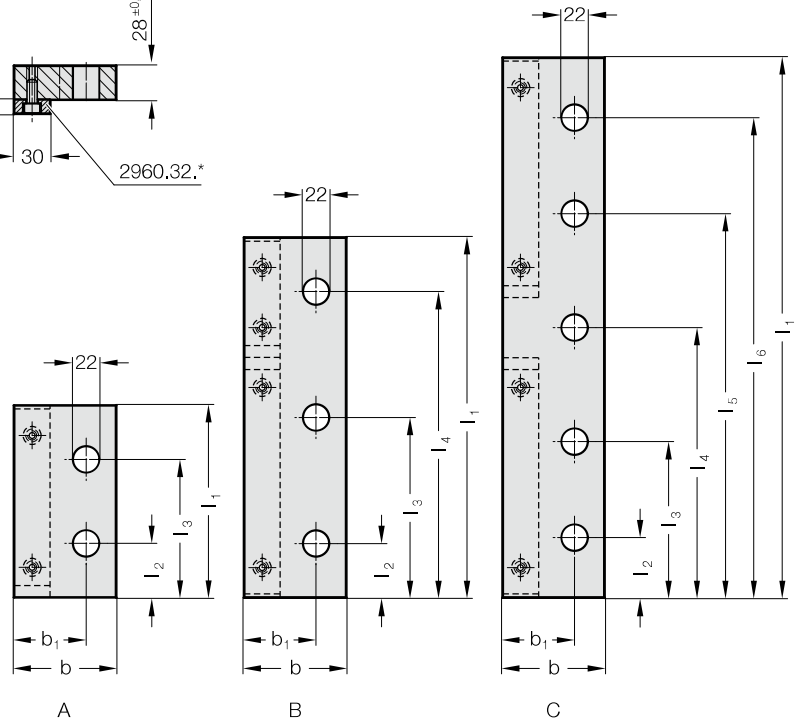
Supplied without screws.

Retaining plate cannot be ordered separately.

*Sliding pad 2960.32. can be ordered separately in case of wear.

Fixing:

Use socket cap screws DIN EN ISO 4762 M20.



RETAINING PLATE WITH SLIDING PAD, STEEL / STEEL WITH SINTERLAYER, ACCORDING TO VW

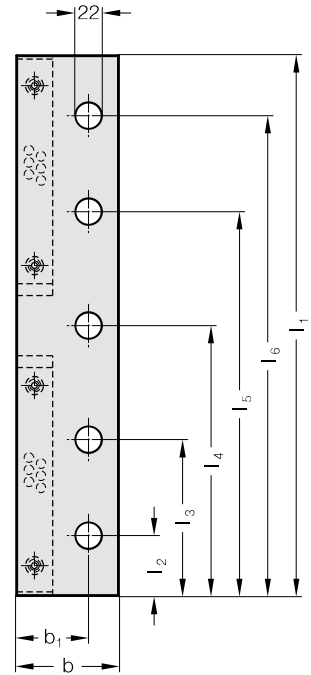
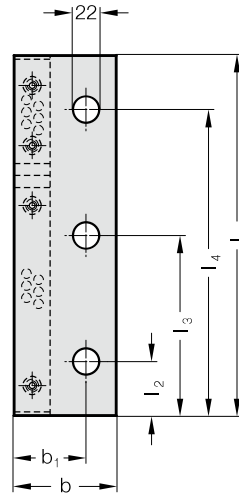
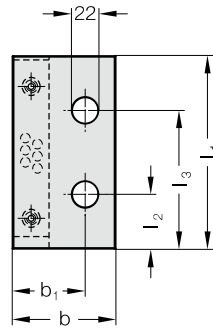
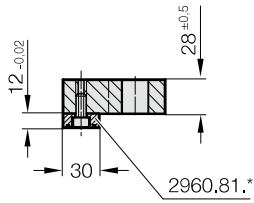
2961.30.55. Retaining plate with sliding pad, Steel / Steel with sinterlayer, according to VW

Order No	Shape	b	b ₁	l ₁	l ₂	l ₃	l ₄	l ₅	l ₆	Number of screw holes
2961.30.55.085.28.160	A	85	60	160	45	115	-	-	-	2
2961.30.55.085.28.200	A	85	60	200	45	155	-	-	-	2
2961.30.55.085.28.250	B	85	60	250	45	125	225	-	-	3
2961.30.55.085.28.300	B	85	60	300	45	150	255	-	-	3
2961.30.55.085.28.350	B	85	60	350	45	175	305	-	-	3
2961.30.55.085.28.400	C	85	60	400	45	125	200	275	355	5
2961.30.55.085.28.450	C	85	60	450	50	130	225	320	400	5
2961.30.55.085.28.500	C	85	60	500	50	130	250	370	450	5
2961.30.55.125.25.160	A	125	75	160	45	115	-	-	-	2
2961.30.55.125.25.200	A	125	75	200	45	155	-	-	-	2
2961.30.55.125.25.250	B	125	75	250	45	125	225	-	-	3
2961.30.55.125.25.300	B	125	75	300	45	150	255	-	-	3
2961.30.55.125.25.350	B	125	75	350	45	175	305	-	-	3
2961.30.55.125.25.400	C	125	75	400	45	125	200	275	355	5
2961.30.55.125.25.450	C	125	75	450	50	130	225	320	400	5
2961.30.55.125.25.500	C	125	75	500	50	130	250	350	450	5

RETAINING PLATE WITH SLIDING PAD, STEEL / BRONZE WITH SOLID LUBRICANT, ACCORDING TO VW



2961.74.55.



Material:

Retaining plate: Steel
 Sliding pad: Bronze with solid lubricant,
 low-maintenance

Execution:

The retaining plate with sliding pad consists of:

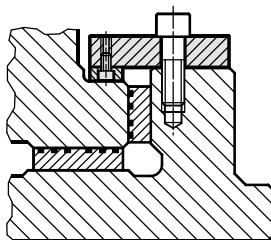
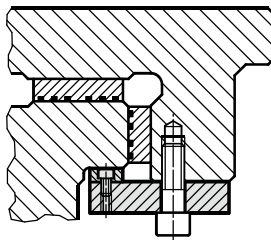
- Retaining plate
- Sliding pad 2960.81.*
- Cylindrical screw according to DIN EN ISO 4762 M8x16 (x2, x4)

Note:

Supplied without screws.
 Retaining plate cannot be ordered separately.
 *Sliding pad 2960.81. can be ordered separately in case of wear.

Fixing:

Use socket cap screws DIN EN ISO 4762 M20.



RETAINING PLATE WITH SLIDING PAD, STEEL / BRONZE WITH SOLID LUBRICANT, ACCORDING TO VW

2961.74.55. Retaining plate with sliding pad, Steel / Bronze with solid lubricant, according to VW

Order No	Shape	b	b ₁	l ₁	l ₂	l ₃	l ₄	l ₅	l ₆	Number of screw holes
2961.74.55.085.28.160	A	85	60	160	45	115	-	-	-	2
2961.74.55.085.28.200	A	85	60	200	45	155	-	-	-	2
2961.74.55.085.28.250	B	85	60	250	45	125	225	-	-	3
2961.74.55.085.28.300	B	85	60	300	45	150	255	-	-	3
2961.74.55.085.28.350	B	85	60	350	45	175	305	-	-	3
2961.74.55.085.28.400	C	85	60	400	45	125	200	275	355	5
2961.74.55.085.28.450	C	85	60	450	50	130	225	320	400	5
2961.74.55.085.28.500	C	85	60	500	50	130	250	370	450	5
2961.74.55.125.25.160	A	125	75	160	45	115	-	-	-	2
2961.74.55.125.25.200	A	125	75	200	45	155	-	-	-	2
2961.74.55.125.25.250	B	125	75	250	45	125	225	-	-	3
2961.74.55.125.25.300	B	125	75	300	45	150	255	-	-	3
2961.74.55.125.25.350	B	125	75	350	45	175	305	-	-	3
2961.74.55.125.25.400	C	125	75	400	45	125	200	275	355	5
2961.74.55.125.25.450	C	125	75	450	50	130	225	320	400	5
2961.74.55.125.25.500	C	125	75	500	50	130	250	350	450	5

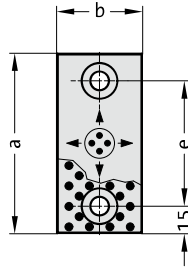
SLIDING PAD, SMALL DIMENSION, BRONZE WITH SOLID LUBRICANT



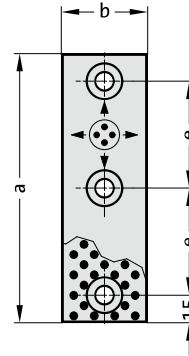
2960.72.



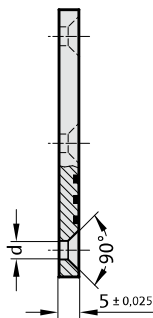
A



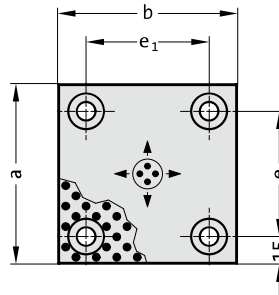
B



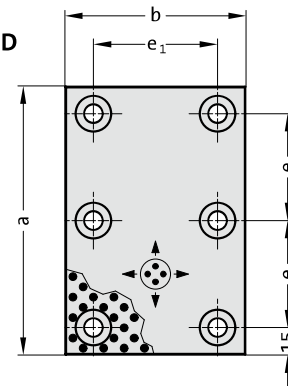
2960.72.



C



D



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

Use countersunk cap screws
DIN 7991/ISO 10642.

2960.72. Sliding pad, small dimension, Bronze with solid lubricant

Order No	Shape	b	a	e	e ₁	d	Number of screw holes
2960.72.018.050	A	18	50	20	-	6.5	2
2960.72.018.075	A	18	75	45	-	6.5	2
2960.72.018.100	A	18	100	70	-	6.5	2
2960.72.018.150	B	18	150	60	-	6.5	3
2960.72.028.050	A	28	50	20	-	9	2
2960.72.028.075	A	28	75	45	-	9	2
2960.72.028.100	A	28	100	70	-	9	2
2960.72.028.150	B	28	150	60	-	9	3
2960.72.038.050	A	38	50	20	-	9	2
2960.72.038.075	A	38	75	45	-	9	2
2960.72.038.100	A	38	100	70	-	9	2
2960.72.038.150	B	38	150	60	-	9	3
2960.72.048.075	A	48	75	45	-	9	2
2960.72.048.100	A	48	100	70	-	9	2
2960.72.048.125	A	48	125	95	-	9	2
2960.72.048.150	B	48	150	60	-	9	3
2960.72.075.075	C	75	75	45	45	9	4
2960.72.075.100	C	75	100	70	45	9	4
2960.72.075.125	C	75	125	95	45	9	4
2960.72.075.150	D	75	150	60	45	9	6
2960.72.100.100	C	100	100	70	70	9	4
2960.72.100.125	C	100	125	95	70	9	4
2960.72.100.150	D	100	150	60	70	9	6

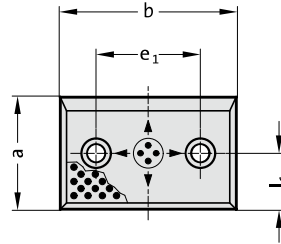
SLIDING PAD, BRONZE WITH SOLID LUBRICANT, VDI 3357 / ISO 9183-1



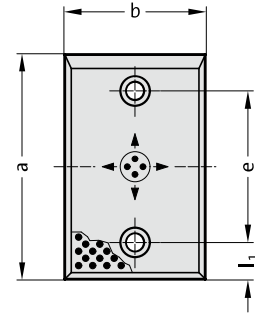
2960.71.



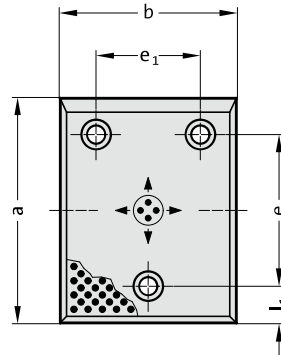
D



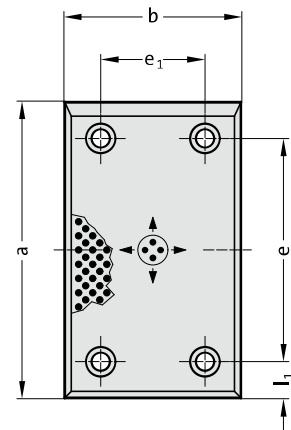
B



G



H



Material:

Bronze with solid lubricant, oilless lubricating

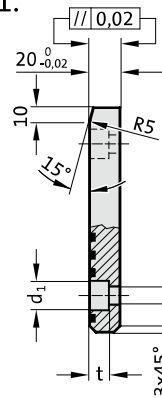
Note:

Screws are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762.

2960.71.



SLIDING PAD, BRONZE WITH SOLID LUBRICANT, VDI 3357 / ISO 9183-1

2960.71. Sliding pad, Bronze with solid lubricant, VDI 3357 / ISO 9183-1

Order No	Shape	b	a	l ₁	e	e ₁	d	d ₁	t	Number of screw holes
2960.71.050.080	B	50	80	25	30	-	9	15	9	2
2960.71.050.100	B	50	100	25	50	-	13.5	20	13	2
2960.71.050.125	B	50	125	25	75	-	13.5	20	13	2
2960.71.050.160	B	50	160	25	110	-	13.5	20	13	2
2960.71.050.200	B	50	200	25	150	-	13.5	20	13	2
2960.71.080.050	D	80	50	25	-	30	9	15	9	2
2960.71.080.080	B	80	80	25	30	-	13.5	20	13	2
2960.71.080.100	B	80	100	25	50	-	13.5	20	13	2
2960.71.080.125	B	80	125	25	75	-	13.5	20	13	2
2960.71.080.160	B	80	160	25	110	-	13.5	20	13	2
2960.71.080.200	B	80	200	25	150	-	13.5	20	13	2
2960.71.080.250	B	80	250	40	170	-	13.5	20	13	2
2960.71.080.315	B	80	315	40	235	-	13.5	20	13	2
2960.71.100.050	D	100	50	25	-	50	13.5	20	13	2
2960.71.100.080	D	100	80	40	-	50	13.5	20	13	2
2960.71.100.100	B	100	100	25	50	-	13.5	20	13	2
2960.71.100.125	B	100	125	25	75	-	13.5	20	13	2
2960.71.100.160	B	100	160	25	110	-	13.5	20	13	2
2960.71.100.200	B	100	200	25	150	-	13.5	20	13	2
2960.71.100.250	B	100	250	40	170	-	13.5	20	13	2
2960.71.100.315	B	100	315	40	235	-	13.5	20	13	2
2960.71.125.050	D	125	50	25	-	75	13.5	20	13	2
2960.71.125.080	D	125	80	40	-	75	13.5	20	13	2
2960.71.125.100	G	125	100	25	50	75	13.5	20	13	3
2960.71.125.125	G	125	125	25	75	75	13.5	20	13	3
2960.71.125.160	G	125	160	25	110	75	13.5	20	13	3
2960.71.125.200	G	125	200	25	150	75	13.5	20	13	3
2960.71.125.250	G	125	250	40	170	75	13.5	20	13	3
2960.71.125.315	G	125	315	40	235	75	13.5	20	13	3
2960.71.160.050	D	160	50	25	-	110	13.5	20	13	2
2960.71.160.080	D	160	80	40	-	110	13.5	20	13	2
2960.71.160.100	G	160	100	25	50	110	13.5	20	13	3
2960.71.160.125	G	160	125	25	75	110	13.5	20	13	3
2960.71.160.160	G	160	160	25	110	110	13.5	20	13	3
2960.71.160.200	G	160	200	25	150	110	13.5	20	13	3
2960.71.160.250	H	160	250	40	170	110	13.5	20	13	4
2960.71.160.315	H	160	315	40	235	110	13.5	20	13	4

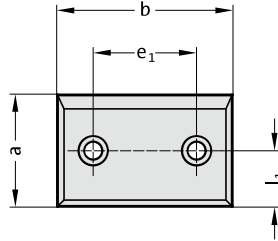
SLIDING PAD, STEEL, VDI 3357



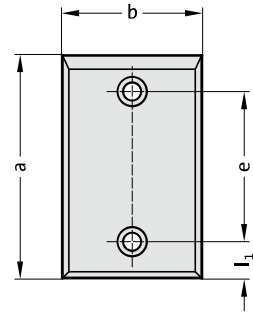
2960.87.



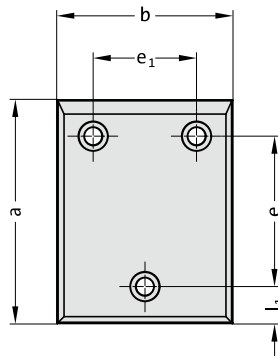
D



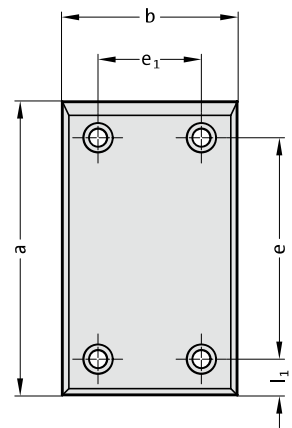
B



G



H



Material:

Steel, surface hardened

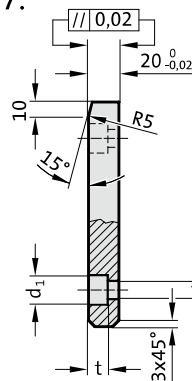
Note:

Screws are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762.

2960.87.



SLIDING PAD, STEEL, VDI 3357

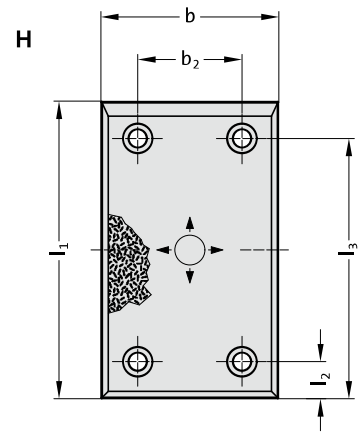
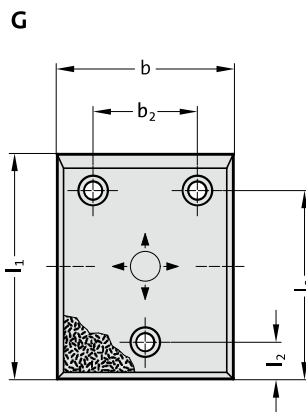
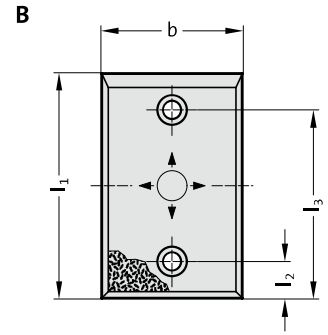
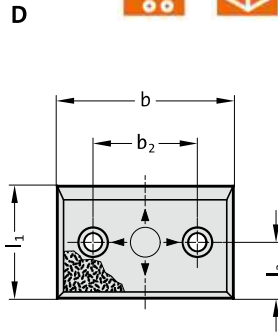
2960.87. Sliding pad, Steel, VDI 3357

Order No	Shape	b	a	l ₁	e	e ₁	d	d ₁	t	Number of screw holes
2960.87.050.080	B	50	80	25	30	-	9	15	9	2
2960.87.050.100	B	50	100	25	50	-	13.5	20	13	2
2960.87.050.125	B	50	125	25	75	-	13.5	20	13	2
2960.87.050.160	B	50	160	25	110	-	13.5	20	13	2
2960.87.050.200	B	50	200	25	150	-	13.5	20	13	2
2960.87.080.050	D	80	50	25	-	30	9	15	9	2
2960.87.080.080	B	80	80	25	30	-	13.5	20	13	2
2960.87.080.100	B	80	100	25	50	-	13.5	20	13	2
2960.87.080.125	B	80	125	25	75	-	13.5	20	13	2
2960.87.080.160	B	80	160	25	110	-	13.5	20	13	2
2960.87.080.200	B	80	200	25	150	-	13.5	20	13	2
2960.87.080.250	B	80	250	40	170	-	13.5	20	13	2
2960.87.080.315	B	80	315	40	235	-	13.5	20	13	2
2960.87.100.050	D	100	50	25	-	50	13.5	20	13	2
2960.87.100.080	D	100	80	40	-	50	13.5	20	13	2
2960.87.100.100	B	100	100	25	50	-	13.5	20	13	2
2960.87.100.125	B	100	125	25	75	-	13.5	20	13	2
2960.87.100.160	B	100	160	25	110	-	13.5	20	13	2
2960.87.100.200	B	100	200	25	150	-	13.5	20	13	2
2960.87.100.250	B	100	250	40	170	-	13.5	20	13	2
2960.87.100.315	B	100	315	40	235	-	13.5	20	13	2
2960.87.125.050	D	125	50	25	-	75	13.5	20	13	2
2960.87.125.080	D	125	80	40	-	75	13.5	20	13	2
2960.87.125.100	G	125	100	25	50	75	13.5	20	13	3
2960.87.125.125	G	125	125	25	75	75	13.5	20	13	3
2960.87.125.160	G	125	160	25	110	75	13.5	20	13	3
2960.87.125.200	G	125	200	25	150	75	13.5	20	13	3
2960.87.125.250	G	125	250	40	170	75	13.5	20	13	3
2960.87.125.315	G	125	315	40	235	75	13.5	20	13	3
2960.87.160.050	D	160	50	25	-	110	13.5	20	13	2
2960.87.160.080	D	160	80	40	-	110	13.5	20	13	2
2960.87.160.100	G	160	100	25	50	110	13.5	20	13	3
2960.87.160.125	G	160	125	25	75	110	13.5	20	13	3
2960.87.160.160	G	160	160	25	110	110	13.5	20	13	3
2960.87.160.200	G	160	200	25	150	110	13.5	20	13	3
2960.87.160.250	H	160	250	40	170	110	13.5	20	13	4
2960.87.160.315	H	160	315	40	235	110	13.5	20	13	4

SLIDING PAD, STEEL WITH SINTERLAYER, VDI 3357



2960.30.



Description:

Steel with sinterlayer is a two-layer material. It ensures low maintenance, selflubricating service even in arduous multishift applications.

Material:

Steel plate with sinterlayer, part of lubricant 20-25%.

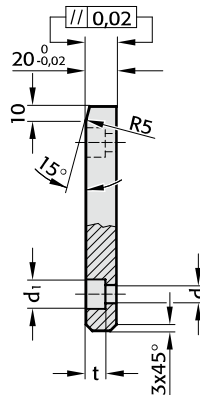
Note:

Screws are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762.

2960.30.



SLIDING PAD, STEEL WITH SINTERLAYER, VDI 3357

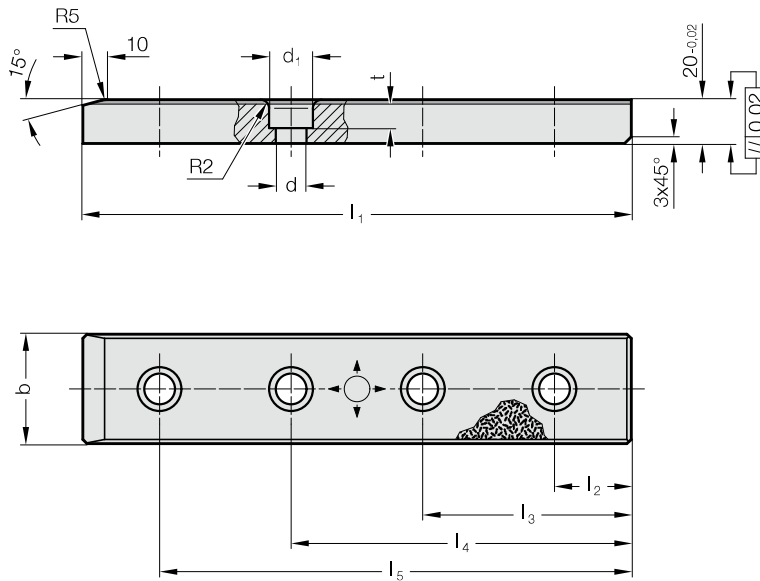
2960.30. Sliding pad, Steel with sinterlayer, VDI 3357

Order No	Shape	b	l ₁	l ₂	l ₃	b ₂	d	d ₁	t	Number of screw holes
2960.30.050.080	B	50	80	25	55	-	9	15	9	2
2960.30.050.100	B	50	100	25	75	-	13.5	20	13	2
2960.30.050.125	B	50	125	25	100	-	13.5	20	13	2
2960.30.050.160	B	50	160	25	125	-	13.5	20	13	2
2960.30.050.200	B	50	200	25	175	-	13.5	20	13	2
2960.30.080.050	D	80	50	25	-	30	9	15	9	2
2960.30.080.080	B	80	80	25	55	-	13.5	20	13	2
2960.30.080.100	B	80	100	25	75	-	13.5	20	13	2
2960.30.080.125	B	80	125	25	100	-	13.5	20	13	2
2960.30.080.160	B	80	160	25	135	-	13.5	20	13	2
2960.30.080.200	B	80	200	25	175	-	13.5	20	13	2
2960.30.080.250	B	80	250	40	210	-	13.5	20	13	2
2960.30.080.315	B	80	315	40	275	-	13.5	20	13	2
2960.30.100.050	D	100	50	25	-	50	13.5	20	13	2
2960.30.100.080	D	100	80	40	-	50	13.5	20	13	2
2960.30.100.100	B	100	100	25	75	-	13.5	20	13	2
2960.30.100.125	B	100	125	25	100	-	13.5	20	13	2
2960.30.100.160	B	100	160	25	135	-	13.5	20	13	2
2960.30.100.200	B	100	200	25	175	-	13.5	20	13	2
2960.30.100.250	B	100	250	40	210	-	13.5	20	13	2
2960.30.100.315	B	100	315	40	275	-	13.5	20	13	2
2960.30.125.050	D	125	50	25	-	75	13.5	20	13	2
2960.30.125.080	D	125	80	40	-	75	13.5	20	13	2
2960.30.125.100	G	125	100	25	75	75	13.5	20	13	3
2960.30.125.125	G	125	125	25	100	75	13.5	20	13	3
2960.30.125.160	G	125	160	25	135	75	13.5	20	13	3
2960.30.125.200	G	125	200	25	175	75	13.5	20	13	3
2960.30.125.250	G	125	250	40	210	75	13.5	20	13	3
2960.30.125.315	G	125	315	40	275	75	13.5	20	13	3
2960.30.160.050	D	160	50	25	-	110	13.5	20	13	2
2960.30.160.080	D	160	80	40	-	110	13.5	20	13	2
2960.30.160.100	G	160	100	25	75	110	13.5	20	13	3
2960.30.160.125	G	160	125	25	100	110	13.5	20	13	3
2960.30.160.160	G	160	160	25	135	110	13.5	20	13	3
2960.30.160.200	G	160	200	25	175	110	13.5	20	13	3
2960.30.160.250	H	160	250	40	210	110	13.5	20	13	4
2960.30.160.315	H	160	315	40	275	110	13.5	20	13	4

SLIDING PAD, STEEL WITH SINTERLAYER, VDI 3357



2960.31.



Description:

Steel with sinterlayer is a two-layer material. It ensures low maintenance, selflubricating service even in arduous multishift applications.

Material:

Steel plate with sinterlayer, part of lubricant 20-25%.

Note:

Screws are not included.

Fixing:

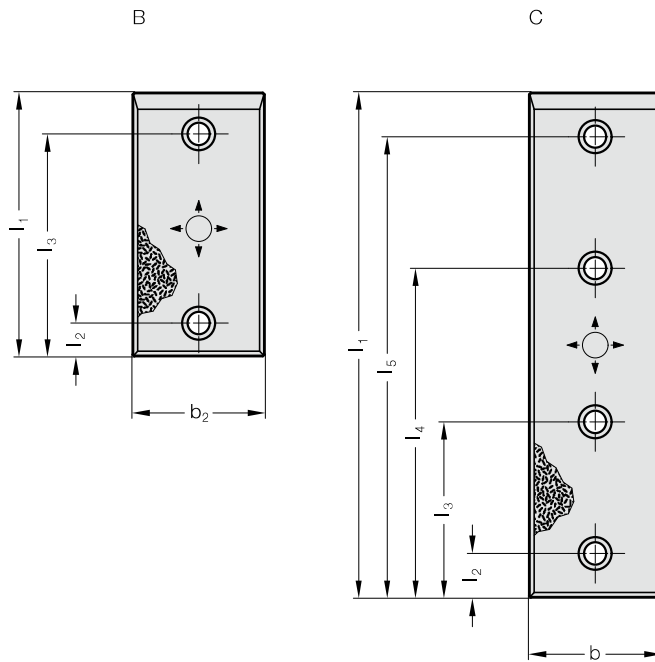
Use socket cap screws DIN EN ISO 4762 M12.

2960.31. Sliding pad, Steel with sinterlayer, VDI 3357

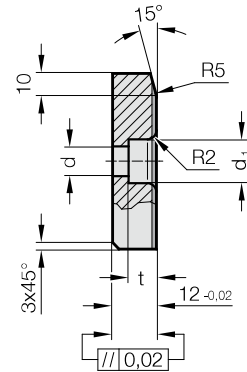
Order No	b	l ₁	l ₂	l ₃	l ₄	l ₅	d	d ₁	t	Number of screw holes
2960.31.050.250	50	250	25	85	165	225	13.5	20	13	4
2960.31.050.300	50	300	25	105	195	275	13.5	20	13	4
2960.31.050.350	50	350	25	125	225	325	13.5	20	13	4
2960.31.050.400	50	400	25	145	255	375	13.5	20	13	4
2960.31.050.450	50	450	25	165	285	425	13.5	20	13	4
2960.31.050.500	50	500	25	175	325	475	13.5	20	13	4
2960.31.080.250	80	250	25	85	165	225	13.5	20	13	4
2960.31.080.300	80	300	25	105	195	275	13.5	20	13	4
2960.31.080.350	80	350	25	125	225	325	13.5	20	13	4
2960.31.080.400	80	400	25	145	255	375	13.5	20	13	4
2960.31.080.450	80	450	25	165	285	425	13.5	20	13	4
2960.31.080.500	80	500	25	175	325	475	13.5	20	13	4
2960.31.100.250	100	250	25	85	165	225	13.5	20	13	4
2960.31.100.300	100	300	25	105	195	275	13.5	20	13	4
2960.31.100.350	100	350	25	125	225	325	13.5	20	13	4
2960.31.100.400	100	400	25	145	255	375	13.5	20	13	4
2960.31.100.450	100	450	25	165	285	425	13.5	20	13	4
2960.31.100.500	100	500	25	175	325	475	13.5	20	13	4
2960.31.125.250	125	250	25	85	165	225	13.5	20	13	4
2960.31.125.300	125	300	25	105	195	275	13.5	20	13	4
2960.31.125.350	125	350	25	125	225	325	13.5	20	13	4
2960.31.125.400	125	400	25	145	255	375	13.5	20	13	4
2960.31.125.450	125	450	25	165	285	425	13.5	20	13	4
2960.31.125.500	125	500	25	175	325	475	13.5	20	13	4
2960.31.160.250	160	250	25	85	165	225	13.5	20	13	4
2960.31.160.300	160	300	25	105	195	275	13.5	20	13	4
2960.31.160.350	160	350	25	125	225	325	13.5	20	13	4
2960.31.160.400	160	400	25	145	255	375	13.5	20	13	4
2960.31.160.450	160	450	25	165	285	425	13.5	20	13	4
2960.31.160.500	160	500	25	175	325	475	13.5	20	13	4

SLIDING PAD, STEEL WITH SINTERLAYER, VDI 3357

2960.32.



2960.32.



2960.32. Sliding pad, Steel with sinterlayer, VDI 3357

Order No	Shape	b	l ₁	l ₂	l ₃	l ₄	l ₅	d	d ₁	t	Number of screw holes
2960.32.030.080	B	30	80	25	55	-	-	9	15	9	2
2960.32.030.100	B	30	100	25	75	-	-	9	15	9	2
2960.32.030.125	B	30	125	25	100	-	-	9	15	9	2
2960.32.030.160	B	30	160	25	135	-	-	9	15	9	2
2960.32.030.200	B	30	200	25	175	-	-	9	15	9	2
2960.32.040.080	B	40	80	25	55	-	-	9	15	9	2
2960.32.040.100	B	40	100	25	75	-	-	9	15	9	2
2960.32.040.125	B	40	125	25	100	-	-	9	15	9	2
2960.32.040.160	B	40	160	25	135	-	-	9	15	9	2
2960.32.040.200	B	40	200	25	175	-	-	9	15	9	2
2960.32.050.080	B	50	80	25	55	-	-	9	15	9	2
2960.32.050.100	B	50	100	25	75	-	-	9	15	9	2
2960.32.050.125	B	50	125	25	100	-	-	9	15	9	2
2960.32.050.160	B	50	160	25	135	-	-	9	15	9	2
2960.32.050.200	B	50	200	25	175	-	-	9	15	9	2
2960.32.050.250	C	50	250	25	85	165	225	9	15	9	4
2960.32.050.300	C	50	300	25	105	195	275	9	15	9	4
2960.32.050.350	C	50	350	25	125	225	325	9	15	9	4
2960.32.050.400	C	50	400	25	145	255	375	9	15	9	4
2960.32.060.080	B	60	80	25	55	-	-	9	15	9	2
2960.32.060.100	B	60	100	25	75	-	-	9	15	9	2
2960.32.060.125	B	60	125	25	100	-	-	9	15	9	2
2960.32.060.160	B	60	160	25	135	-	-	9	15	9	2
2960.32.060.200	B	60	200	25	175	-	-	9	15	9	2
2960.32.080.080	B	80	80	25	55	-	-	9	15	9	2
2960.32.080.100	B	80	100	25	75	-	-	9	15	9	2
2960.32.080.125	B	80	125	25	100	-	-	9	15	9	2
2960.32.080.160	B	80	160	25	135	-	-	9	15	9	2
2960.32.080.200	B	80	200	25	175	-	-	9	15	9	2

Description:

Steel with sinterlayer is a two-layer material. It ensures low maintenance, selflubricating service even in arduous multishift applications.

Material:

Steel plate with sinterlayer, part of lubricant 20-25%.

Note:

Screws are not included.

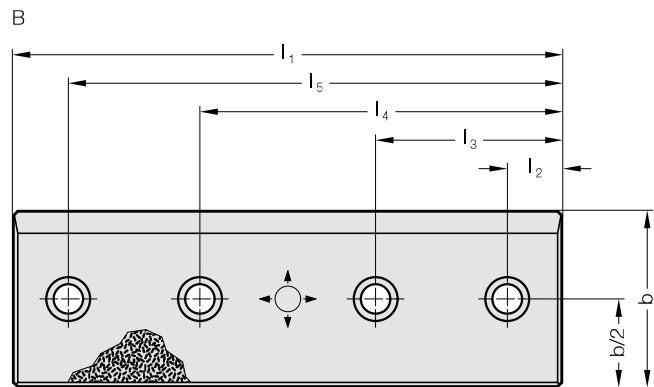
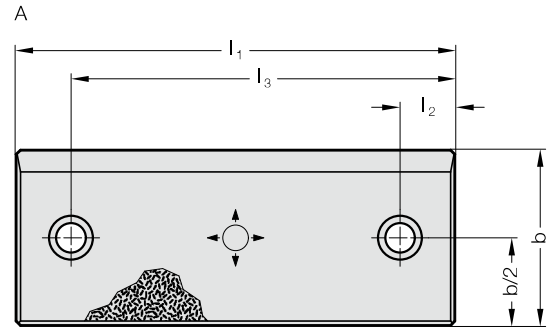
Fixing:

Use socket cap screws DIN EN ISO 4762 M8.

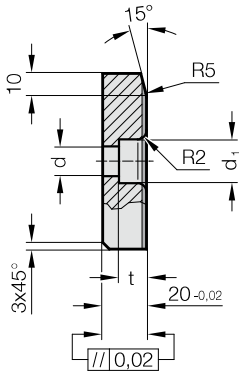
SLIDING PAD, STEEL WITH SINTERLAYER, VDI 3357



2960.33.



2960.33.



Description:

Steel with sinterlayer is a two-layer material. It ensures low maintenance, selflubricating service even in arduous multishift applications.

Material:

Steel plate with sinterlayer, part of lubricant 20-25%.

Note:

Screws are not included.

Fixing:

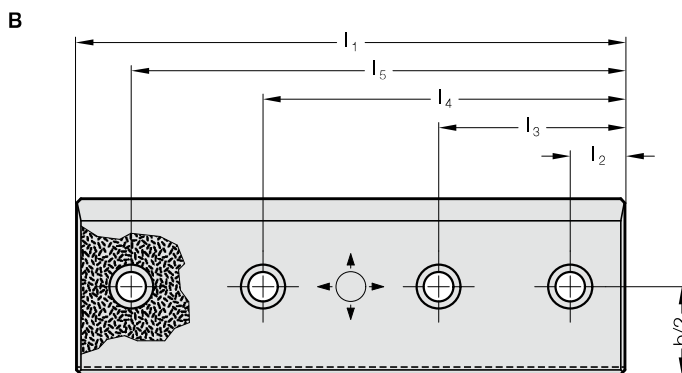
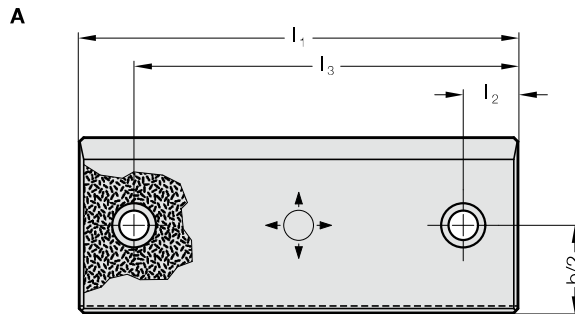
Use socket cap screws DIN EN ISO 4762 M12.

2960.33. Sliding pad, Steel with sinterlayer, VDI 3357

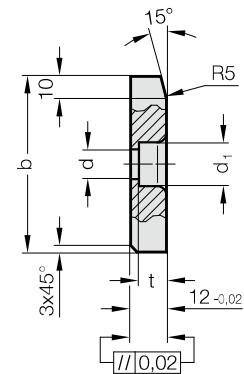
Order No	Shape	b	l ₁	l ₂	l ₃	l ₄	l ₅	d	d ₁	t	Number of screw holes
2960.33.080.200	A	80	200	25	175	-	-	13.5	20	13	2
2960.33.080.250	B	80	250	25	85	165	225	13.5	20	13	4
2960.33.080.300	B	80	300	25	105	195	275	13.5	20	13	4
2960.33.080.350	B	80	350	25	125	225	325	13.5	20	13	4
2960.33.080.400	B	80	400	25	145	255	375	13.5	20	13	4
2960.33.080.450	B	80	450	25	165	285	425	13.5	20	13	4
2960.33.080.500	B	80	500	25	175	325	475	13.5	20	13	4

SLIDING PAD, STEEL WITH SINTERLAYER, ~VDI 3387

2960.34.



2960.34.



2960.34. Sliding pad, Steel with sinterlayer, ~VDI 3387

Order No	Shape	b	l ₁	l ₂	l ₃	l ₄	l ₅	d	d ₁	t	Number of screw holes
2960.34.080.200	A	80	200	25	175	-	-	9	15	9	2
2960.34.080.250	B	80	250	25	85	165	225	9	15	9	4
2960.34.080.300	B	80	300	25	105	195	275	9	15	9	4
2960.34.080.350	B	80	350	25	125	225	325	9	15	9	4
2960.34.080.400	B	80	400	25	145	255	375	9	15	9	4
2960.34.080.450	B	80	450	25	165	285	425	9	15	9	4
2960.34.080.500	B	80	500	25	175	325	475	9	15	9	4

Description:

Steel with sinterlayer is a two-layer material. It ensures low maintenance, selflubricating service even in arduous multishift applications.

Material:

Steel plate with sinterlayer, part of lubricant 20-25%.

Note:

Screws are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762 M8.

SLIDING PAD, BRONZE WITH SOLID LUBRICANT



Material:

Bronze with solid lubricant, oilless lubricating

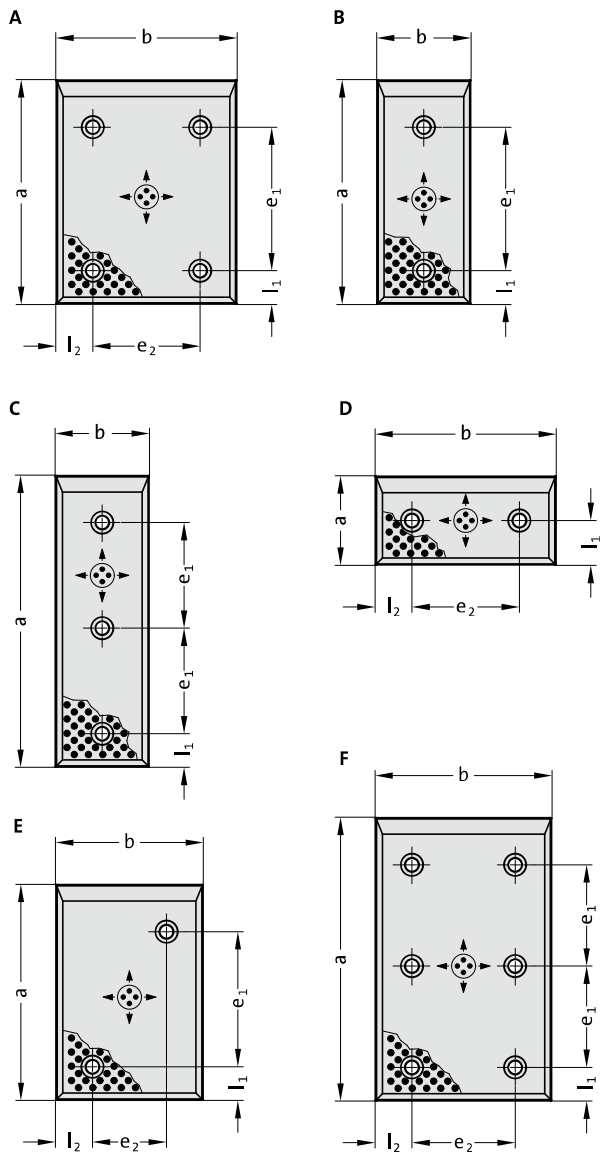
Note:

Screws are not included.

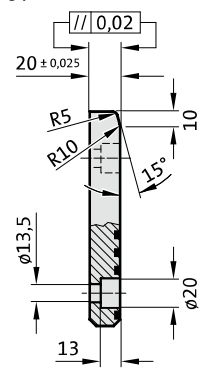
Fixing:

Use socket cap screws DIN EN ISO 4762 M12.

2960.70.



2960.70.



SLIDING PAD, BRONZE WITH SOLID LUBRICANT

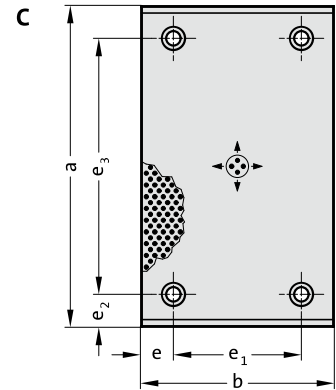
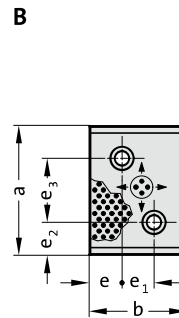
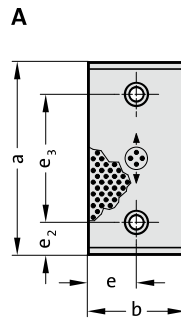
2960.70. Sliding pad, Bronze with solid lubricant

Order No	Shape	b	a	l ₁	e ₁	l ₂	e ₂
2960.70.050.080	B	50	80	20	35	25	-
2960.70.050.100	B	50	100	20	55	25	-
2960.70.050.125	B	50	125	20	80	25	-
2960.70.050.160	B	50	160	20	115	25	-
2960.70.050.200	B	50	200	20	155	25	-
2960.70.050.250	C	50	250	20	100	25	-
2960.70.080.050	D	80	50	25	-	20	40
2960.70.080.080	E	80	80	20	35	20	40
2960.70.080.100	E	80	100	20	55	20	40
2960.70.080.125	E	80	125	20	80	20	40
2960.70.080.160	A	80	160	20	115	20	40
2960.70.080.200	A	80	200	20	155	20	40
2960.70.080.250	F	80	250	20	100	20	40
2960.70.080.315	F	80	315	20	132	20	40
2960.70.100.050	D	100	50	25	-	20	60
2960.70.100.080	E	100	80	20	35	20	60
2960.70.100.100	E	100	100	20	55	20	60
2960.70.100.125	A	100	125	20	80	20	60
2960.70.100.160	A	100	160	20	115	20	60
2960.70.100.200	A	100	200	20	155	20	60
2960.70.100.250	F	100	250	20	100	20	60
2960.70.100.315	F	100	315	20	132	20	60
2960.70.125.050	D	125	50	25	-	20	85
2960.70.125.080	E	125	80	20	35	20	85
2960.70.125.100	A	125	100	20	55	20	85
2960.70.125.125	A	125	125	20	80	20	85
2960.70.125.160	A	125	160	20	115	20	85
2960.70.125.200	A	125	200	20	155	20	85
2960.70.125.250	F	125	250	20	100	20	85
2960.70.125.315	F	125	315	20	132	20	85
2960.70.160.050	D	160	50	25	-	20	120
2960.70.160.080	A	160	80	20	35	20	120
2960.70.160.100	A	160	100	20	55	20	120
2960.70.160.125	A	160	125	20	80	20	120
2960.70.160.160	A	160	160	20	115	20	120
2960.70.160.200	A	160	200	20	155	20	120
2960.70.160.250	F	160	250	20	100	20	120
2960.70.160.315	F	160	315	20	132	20	120

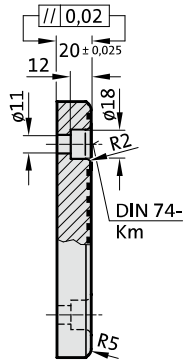
SLIDING PAD, BRONZE WITH SOLID LUBRICANT



2960.85.



2960.85.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

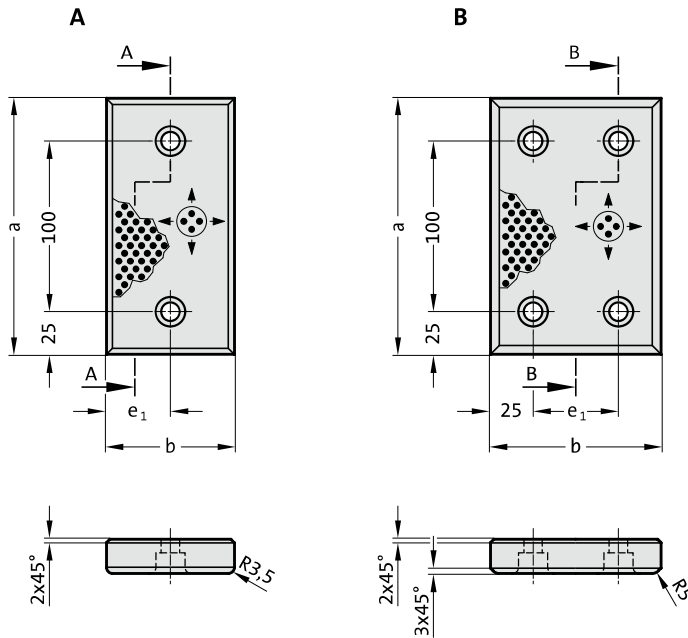
Use socket cap screws DIN EN ISO 4762 M10.

2960.85. Sliding pad, Bronze with solid lubricant

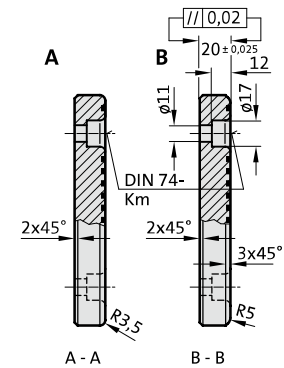
Order No	Shape	b	a	e	e ₁	e ₂	e ₃	Number of screw holes
2960.85.028.075	A	28	75	14	-	15	45	2
2960.85.028.100	A	28	100	14	-	25	50	2
2960.85.028.125	A	28	125	14	-	25	75	2
2960.85.028.150	A	28	150	14	-	25	100	2
2960.85.038.075	A	38	75	19	-	15	45	2
2960.85.038.100	A	38	100	19	-	25	50	2
2960.85.038.125	A	38	125	19	-	25	75	2
2960.85.038.150	A	38	150	19	-	25	100	2
2960.85.038.200	A	38	200	19	-	25	150	2
2960.85.048.075	A	48	75	24	-	15	45	2
2960.85.048.100	A	48	100	24	-	25	50	2
2960.85.048.125	A	48	125	24	-	25	75	2
2960.85.048.150	A	48	150	24	-	25	100	2
2960.85.048.200	A	48	200	24	-	25	150	2
2960.85.058.075	A	58	75	29	-	15	45	2
2960.85.058.100	A	58	100	29	-	25	50	2
2960.85.058.150	A	58	150	29	-	25	100	2
2960.85.075.075.1	A	75	75	37.5	-	15	45	2
2960.85.075.075	B	75	75	25	25	25	25	2
2960.85.075.100.1	A	75	100	37.5	-	25	50	2
2960.85.075.100	B	75	100	25	25	25	50	2
2960.85.075.125	A	75	125	37.5	-	25	75	2
2960.85.075.150	A	75	150	37.5	-	25	100	2
2960.85.075.200	A	75	200	37.5	-	25	150	2
2960.85.100.100	C	100	100	25	50	25	50	4
2960.85.100.125	C	100	125	25	50	25	75	4
2960.85.100.150	C	100	150	25	50	25	100	4
2960.85.100.200	C	100	200	25	50	25	150	4
2960.85.100.250	C	100	250	25	50	25	200	4
2960.85.100.300	C	100	300	25	50	25	250	4
2960.85.125.125	C	125	125	37.5	50	25	75	4
2960.85.125.150	C	125	150	37.5	50	25	100	4
2960.85.125.200	C	125	200	37.5	50	25	150	4
2960.85.125.250	C	125	250	37.5	50	25	200	4
2960.85.125.300	C	125	300	37.5	50	25	250	4
2960.85.125.350	C	125	350	37.5	50	25	300	4
2960.85.150.150	C	150	150	25	100	25	100	4
2960.85.150.200	C	150	200	25	100	25	150	4
2960.85.150.250	C	150	250	25	100	25	200	4
2960.85.150.300	C	150	300	25	100	25	250	4
2960.85.200.200	C	200	200	25	150	25	150	4
2960.85.200.250	C	200	250	25	150	25	200	4
2960.85.200.300	C	200	300	25	150	25	250	4

SLIDING PAD, BRONZE WITH SOLID LUBRICANT

2960.86.



2960.86.



2960.86. Sliding pad, Bronze with solid lubricant

Order No	Shape	b	a	e ₁	Number of screw holes
2960.86.038.150	A	38	150	19	2
2960.86.075.150	A	75	150	37.5	2
2960.86.100.150	B	100	150	50	4

Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

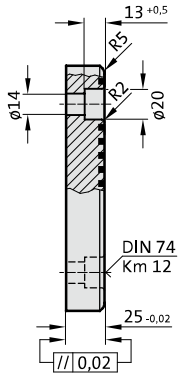
Use socket cap screws
DIN EN ISO 4762 M10.

SLIDING PAD, BRONZE WITH SOLID LUBRICANT

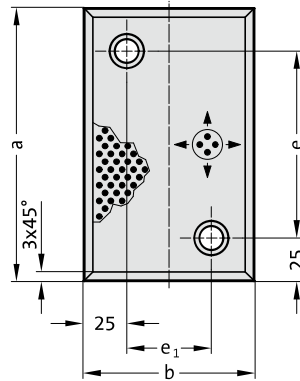


2960.76.

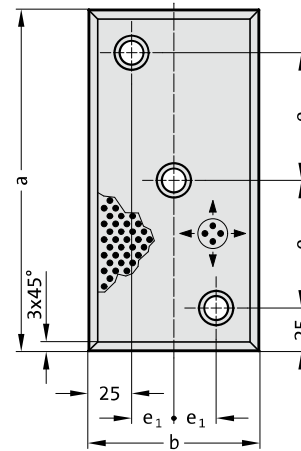
2960.76.



A



B



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

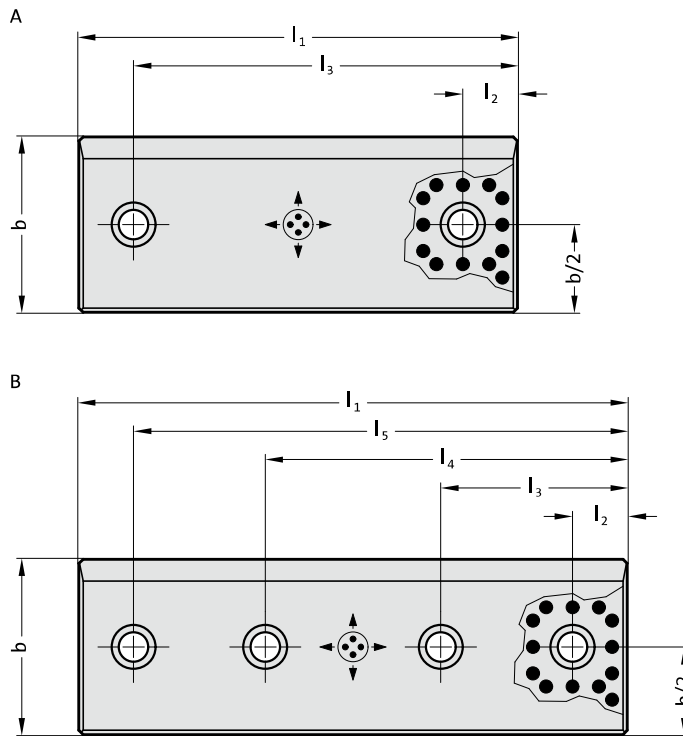
Use socket cap screws
DIN EN ISO 4762 M12.

2960.76. Sliding pad, Bronze with solid lubricant

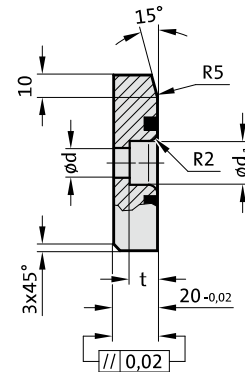
Order No	Shape	b	a	e	e ₁	Number of screw holes
2960.76.080.100	A	80	100	50	30	2
2960.76.080.125	A	80	125	75	30	2
2960.76.080.160	A	80	160	110	30	2
2960.76.080.200	B	80	200	75	15	3
2960.76.100.125	A	100	125	75	50	2
2960.76.100.160	A	100	160	110	50	2
2960.76.100.200	B	100	200	75	25	3
2960.76.125.125	A	125	125	75	75	2

SLIDING PAD, BRONZE WITH SOLID LUBRICANT, VDI 3357

2960.77.



2960.77.



2960.77. Sliding pad, Bronze with solid lubricant, VDI 3357

Order No	Shape	b	l ₁	l ₂	l ₃	l ₄	l ₅	d	d ₁	t	Number of screw holes
2960.77.080.200	A	80	200	25	175	0	0	13.5	20	13	2
2960.77.080.250	B	80	250	25	85	165	225	13.5	20	13	4
2960.77.080.300	B	80	300	25	105	195	275	13.5	20	13	4
2960.77.080.350	B	80	350	25	125	225	325	13.5	20	13	4
2960.77.080.400	B	80	400	25	145	255	375	13.5	20	13	4
2960.77.080.450	B	80	450	25	165	285	425	13.5	20	13	4
2960.77.080.500	B	80	500	25	175	325	475	13.5	20	13	4

Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws not included.

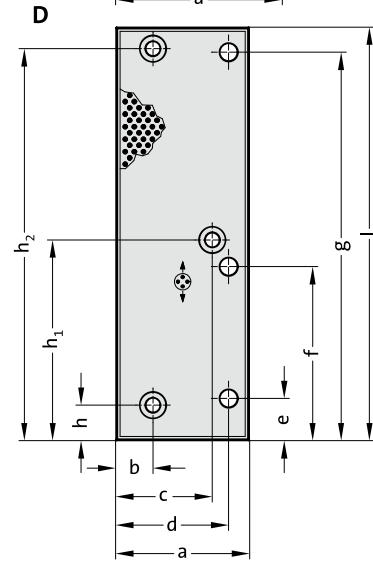
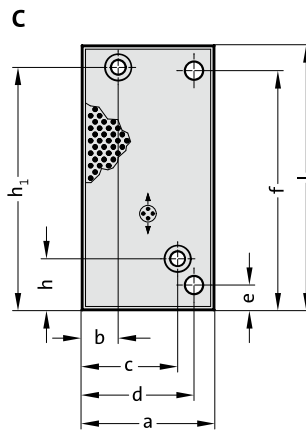
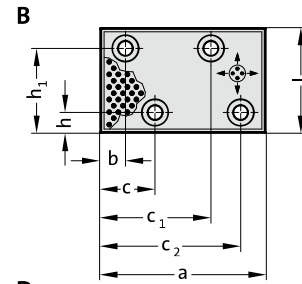
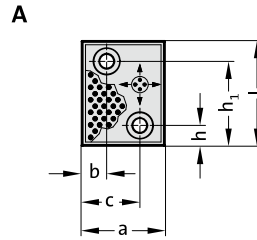
Fixing:

Use socket cap screws DIN EN ISO 4762 M12.

SLIDING PAD, BRONZE WITH SOLID LUBRICANT, CNOMO

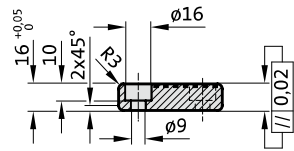


2962.78.45.

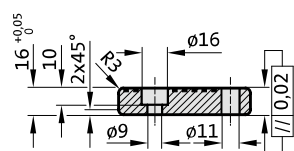


2962.78.45.

A, B



C, D



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

Use socket cap screws

DIN EN ISO 4762 M8.

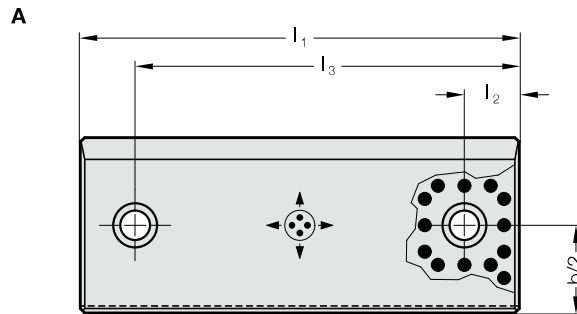
2962.78.45. Sliding pad, Bronze with solid lubricant, CNOMO

Order No	Shape	a	l	b	c	c ₁	c ₂	d	e	f	g	h	h ₁	h ₂	h ₃	Number of screw counterbores	Number of screw holes
2962.78.45.050.16.063	A	50	63	15	35	-	-	-	-	-	-	12	51	-	-	2	-
2962.78.45.050.16.160	C	50	160	19	31	-	-	-	-	-	-	21	147	-	-	2	-
2962.78.45.050.16.250	D	50	250	19	31	-	-	-	-	-	-	21	121	237	-	3	-
2962.78.45.080.16.160	C	80	160	22	58	-	-	68	15	145	-	31	147	-	-	2	2
2962.78.45.080.16.250	D	80	250	22	58	-	-	68	25	105	235	21	121	237	-	3	3
2962.78.45.100.16.063	B	100	63	15	33	67	85	-	-	-	-	12	51	-	-	4	-

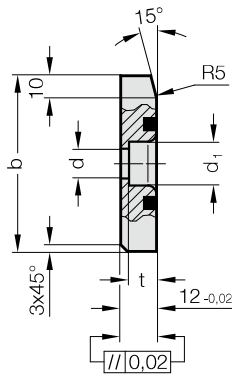
SLIDING PAD, BRONZE WITH SOLID LUBRICANT, ~VDI 3387



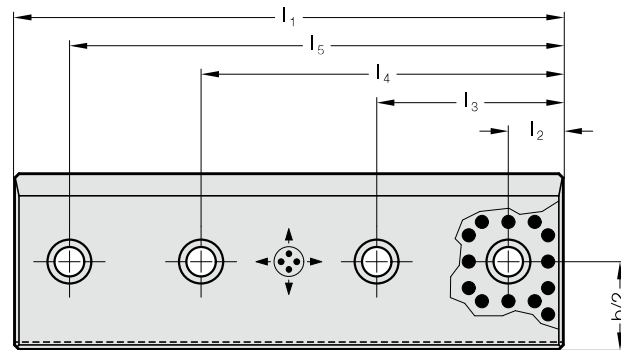
2960.84.



2960.84.



B



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762 M8.

2960.84. Sliding pad, Bronze with solid lubricant, ~VDI 3387

Order No	Shape	b	l_1	l_2	l_3	l_4	l_5	d	d_1	t	Number of screw holes
2960.84.080.200	A	80	200	25	175	-	-	9	15	9	2
2960.84.080.250	B	80	250	25	85	165	225	9	15	9	4
2960.84.080.300	B	80	300	25	105	195	275	9	15	9	4
2960.84.080.350	B	80	350	25	125	225	325	9	15	9	4
2960.84.080.400	B	80	400	25	145	255	375	9	15	9	4
2960.84.080.450	B	80	450	25	165	285	425	9	15	9	4
2960.84.080.500	B	80	500	25	175	325	475	9	15	9	4

SLIDING PAD, BRONZE WITH SOLID LUBRICANT



Material:

Bronze with solid lubricant, oilless lubricating

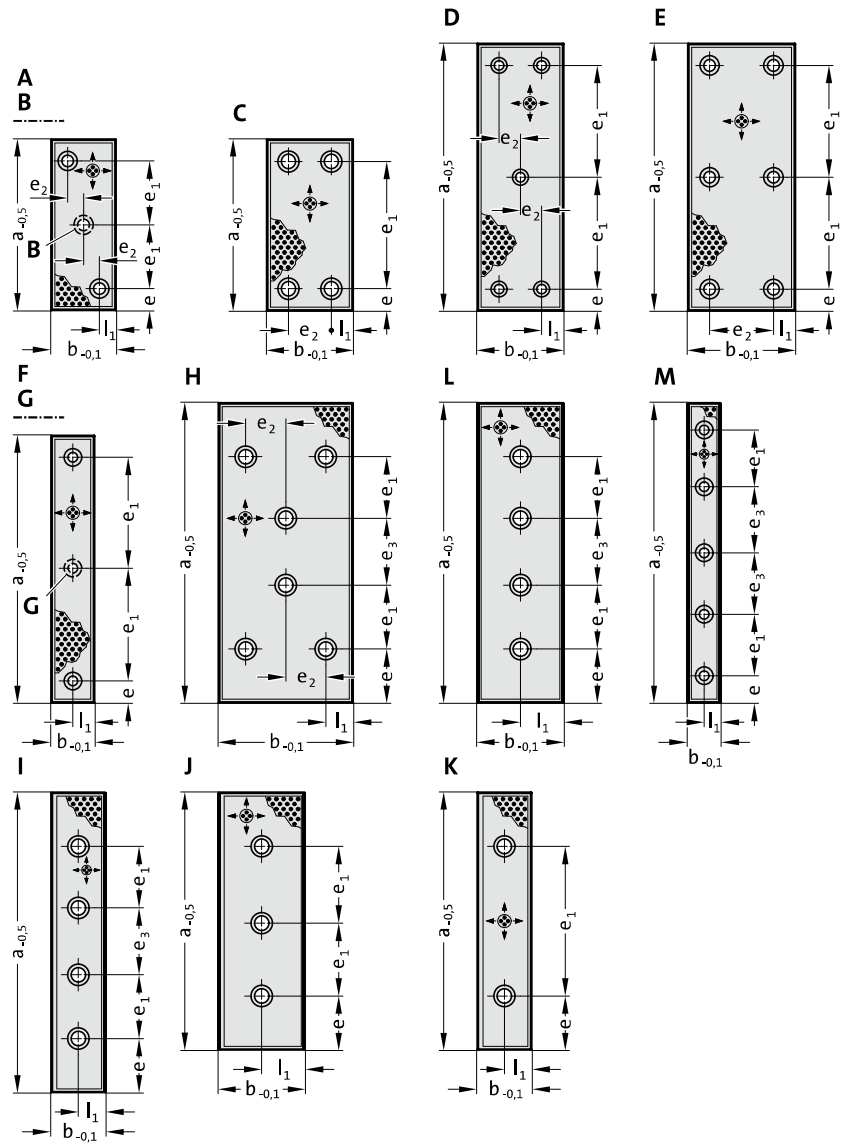
Note:

Screws are not included.

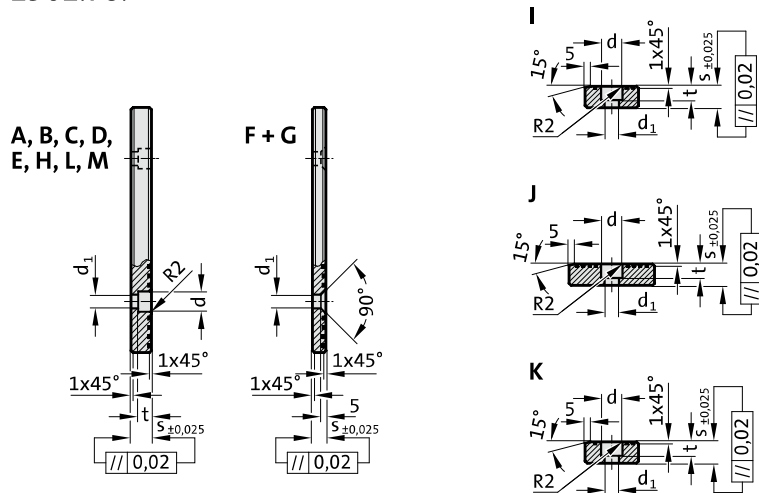
Fixing:

Use socket cap screws DIN EN ISO 4762, or countersunk cap screws DIN 7991/ISO 10642.

2962.78.



2962.78.



SLIDING PAD, BRONZE WITH SOLID LUBRICANT

2962.78. Sliding pad, Bronze with solid lubricant

Order No	Shape	b	s	a	l ₁	e	e ₁	e ₂	e ₃	Number of screw holes	d	d ₁	t
2962.78.030.12.100	A	30	12	100	15	20	60	-	-	2	15	9	9
2962.78.030.12.160	B	30	12	160	15	20	60	-	-	3	15	9	9
2962.78.030.12.240	B	30	12	240	15	25	95	-	-	3	15	9	9
2962.78.030.12.250	B	30	12	250	15	20	105	-	-	3	15	9	9
2962.78.030.12.300	L	30	12	300	15	25	85	-	80	4	15	9	9
2962.78.030.12.350	L	30	12	350	15	25	100	-	100	4	15	9	9
2962.78.030.12.400	L	30	12	400	15	25	115	-	120	4	15	9	9
2962.78.030.12.450	M	30	12	450	15	25	100	-	100	5	15	9	9
2962.78.030.12.500	M	30	12	500	15	25	110	-	115	5	15	9	9
2962.78.040.08.100	F	40	8	100	20	20	60	-	-	2	-	9	5
2962.78.040.08.160	G	40	8	160	20	20	60	-	-	3	-	9	5
2962.78.040.08.250	G	40	8	250	20	20	105	-	-	3	-	9	5
2962.78.040.12.100	A	40	12	100	20	20	60	-	-	2	15	9	9
2962.78.040.12.160	B	40	12	160	20	20	60	-	-	3	15	9	9
2962.78.040.12.250	B	40	12	250	20	20	105	-	-	3	15	9	9
2962.78.040.16.100	A	40	16	100	20	20	60	-	-	2	18	11	11
2962.78.040.16.160	B	40	16	160	20	20	60	-	-	3	18	11	11
2962.78.040.16.250	B	40	16	250	20	20	105	-	-	3	18	11	11
2962.78.050.20.100	A	50	20	100	15	20	60	20	-	2	20	13.5	13
2962.78.050.20.160	B	50	20	160	15	20	60	10	-	3	20	13.5	13
2962.78.050.20.240	A	50	20	240	25	50	140	-	-	2	20	13.5	13
2962.78.050.20.240.1	K	50	20	240	25	50	140	-	-	2	20	13.5	13
2962.78.050.20.250	B	50	20	250	15	20	105	10	-	3	20	13.5	13
2962.78.050.20.300	B	50	20	300	25	50	100	-	-	3	20	13.5	13
2962.78.050.20.300.1	J	50	20	300	25	50	100	-	-	3	20	13.5	13
2962.78.050.20.350	B	50	20	350	25	50	125	-	-	3	20	13.5	13
2962.78.050.20.350.1	J	50	20	350	25	50	125	-	-	3	20	13.5	13
2962.78.050.20.400.1	J	50	20	400	25	50	150	-	-	3	20	13.5	13
2962.78.050.20.450.1	I	50	20	450	25	50	115	-	120	4	20	13.5	13
2962.78.050.20.500.1	I	50	20	500	25	50	135	-	130	4	20	13.5	13
2962.78.060.16.100	A	60	16	100	15	20	60	30	-	2	18	11	11
2962.78.060.16.160	B	60	16	160	15	20	60	15	-	3	18	11	11
2962.78.060.16.250	B	60	16	250	15	20	105	15	-	3	18	11	11
2962.78.080.12.100	A	80	12	100	20	20	60	40	-	2	15	9	9
2962.78.080.12.160	C	80	12	160	20	20	120	40	-	4	15	9	9
2962.78.080.12.250	D	80	12	250	20	20	105	20	-	5	15	9	9
2962.78.080.20.100	A	80	20	100	20	20	60	40	-	2	20	13.5	13
2962.78.080.20.160	C	80	20	160	20	20	120	40	-	4	20	13.5	13
2962.78.080.20.250	D	80	20	250	20	20	105	20	-	5	20	13.5	13
2962.78.080.20.300	B	80	20	300	40	50	100	-	-	3	20	13.5	13
2962.78.080.20.300.1	J	80	20	300	40	50	100	-	-	3	20	13.5	13
2962.78.080.20.350	B	80	20	350	40	50	125	-	-	3	20	13.5	13
2962.78.080.20.350.1	J	80	20	350	40	50	125	-	-	3	20	13.5	13
2962.78.080.20.400	B	80	20	400	40	50	150	-	-	3	20	13.5	13
2962.78.080.20.400.1	J	80	20	400	40	50	150	-	-	3	20	13.5	13
2962.78.080.20.450	L	80	20	450	40	50	115	-	120	4	20	13.5	13
2962.78.080.20.450.1	I	80	20	450	40	50	115	-	120	4	20	13.5	13
2962.78.080.20.500	L	80	20	500	40	50	135	-	130	4	20	13.5	13
2962.78.080.20.500.1	I	80	20	500	40	50	135	-	130	4	20	13.5	13
2962.78.100.16.100	A	100	16	100	20	20	60	60	-	2	18	11	11
2962.78.100.16.160	C	100	16	160	20	20	120	60	-	4	18	11	11
2962.78.100.16.250	E	100	16	250	20	20	105	60	-	6	18	11	11
2962.78.125.20.100	C	125	20	100	20	20	60	85	-	4	20	13.5	13
2962.78.125.20.160	C	125	20	160	20	20	120	85	-	4	20	13.5	13
2962.78.125.20.250	E	125	20	250	20	20	105	85	-	6	20	13.5	13
2962.78.125.20.400	D	125	20	400	25	50	150	37.5	-	5	20	13.5	13
2962.78.125.20.450	H	125	20	450	25	50	115	37.5	120	6	20	13.5	13
2962.78.125.20.500	H	125	20	500	25	50	135	37.5	130	6	20	13.5	13

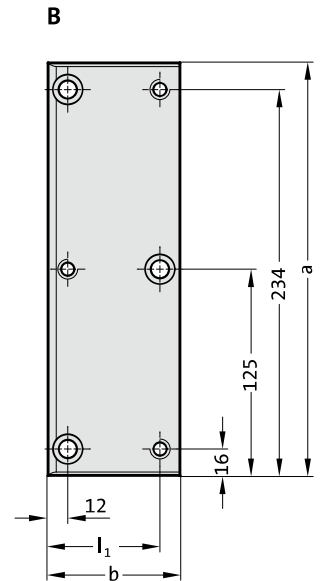
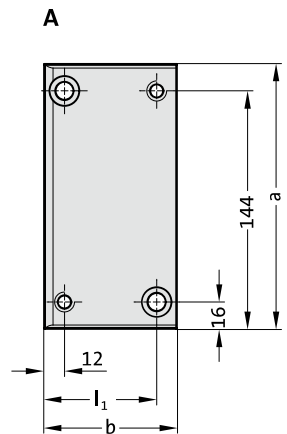
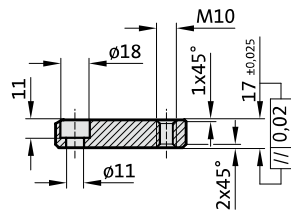
SLIDING PAD, STEEL, CNOMO



2962.84.45.



2962.84.45.



Material:
Steel, surface hardened

Note:
Screws are not included.

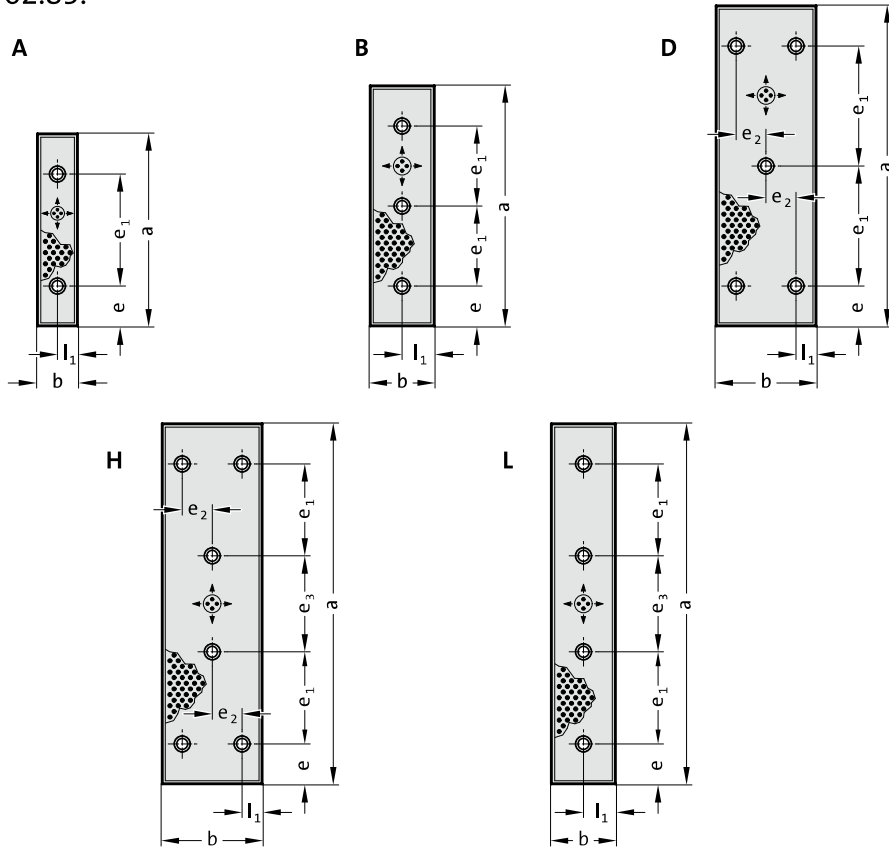
Fixing:
Use socket cap screws
DIN EN ISO 4762 M10.

2962.84.45. Sliding pad, Steel, CNOMO

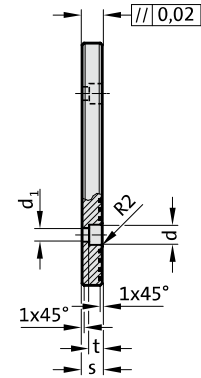
Order No	Shape	b	a	l ₁	Number of screw counterbores	Number of threads
2962.84.45.050.17.160	A	50	160	38	2	2
2962.84.45.050.17.250	B	50	250	38	3	3
2962.84.45.080.17.160	A	80	160	68	2	2
2962.84.45.080.17.250	B	80	250	68	3	3

SLIDING PAD, STEEL WITH SOLID LUBRICANT

2962.85.



2962.85.



2962.85. Sliding pad, Steel with solid lubricant

Order No	Shape	b	s	a	l ₁	e	e ₁	e ₂	e ₃	Number of screw holes	d ₁	d	t
2962.85.050.20.240	A	50	20	240	25	50	140	-	-	2	13.5	20	13
2962.85.050.20.300	B	50	20	300	25	50	100	-	-	3	13.5	20	13
2962.85.050.20.350	B	50	20	350	25	50	125	-	-	3	13.5	20	13
2962.85.080.20.300	B	80	20	300	40	50	100	-	-	3	13.5	20	13
2962.85.080.20.350	B	80	20	350	40	50	125	-	-	3	13.5	20	13
2962.85.080.20.400	B	80	20	400	40	50	150	-	-	3	13.5	20	13
2962.85.080.20.450	L	80	20	450	40	50	115	-	120	4	13.5	20	13
2962.85.080.20.500	L	80	20	500	40	50	135	-	130	4	13.5	20	13
2962.85.125.20.400	D	125	20	400	25	50	150	37.5	-	5	13.5	20	13
2962.85.125.20.450	H	125	20	450	25	50	115	37.5	120	6	13.5	20	13
2962.85.125.20.500	H	125	20	500	25	50	135	37.5	130	6	13.5	20	13

Material:

Steel, surface hardened. Sliding faces with embedded solid lubricant.

Note:

Screws are not included.

Fixing:

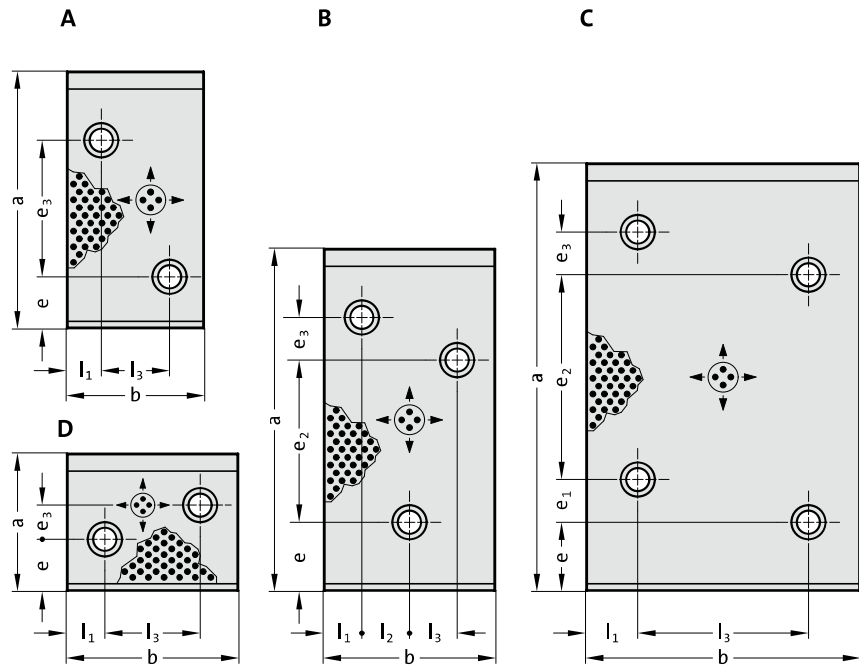
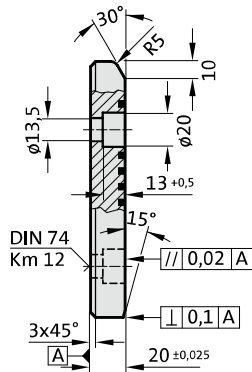
Use socket cap screws
DIN EN ISO 4762 M12.

SLIDING PAD, BRONZE WITH SOLID LUBRICANT, NAAMS



2960.79.

2960.79.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

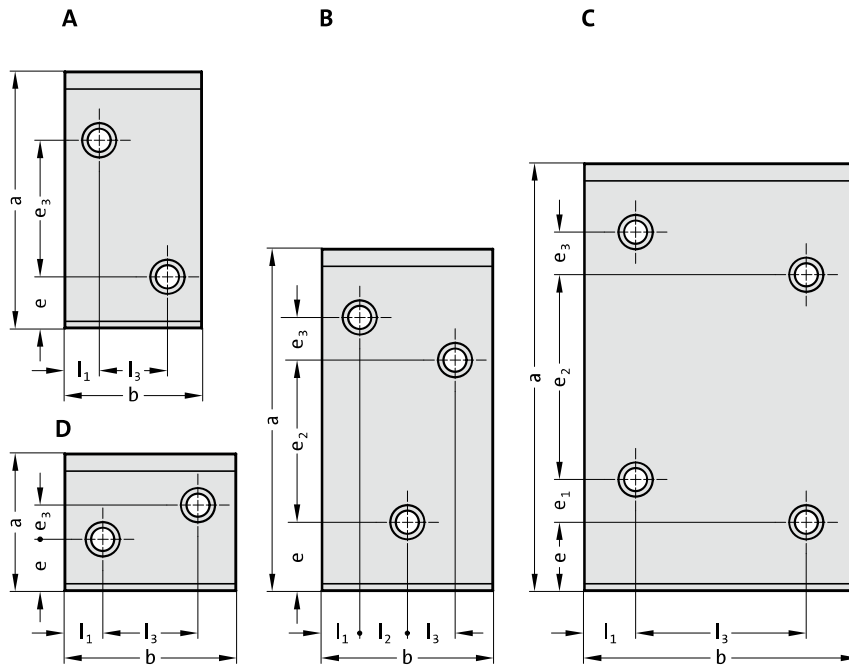
Use socket cap screws
DIN EN ISO 4762 M12.

2960.79. Sliding pad, Bronze with solid lubricant, NAAMS

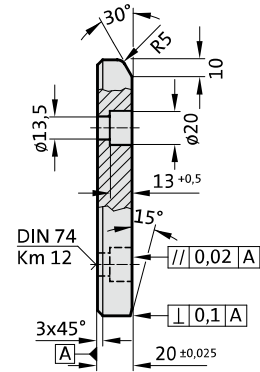
Order No	Shape	b	a	l ₁	l ₂	l ₃	e	e ₁	e ₂	e ₃	Number of screw holes
2960.79.050.100	A	50	100	25	-	-	30	-	-	30	2
2960.79.050.150	A	50	150	25	-	-	30	-	-	80	2
2960.79.050.200	A	50	200	25	-	-	40	-	-	120	2
2960.79.080.100	A	80	100	20	-	40	30	-	-	30	2
2960.79.080.150	A	80	150	20	-	40	30	-	-	80	2
2960.79.080.200	A	80	200	20	-	40	40	-	-	120	2
2960.79.080.250	A	80	250	20	-	40	40	-	-	170	2
2960.79.080.315	B	80	315	20	20	20	40	-	210	25	3
2960.79.100.050	D	100	50	22	-	56	14	-	-	13	2
2960.79.100.080	D	100	80	22	-	56	30	-	-	20	2
2960.79.100.100	A	100	100	22	-	56	30	-	-	30	2
2960.79.100.150	A	100	150	22	-	56	30	-	-	80	2
2960.79.100.200	B	100	200	22	28	28	40	-	95	25	3
2960.79.100.250	B	100	250	22	28	28	40	-	145	25	3
2960.79.100.315	B	100	315	22	28	28	40	-	210	25	3
2960.79.125.080	D	125	80	25	-	75	30	-	-	20	2
2960.79.125.100	A	125	100	25	-	75	30	-	-	30	2
2960.79.125.150	A	125	150	25	-	75	30	-	-	80	2
2960.79.125.200	B	125	200	25	37	38	40	-	95	25	3
2960.79.125.250	B	125	250	25	37	38	40	-	145	25	3
2960.79.125.315	C	125	315	25	-	75	40	25	165	25	4
2960.79.160.100	A	160	100	30	-	100	30	-	-	30	2
2960.79.160.150	A	160	150	30	-	100	30	-	-	80	2
2960.79.160.200	B	160	200	30	50	50	40	-	95	25	3
2960.79.160.250	C	160	250	30	-	100	40	25	120	25	4
2960.79.160.315	C	160	315	30	-	100	40	25	185	25	4

SLIDING PAD, STEEL, NAAMS

2960.80.



2960.80.



2960.80. Sliding pad, Steel, NAAMS

Order No	Shape	b	a	l ₁	l ₂	l ₃	e	e ₁	e ₂	e ₃	Number of screw holes
2960.80.050.100	A	50	100	25	-	-	30	-	-	30	2
2960.80.050.150	A	50	150	25	-	-	30	-	-	80	2
2960.80.050.200	A	50	200	25	-	-	40	-	-	120	2
2960.80.080.100	A	80	100	20	-	40	30	-	-	30	2
2960.80.080.150	A	80	150	20	-	40	30	-	-	80	2
2960.80.080.200	A	80	200	20	-	40	40	-	-	120	2
2960.80.080.250	A	80	250	20	-	40	40	-	-	170	2
2960.80.080.315	B	80	315	20	20	20	40	-	210	25	3
2960.80.100.050	D	100	50	22	-	56	14	-	-	13	2
2960.80.100.080	D	100	80	22	-	56	30	-	-	20	2
2960.80.100.100	A	100	100	22	-	56	30	-	-	30	2
2960.80.100.150	A	100	150	22	-	56	30	-	-	80	2
2960.80.100.200	B	100	200	22	28	28	40	-	95	25	3
2960.80.100.250	B	100	250	22	28	28	40	-	145	25	3
2960.80.100.315	B	100	315	22	28	28	40	-	210	25	3
2960.80.125.080	D	125	80	25	-	75	30	-	-	20	2
2960.80.125.100	A	125	100	25	-	75	30	-	-	30	2
2960.80.125.150	A	125	150	25	-	75	30	-	-	80	2
2960.80.125.200	B	125	200	25	37	38	40	-	95	25	3
2960.80.125.250	B	125	250	25	37	38	40	-	145	25	3
2960.80.125.315	C	125	315	25	-	75	40	25	165	25	4
2960.80.160.100	A	160	100	30	-	100	30	-	-	30	2
2960.80.160.150	A	160	150	30	-	100	30	-	-	80	2
2960.80.160.200	B	160	200	30	50	50	40	-	95	25	3
2960.80.160.250	C	160	250	30	-	100	40	25	120	25	4
2960.80.160.315	C	160	315	30	-	100	40	25	185	25	4

Material:

Steel, surface hardened

Note:

Screws are not included.

Fixing:

Use socket cap screws
DIN EN ISO 4762 M12.

SLIDING PAD, BRONZE WITH SOLID LUBRICANT, AFNOR/ISO 9183-2

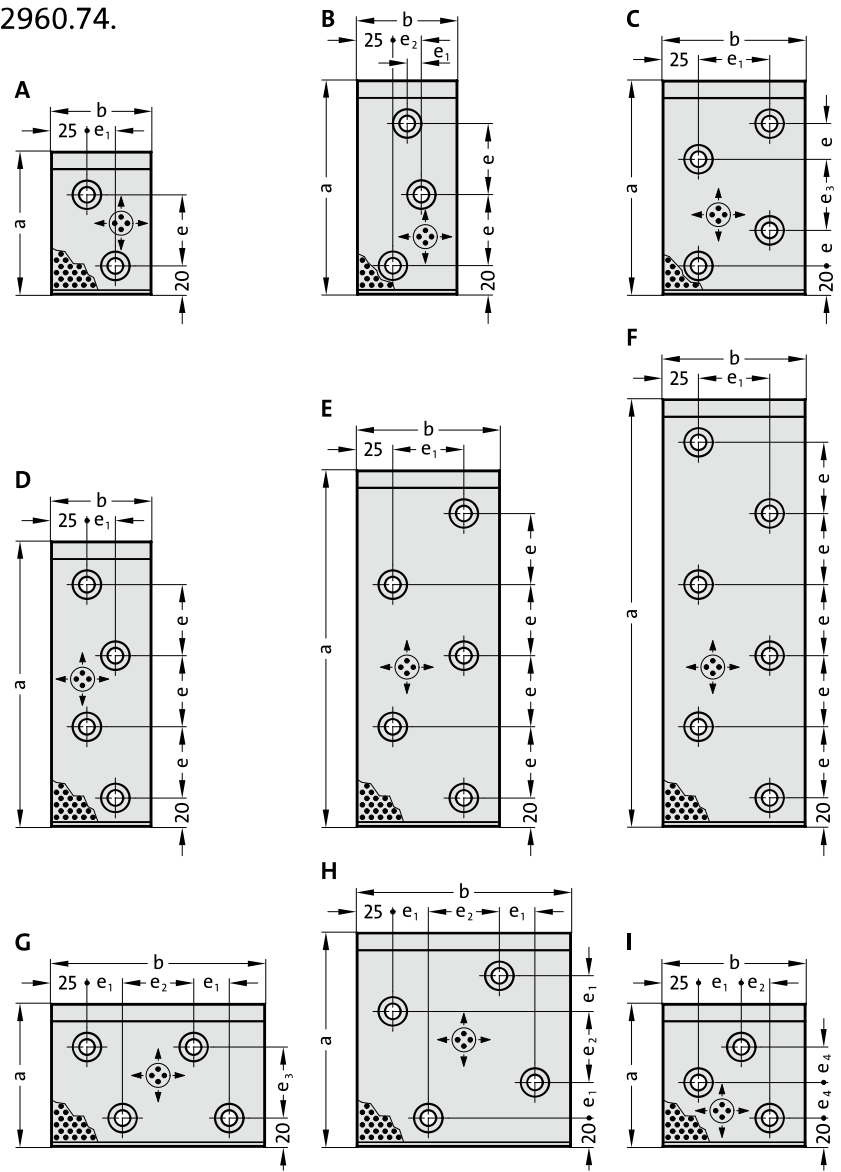


Material:
Bronze with solid lubricant, oilless lubricating

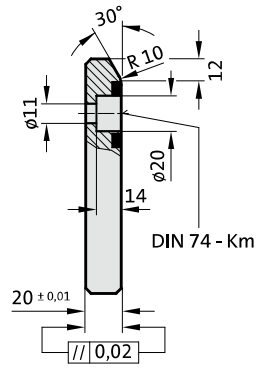
Note:
Screws are not included.

Fixing:
Use socket cap screws DIN EN ISO 4762 M10.

2960.74.



2960.74.



SLIDING PAD, BRONZE WITH SOLID LUBRICANT, AFNOR/ISO 9183-2

2960.74. Sliding pad, Bronze with solid lubricant, AFNOR/ISO 9183-2

Order No	Shape	b	a	e	e ₁	e ₂	e ₃	e ₄	Number of screw holes
2960.74.070.100	A	70	100	50	20	-	-	-	2
2960.74.070.150	B	70	150	50	10	20	-	-	3
2960.74.070.200	D	70	200	50	20	-	-	-	4
2960.74.100.100	I	100	100		30	20	-	25	3
2960.74.100.150	C	100	150	25	50	-	50	-	4
2960.74.100.200	D	100	200	50	50	-	-	-	4
2960.74.100.250	E	100	250	50	50	-	-	-	5
2960.74.100.300	F	100	300	50	50	-	-	-	6
2960.74.150.100	G	150	100		25	50	50	-	4
2960.74.150.150	H	150	150		25	50	-	-	4
2960.74.150.200	D	150	200	50	100	-	-	-	4
2960.74.150.250	E	150	250	50	100	-	-	-	5
2960.74.150.300	F	150	300	50	100	-	-	-	6
2960.74.200.100	G	200	100		50	50	50	-	4

SLIDING PAD, STEEL WITH OIL GROOVE, CNOMO



2960.44.45.

Material:

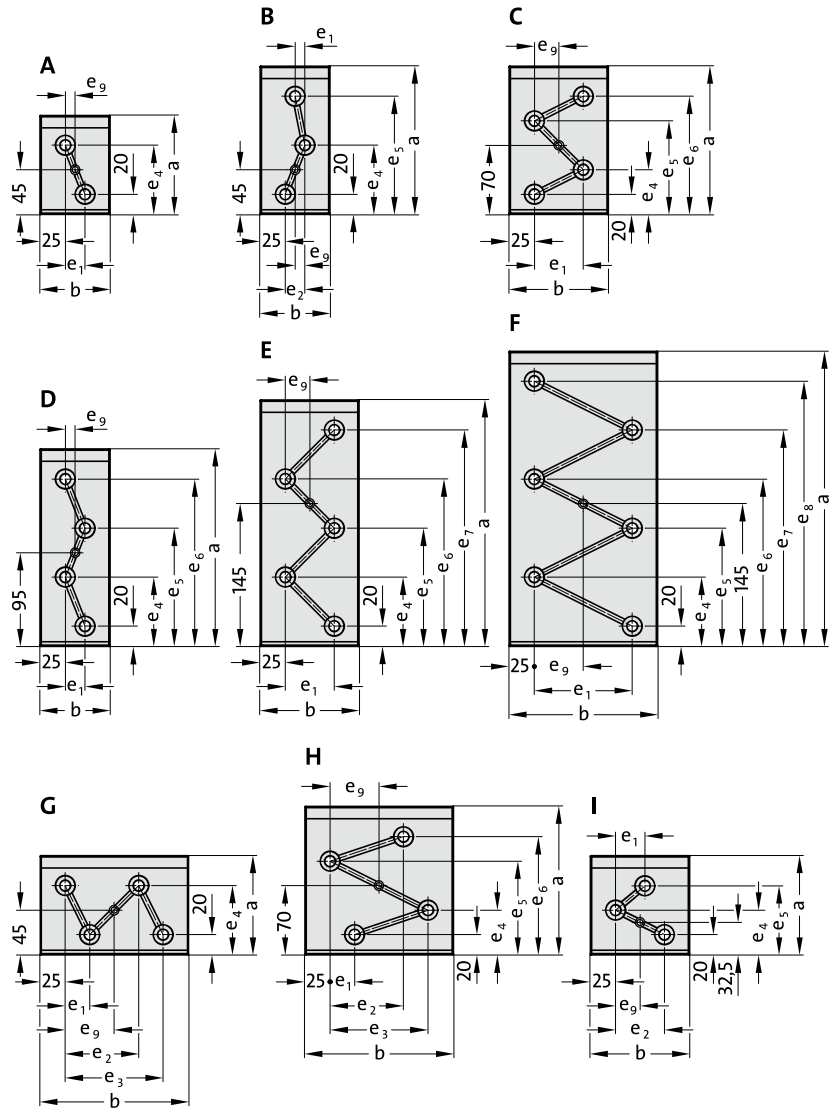
Steel, surface hardened

Note:

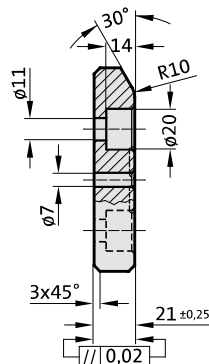
Screws are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762 M10.



2960.44.45.



SLIDING PAD, STEEL WITH OIL GROOVE, CNOMO

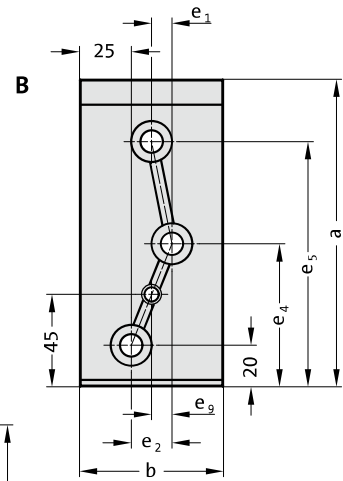
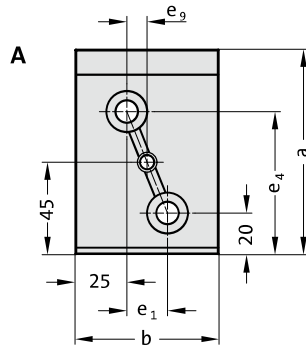
2960.44.45. Sliding pad, Steel with oil groove, CNOMO

Order No	Shape	b	a	e	e ₁	e ₂	e ₃	e ₄	e ₅	e ₆	e ₇	e ₈	e ₉	Number of screw holes
2960.44.45.070.100	A	70	100		20	-	-	70	-	-	-	-	10	2
2960.44.45.070.150	B	70	150		10	20	-	70	120	-	-	-	10	3
2960.44.45.070.200	D	70	200		20	-	-	70	120	170	-	-	10	4
2960.44.45.100.100	I	100	100		30	50	-	45	70	-	-	-	25	3
2960.44.45.100.150	C	100	150		50	-	-	45	95	120	-	-	25	4
2960.44.45.100.200	D	100	200		50	-	-	70	120	170	-	-	25	4
2960.44.45.100.250	E	100	250		50	-	-	70	120	170	220	-	25	5
2960.44.45.100.300	F	100	300		50	-	-	70	120	170	220	270	25	6
2960.44.45.150.100	G	150	100		25	75	100	70	-	-	-	-	50	4
2960.44.45.150.150	H	150	150		25	75	100	45	95	120	-	-	50	4
2960.44.45.150.200	D	150	200		100	-	-	70	120	170	-	-	50	4
2960.44.45.150.250	E	150	250		100	-	-	70	120	170	220	-	50	5
2960.44.45.150.300	F	150	300		100	-	-	70	120	170	220	270	50	6
2960.44.45.200.100	G	200	100		50	100	150	70	-	-	-	-	75	4

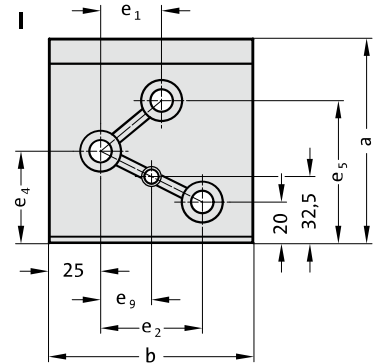
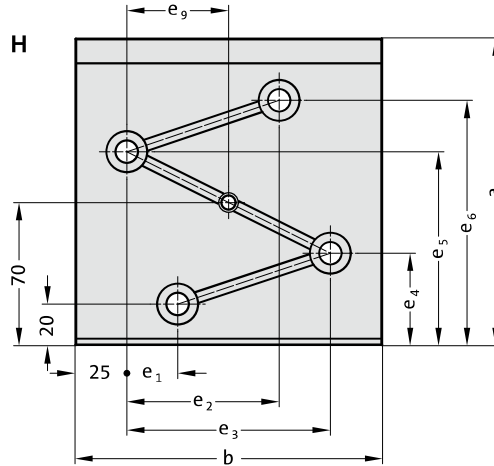
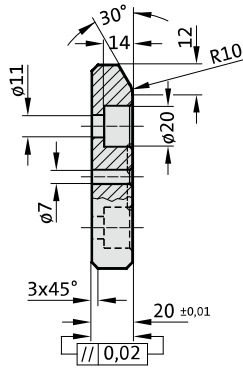
SLIDING PAD, BRONZE WITH OIL GROOVE, CNOMO



2960.54.45.



2960.54.45.



Material:

Bronze

Note:

Screws are not included.

Fixing:

Use socket cap screws
DIN EN ISO 4762 M10.

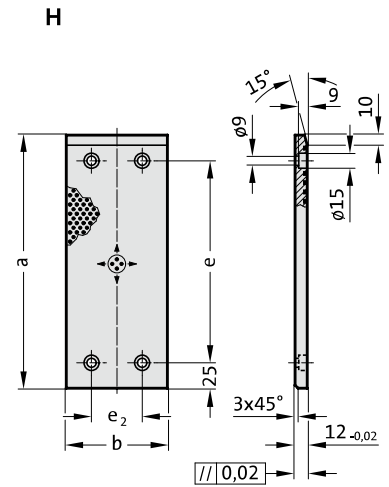
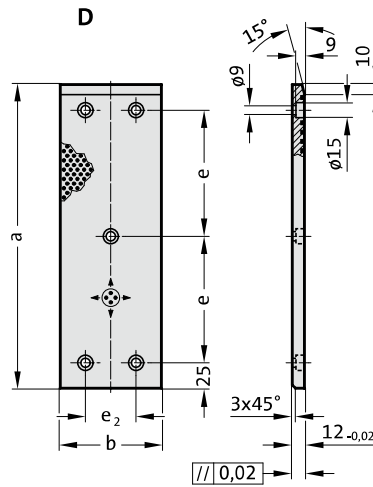
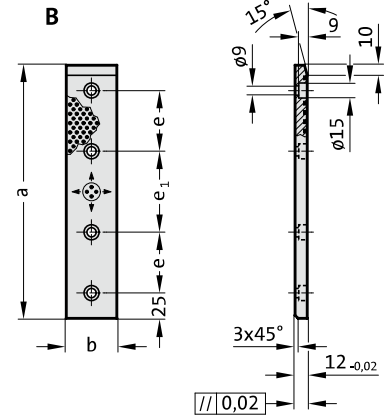
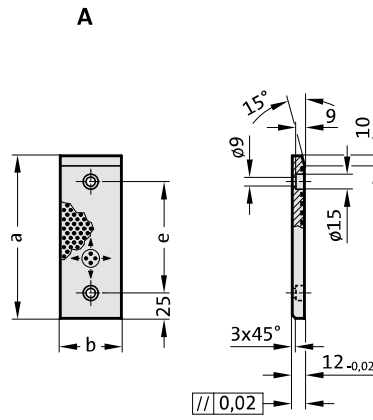
2960.54.45. Sliding pad, Bronze with oil groove, CNOMO

Order No	Shape	b	a	e	e ₁	e ₂	e ₃	e ₄	e ₅	e ₆	e ₇	e ₈	e ₉	Number of screw holes
2960.54.45.070.100	A	70	100	20	-	-	-	70	-	-	-	-	10	2
2960.54.45.070.150	B	70	150	10	20	-	-	70	120	-	-	-	10	3
2960.54.45.150.150	H	150	150	25	75	100	45	95	120	-	-	-	50	4
2960.54.45.100.100	I	100	100	30	50	-	-	45	70	-	-	-	25	3

SLIDING PAD, BRONZE WITH SOLID LUBRICANT, VDI 3357



2960.81.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

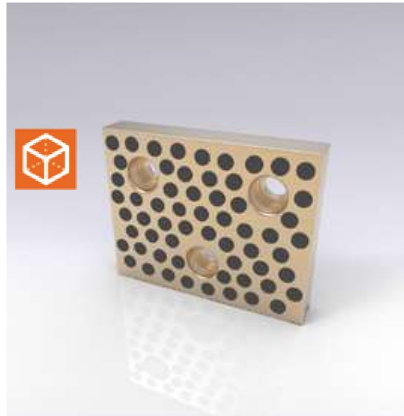
Use socket cap screws DIN EN ISO 4762 M8.

SLIDING PAD, BRONZE WITH SOLID LUBRICANT, VDI 3357

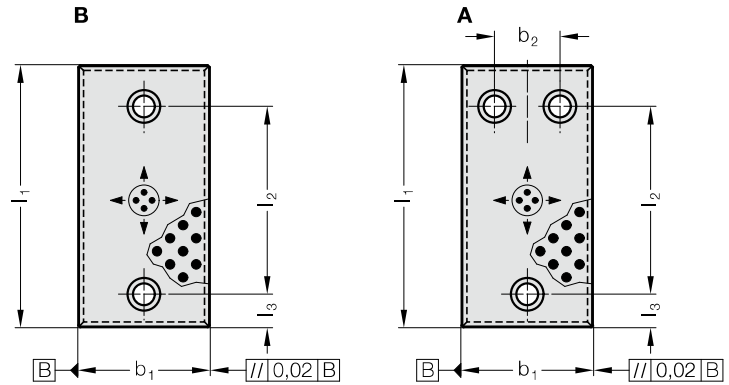
2960.81. Sliding pad, Bronze with solid lubricant, VDI 3357

Order No	Shape	b	a	e	e ₁	e ₂	Number of screw holes
2960.81.030.080	A	30	80	30	-	-	2
2960.81.030.100	A	30	100	50	-	-	2
2960.81.030.125	A	30	125	75	-	-	2
2960.81.030.160	A	30	160	110	-	-	2
2960.81.030.200	A	30	200	150	-	-	2
2960.81.030.225	A	30	225	175	-	-	2
2960.81.030.250	B	30	250	60	80	-	4
2960.81.030.260	B	30	260	60	90	-	4
2960.81.030.280	B	30	280	60	110	-	4
2960.81.030.300	B	30	300	80	90	-	4
2960.81.030.320	B	30	320	80	110	-	4
2960.81.040.080	A	40	80	30	-	-	2
2960.81.040.100	A	40	100	50	-	-	2
2960.81.040.125	A	40	125	75	-	-	2
2960.81.040.160	A	40	160	110	-	-	2
2960.81.040.200	A	40	200	150	-	-	2
2960.81.050.080	A	50	80	30	-	-	2
2960.81.050.100	A	50	100	50	-	-	2
2960.81.050.125	A	50	125	75	-	-	2
2960.81.050.160	A	50	160	110	-	-	2
2960.81.050.200	A	50	200	150	-	-	2
2960.81.050.225	A	50	225	175	-	-	2
2960.81.050.250	B	50	250	60	80	-	4
2960.81.050.300	B	50	300	80	90	-	4
2960.81.050.350	B	50	350	100	100	-	4
2960.81.050.400	B	50	400	120	110	-	4
2960.81.060.080	A	60	80	30	-	-	2
2960.81.060.100	A	60	100	50	-	-	2
2960.81.060.125	A	60	125	75	-	-	2
2960.81.060.160	A	60	160	110	-	-	2
2960.81.060.200	A	60	200	150	-	-	2
2960.81.060.225	A	60	225	175	-	-	2
2960.81.060.240	B	60	240	60	70	-	4
2960.81.060.250	B	60	250	60	80	-	4
2960.81.060.260	B	60	260	60	90	-	4
2960.81.060.280	B	60	280	60	110	-	4
2960.81.080.080	A	80	80	30	-	-	2
2960.81.080.100	A	80	100	50	-	-	2
2960.81.080.125	A	80	125	75	-	-	2
2960.81.080.160	A	80	160	110	-	-	2
2960.81.080.200	A	80	200	150	-	-	2
2960.81.080.225	A	80	225	175	-	-	2
2960.81.080.240	B	80	240	60	70	-	4
2960.81.080.250	B	80	250	60	80	-	4
2960.81.080.260	B	80	260	60	90	-	4
2960.81.080.280	B	80	280	60	110	-	4
2960.81.100.125	H	100	125	75	-	50	4
2960.81.100.160	H	100	160	110	-	50	4
2960.81.100.200	H	100	200	150	-	50	4
2960.81.100.240	B	100	240	60	70	-	4
2960.81.100.250	H	100	250	200	-	50	4
2960.81.100.260	B	100	260	60	90	-	4
2960.81.100.280	B	100	280	60	110	-	4
2960.81.100.300	D	100	300	125	-	50	5

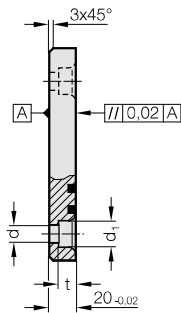
SLIDE PLATE, BRONZE WITH PERMANENT LUBRICANT, IN ACCORDANCE WITH WDX NORM



2960.82.25.



2960.82.25.



2960.82.25. Slide plate, bronze with permanent lubricant, in accordance with WDX norm

Order No	Shape	b	b ₂	l ₁	l ₂	l ₃	d	d ₁	t	Number of screw holes
2960.82.25.050.100	B	50	-	100	50	25	13.5	20	13	2
2960.82.25.050.125	B	50	-	125	75	25	13.5	20	13	2
2960.82.25.050.160	B	50	-	160	110	25	13.5	20	13	2
2960.82.25.050.200	B	50	-	200	150	25	13.5	20	13	2
2960.82.25.080.100	B	80	-	100	50	25	13.5	20	13	2
2960.82.25.080.125	B	80	-	125	75	25	13.5	20	13	2
2960.82.25.080.160	B	80	-	160	110	25	13.5	20	13	2
2960.82.25.080.200	B	80	-	200	150	25	13.5	20	13	2
2960.82.25.080.250	B	80	-	250	170	40	13.5	20	13	2
2960.82.25.080.315	B	80	-	315	235	40	13.5	20	13	2
2960.82.25.125.100	A	125	75	100	50	25	13.5	20	13	3
2960.82.25.125.125	A	125	75	125	75	25	13.5	20	13	3
2960.82.25.125.160	A	125	75	160	110	25	13.5	20	13	3
2960.82.25.125.200	A	125	75	200	150	25	13.5	20	13	3
2960.82.25.125.250	A	125	75	250	170	40	13.5	20	13	3
2960.82.25.125.315	A	125	75	315	235	40	13.5	20	13	3
2960.82.25.160.100	A	160	110	100	50	25	13.5	20	13	3
2960.82.25.160.125	A	160	110	125	75	25	13.5	20	13	3
2960.82.25.160.160	A	160	110	160	110	25	13.5	20	13	3
2960.82.25.160.200	A	160	110	200	150	25	13.5	20	13	3
2960.82.25.160.250	A	160	110	250	170	40	13.5	20	13	3
2960.82.25.160.315	A	160	110	315	235	40	13.5	20	13	3

Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762 M12.

SLIDING PAD, STEEL, VDI 3357

2960.88.



Material:

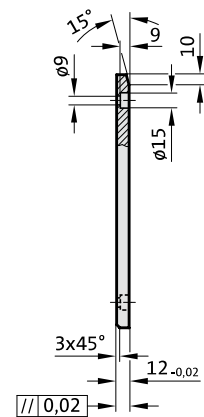
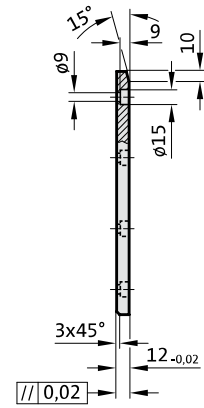
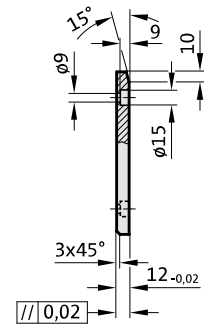
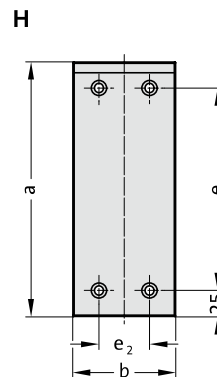
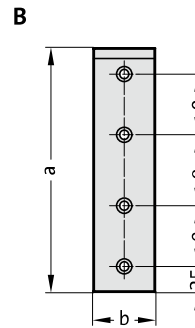
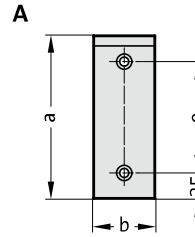
Steel, surface hardened

Note:

Screws are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762 M8.



SLIDING PAD, STEEL, VDI 3357

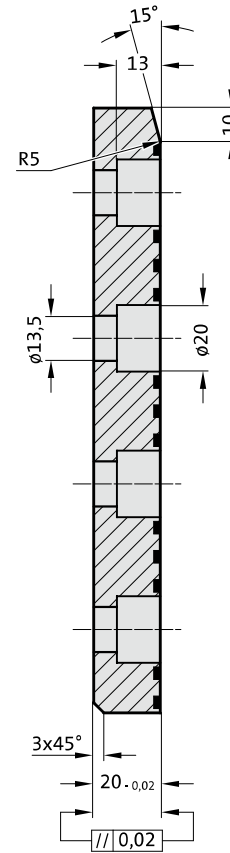
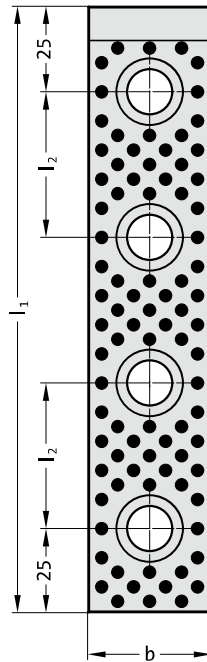
2960.88. Sliding pad, Steel, VDI 3357

Order No	Shape	b	a	e	e ₁	e ₂	Number of screw holes
2960.88.030.080	A	30	80	30	-	-	2
2960.88.030.100	A	30	100	50	-	-	2
2960.88.030.125	A	30	125	75	-	-	2
2960.88.030.160	A	30	160	110	-	-	2
2960.88.030.200	A	30	200	150	-	-	2
2960.88.040.080	A	40	80	30	-	-	2
2960.88.040.100	A	40	100	50	-	-	2
2960.88.040.125	A	40	125	75	-	-	2
2960.88.040.160	A	40	160	110	-	-	2
2960.88.040.200	A	40	200	150	-	-	2
2960.88.040.225	A	40	225	175	-	-	2
2960.88.040.240	B	40	240	60	70	-	4
2960.88.040.250	B	40	250	60	80	-	4
2960.88.040.260	B	40	260	60	90	-	4
2960.88.040.280	B	40	280	60	110	-	4
2960.88.050.080	A	50	80	30	-	-	2
2960.88.050.100	A	50	100	50	-	-	2
2960.88.050.125	A	50	125	75	-	-	2
2960.88.050.160	A	50	160	110	-	-	2
2960.88.050.180	A	50	180	130	-	-	2
2960.88.050.200	A	50	200	150	-	-	2
2960.88.050.225	A	50	225	175	-	-	2
2960.88.050.240	B	50	240	60	70	-	4
2960.88.050.250	B	50	250	60	80	-	4
2960.88.050.260	B	50	260	60	90	-	4
2960.88.050.280	B	50	280	60	110	-	4
2960.88.060.080	A	60	80	30	-	-	2
2960.88.060.100	A	60	100	50	-	-	2
2960.88.060.125	A	60	125	75	-	-	2
2960.88.060.160	A	60	160	110	-	-	2
2960.88.060.180	A	60	180	130	-	-	2
2960.88.060.200	A	60	200	150	-	-	2
2960.88.060.225	A	60	225	175	-	-	2
2960.88.060.240	B	60	240	60	70	-	4
2960.88.060.250	B	60	250	60	80	-	4
2960.88.060.260	B	60	260	60	90	-	4
2960.88.060.280	B	60	280	60	110	-	4
2960.88.060.300	B	60	300	80	90	-	4
2960.88.060.320	B	60	320	80	110	-	4
2960.88.060.340	B	60	340	80	130	-	4
2960.88.060.350	B	60	350	100	100	-	4
2960.88.080.080	A	80	80	30	-	-	2
2960.88.080.100	A	80	100	50	-	-	2
2960.88.080.125	A	80	125	75	-	-	2
2960.88.080.160	A	80	160	110	-	-	2
2960.88.080.200	A	80	200	150	-	-	2
2960.88.080.225	A	80	225	175	-	-	2
2960.88.080.240	B	80	240	60	70	-	4
2960.88.080.250	B	80	250	60	80	-	4
2960.88.080.260	B	80	260	60	90	-	4
2960.88.080.280	B	80	280	60	110	-	4
2960.88.080.300	B	80	300	80	90	-	4
2960.88.080.320	B	80	320	80	110	-	4
2960.88.080.340	B	80	340	80	130	-	4
2960.88.080.350	B	80	350	100	100	-	4
2960.88.100.125	H	100	125	75	-	50	4
2960.88.100.160	H	100	160	110	-	50	4
2960.88.100.200	H	100	200	150	-	50	4
2960.88.100.225	H	100	225	175	-	50	4
2960.88.100.250	B	100	250	60	80	-	4
2960.88.100.250.1	H	100	250	200	-	50	4
2960.88.100.280	B	100	280	60	110	-	4
2960.88.100.300	B	100	300	80	90	-	4
2960.88.100.320	B	100	320	80	110	-	4
2960.88.100.340	B	100	340	80	130	-	4
2960.88.100.350	B	100	350	100	100	-	4

SLIDING PAD, BRONZE WITH SOLID LUBRICANT, VDI 3357



2960.93.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

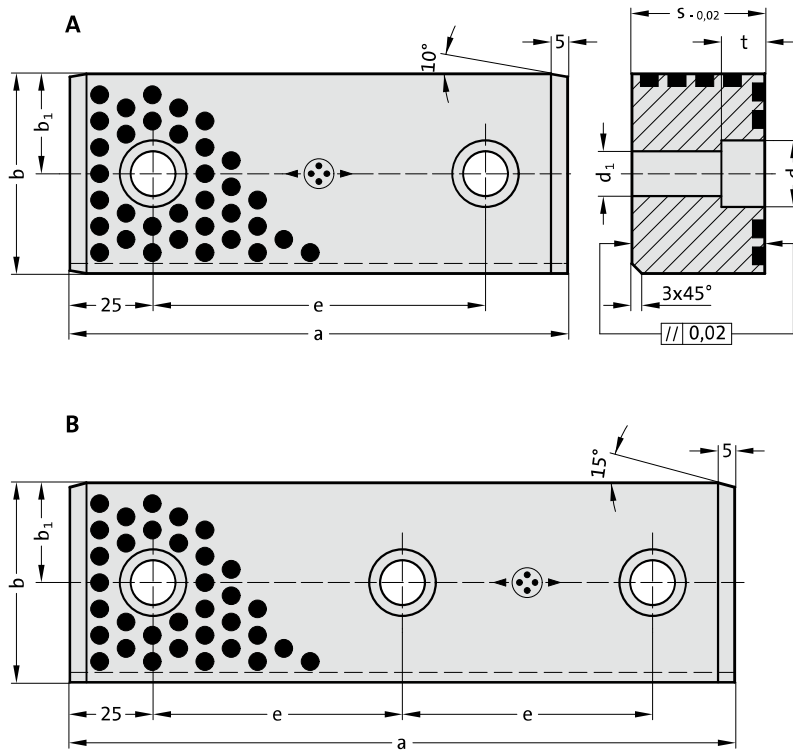
Use socket cap screws
DIN EN ISO 4762 M12.

2960.93. Sliding pad, Bronze with solid lubricant, VDI 3357

Order No	b	l ₁	l ₂
2960.93.050.250	50	250	60
2960.93.050.300	50	300	80
2960.93.050.350	50	350	100
2960.93.050.400	50	400	120
2960.93.050.450	50	450	140
2960.93.050.500	50	500	150
2960.93.080.250	80	250	60
2960.93.080.300	80	300	80
2960.93.080.350	80	350	100
2960.93.080.400	80	400	120
2960.93.080.450	80	450	140
2960.93.080.500	80	500	150
2960.93.100.250	100	250	60
2960.93.100.300	100	300	80
2960.93.100.350	100	350	100
2960.93.100.400	100	400	120
2960.93.100.450	100	450	140
2960.93.100.500	100	500	150
2960.93.125.250	125	250	60
2960.93.125.300	125	300	80
2960.93.125.350	125	350	100
2960.93.125.400	125	400	120
2960.93.125.450	125	450	140
2960.93.125.500	125	500	150
2960.93.160.250	160	250	60
2960.93.160.300	160	300	80
2960.93.160.350	160	350	100
2960.93.160.400	160	400	120
2960.93.160.450	160	450	140
2960.93.160.500	160	500	150

GUIDE BAR WITH TWO SLIDING SURFACES, BRONZE WITH SOLID LUBRICANT, VDI 3357

2962.75.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

Use socket cap screws
DIN EN ISO 4762.

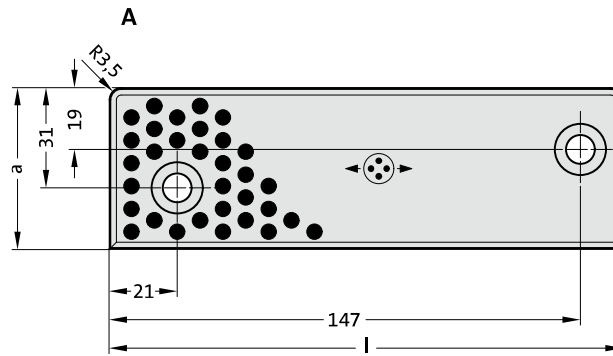
2962.75. Guide bar with two sliding surfaces, Bronze with solid lubricant, VDI 3357

Order No	Shape	a	b	s	b ₁	e	d	d ₁	t	Number of screw holes
2962.75.025.012.0110	A	110	25	12	12.5	60	15	9	8.5	2
2962.75.025.012.0120	A	120	25	12	12.5	70	15	9	8.5	2
2962.75.025.015.0110	A	110	25	15	12.5	60	18	11	10.5	2
2962.75.025.015.0120	A	120	25	15	12.5	70	18	11	10.5	2
2962.75.060.030.0125	A	125	60	30	30	75	20	13.5	13	2
2962.75.060.030.0150	A	150	60	30	30	100	20	13.5	13	2
2962.75.060.030.0160	A	160	60	30	30	110	20	13.5	13	2
2962.75.060.030.0200	B	200	60	30	30	75	20	13.5	13	3
2962.75.060.040.0125	A	125	60	40	30	75	20	13.5	13	2
2962.75.060.040.0150	A	150	60	40	30	100	20	13.5	13	2
2962.75.060.040.0160	A	160	60	40	30	110	20	13.5	13	2
2962.75.060.040.0200	B	200	60	40	30	75	20	13.5	13	3

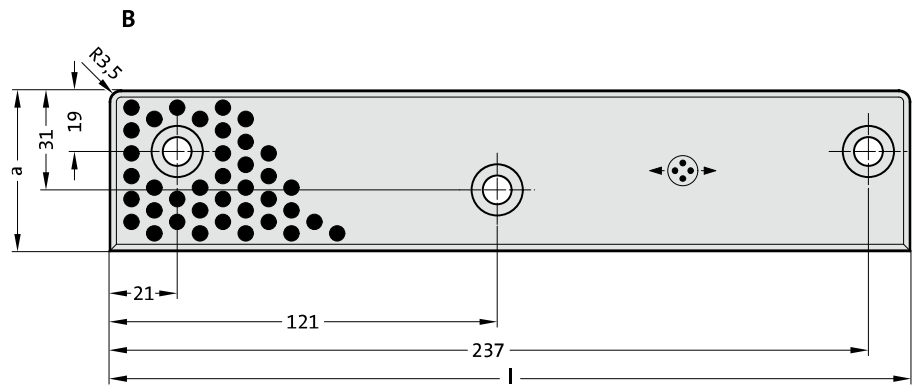
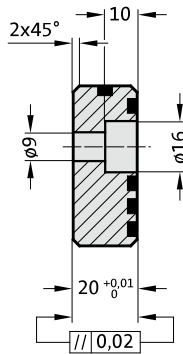
GUIDE BAR WITH TWO SLIDING SURFACES, BRONZE WITH SOLID LUBRICANT, CNOMO



2962.75.45.



2962.75.45.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

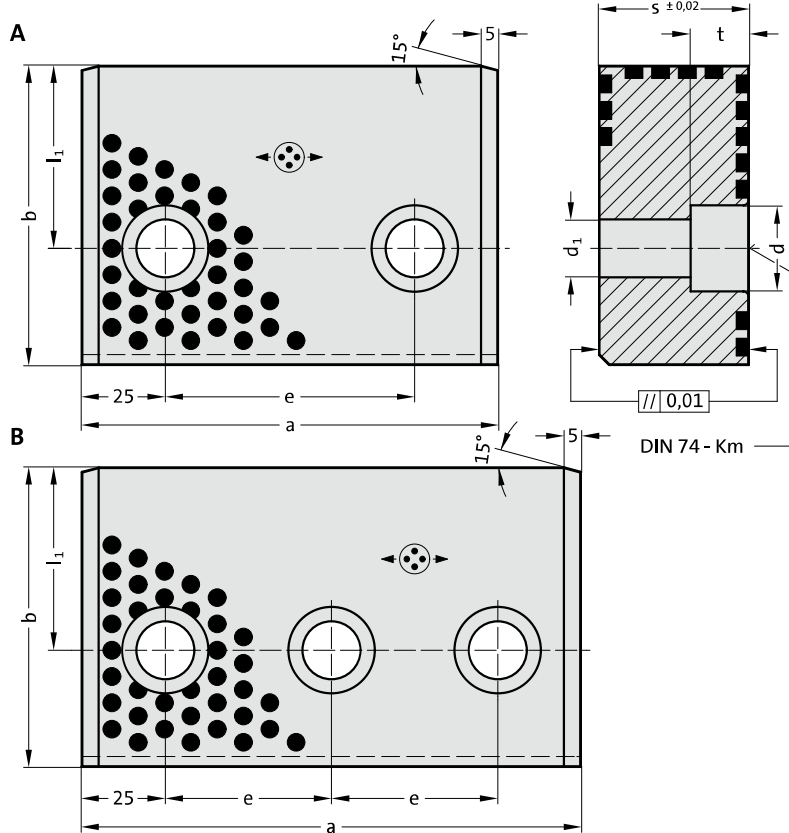
Use socket cap screws
DIN EN ISO 4762 M8.

**2962.75.45. Guide bar with two sliding surfaces,
Bronze with solid lubricant, CNOMO**

Order No	Shape	a	l	Number of screw holes
2962.75.45.050.20.160	A	50	160	2
2962.75.45.050.20.250	B	50	250	3

GUIDE BAR WITH THREE SLIDING SURFACES, BRONZE WITH SOLID LUBRICANT

2962.76.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762.

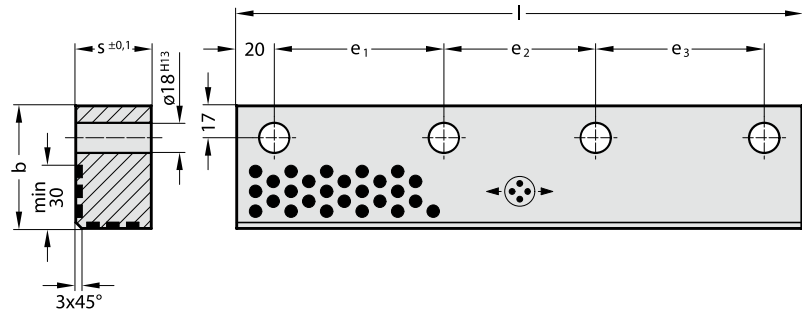
2962.76. Guide bar with three sliding surfaces, Bronze with solid lubricant

Order No	Shape	a	b	s	e	l ₁	d	d ₁	t	Number of screw holes
2962.76.070.032.0125	A	125	70	32	75	40	20	13,5	13	2
2962.76.070.032.0150	A	150	70	32	100	40	20	13,5	13	2
2962.76.070.032.0200	B	200	70	32	75	40	20	13,5	13	3
2962.76.090.045.0125	A	125	90	45	75	55	26	17,5	17,5	2
2962.76.090.045.0150	B	150	90	45	50	55	26	17,5	17,5	3
2962.76.090.045.0200	B	200	90	45	75	55	26	17,5	17,5	3

GUIDE BAR WITH TWO SLIDING SURFACES, BRONZE WITH SOLID LUBRICANT



2962.77.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

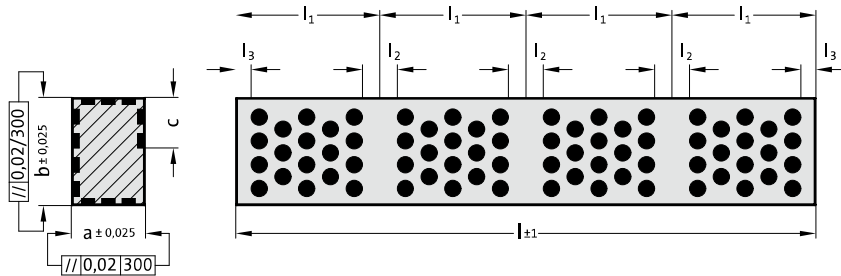
Screws are not included.

2962.77. Guide bar with two sliding surfaces, Bronze with solid lubricant

Order No	b	s	l	e ₁	e ₂	e ₃	Number of screw holes
2962.77.065.040.0150	65	40	150	110	-	-	2
2962.77.065.040.0200	65	40	200	80	80	-	3
2962.77.065.040.0250	65	40	250	105	105	-	3
2962.77.065.040.0300	65	40	300	90	80	90	4
2962.77.065.040.0350	65	40	350	105	100	105	4
2962.77.065.065.0150	65	65	150	110	-	-	2
2962.77.065.065.0200	65	65	200	80	80	-	3
2962.77.065.065.0250	65	65	250	105	105	-	3
2962.77.065.065.0300	65	65	300	90	80	90	4
2962.77.065.065.0350	65	65	350	105	100	105	4

GUIDE BAR WITH FOUR SLIDING SURFACES, BRONZE WITH SOLID LUBRICANT

2962.74.



2962.74. Guide bar with four sliding surfaces, Bronze with solid lubricant

Order No	a	b	c	l	l ₁	l ₂	l ₃
2962.74.015.010.075	10.3	15.3	6	75	25	6	3
2962.74.015.010.100	10.3	15.3	6	100	25	6	3
2962.74.015.010.125	10.3	15.3	6	125	25	6	3
2962.74.015.010.150	10.3	15.3	6	150	25	6	3
2962.74.015.010.175	10.3	15.3	6	175	25	6	3
2962.74.015.010.200	10.3	15.3	6	200	25	6	3
2962.74.015.010.225	10.3	15.3	6	225	25	6	3
2962.74.015.010.250	10.3	15.3	6	250	25	6	3
2962.74.015.010.275	10.3	15.3	6	275	25	6	3
2962.74.015.010.300	10.3	15.3	6	300	25	6	3
2962.74.025.015.105	15.3	25.3	8	105	35	8	4
2962.74.025.015.140	15.3	25.3	8	140	35	8	4
2962.74.025.015.175	15.3	25.3	8	175	35	8	4
2962.74.025.015.210	15.3	25.3	8	210	35	8	4
2962.74.025.015.245	15.3	25.3	8	245	35	8	4
2962.74.025.015.280	15.3	25.3	8	280	35	8	4
2962.74.025.015.315	15.3	25.3	8	315	35	8	4
2962.74.025.015.350	15.3	25.3	8	350	35	8	4
2962.74.025.015.385	15.3	25.3	8	385	35	8	4
2962.74.025.015.420	15.3	25.3	8	420	35	8	4
2962.74.025.015.455	15.3	25.3	8	455	35	8	4
2962.74.025.015.490	15.3	25.3	8	490	35	8	4
2962.74.035.025.135	25.3	35.3	12	135	45	10	5
2962.74.035.025.180	25.3	35.3	12	180	45	10	5
2962.74.035.025.225	25.3	35.3	12	225	45	10	5
2962.74.035.025.270	25.3	35.3	12	270	45	10	5
2962.74.035.025.315	25.3	35.3	12	315	45	10	5
2962.74.035.025.360	25.3	35.3	12	360	45	10	5
2962.74.035.025.405	25.3	35.3	12	405	45	10	5
2962.74.035.025.450	25.3	35.3	12	450	45	10	5
2962.74.035.025.495	25.3	35.3	12	495	45	10	5
2962.74.045.035.165	35.3	45.3	16	165	55	12	6
2962.74.045.035.220	35.3	45.3	16	220	55	12	6
2962.74.045.035.275	35.3	45.3	16	275	55	12	6
2962.74.045.035.330	35.3	45.3	16	330	55	12	6
2962.74.045.035.385	35.3	45.3	16	385	55	12	6
2962.74.045.035.440	35.3	45.3	16	440	55	12	6
2962.74.045.035.495	35.3	45.3	16	495	55	12	6

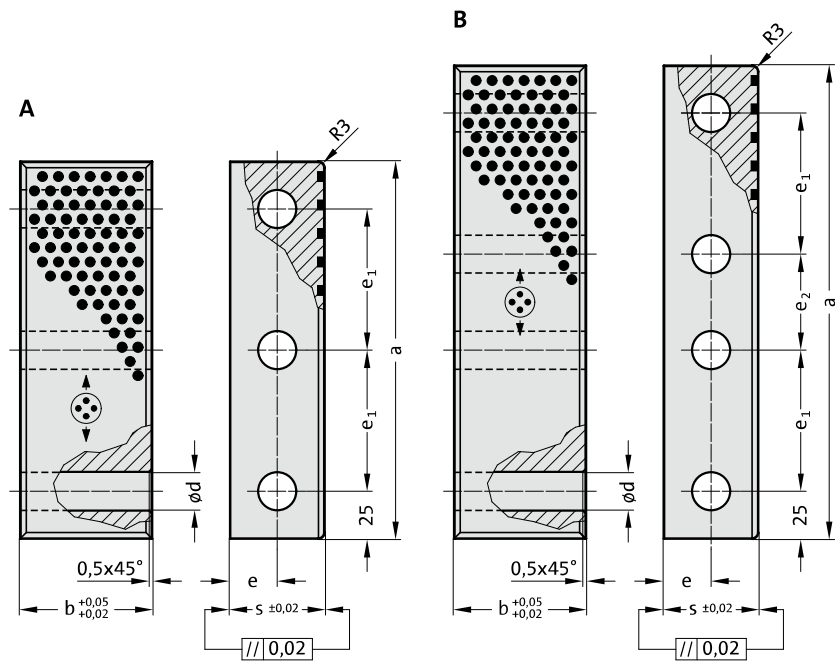
Material:

Bronze with solid lubricant, oilless lubricating

GUIDE BAR WITH ONE SLIDING SURFACES, BRONZE WITH SOLID LUBRICANT



2962.79.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

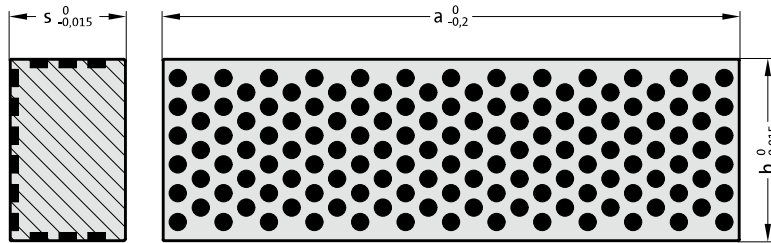
Screws are not included.

2962.79. Guide bar with one sliding surfaces, Bronze with solid lubricant

Order No	Shape	b	s	a	e	e ₁	e ₂	d	Number of screw holes
2962.79.030.040.150	A	30	40	150	20	50	-	14	3
2962.79.030.040.200	A	30	40	200	20	75	-	14	3
2962.79.030.040.250	B	30	40	250	20	75	50	14	4
2962.79.040.040.150	A	40	40	150	20	50	-	14	3
2962.79.040.040.200	A	40	40	200	20	75	-	14	3
2962.79.040.040.250	B	40	40	250	20	75	50	14	4
2962.79.045.050.150	A	45	50	150	25	50	-	18	3
2962.79.045.050.200	A	45	50	200	25	75	-	18	3
2962.79.045.050.250	B	45	50	250	25	75	50	18	4
2962.79.055.050.150	A	55	50	150	25	50	-	18	3
2962.79.055.050.200	A	55	50	200	25	75	-	18	3
2962.79.055.050.250	B	55	50	250	25	75	50	18	4
2962.79.060.050.150	A	60	50	150	25	50	-	18	3
2962.79.060.050.200	A	60	50	200	25	75	-	18	3
2962.79.060.050.250	B	60	50	250	25	75	50	18	4
2962.79.070.050.150	A	70	50	150	25	50	-	18	3
2962.79.070.050.200	A	70	50	200	25	75	-	18	3
2962.79.070.050.250	B	70	50	250	25	75	50	18	4

GUIDE BAR WITH THREE SLIDING SURFACES, BRONZE WITH SOLID LUBRICANT

2962.80.



2962.80. Guide bar with three sliding surfaces, Bronze with solid lubricant

Order No	b	s	a
2962.80.025.016.080	25	16	80
2962.80.025.016.100	25	16	100
2962.80.025.016.125	25	16	125
2962.80.040.025.125	40	25	125
2962.80.040.025.160	40	25	160
2962.80.040.025.200	40	25	200
2962.80.063.040.200	63	40	200
2962.80.063.040.250	63	40	250
2962.80.063.040.315	63	40	315

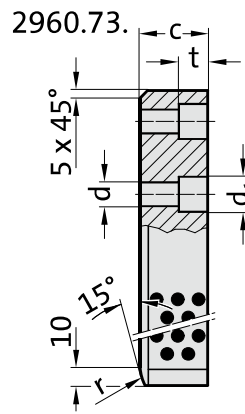
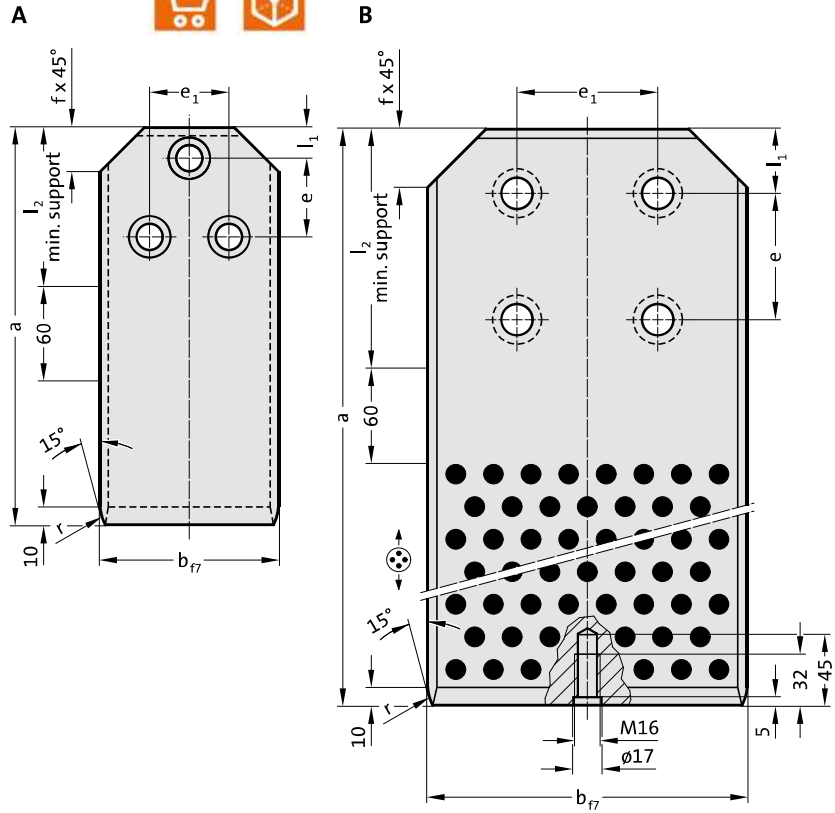
Material:

Bronze with solid lubricant, oilless lubricating

GUIDE BRACKET, STEEL WITH SOLID LUBRICANT, VDI 3387



2960.73.



Material:

Steel, surface hardened. Sliding faces with embedded solid lubricant.

Note:

Screws are not included.

Fixing:

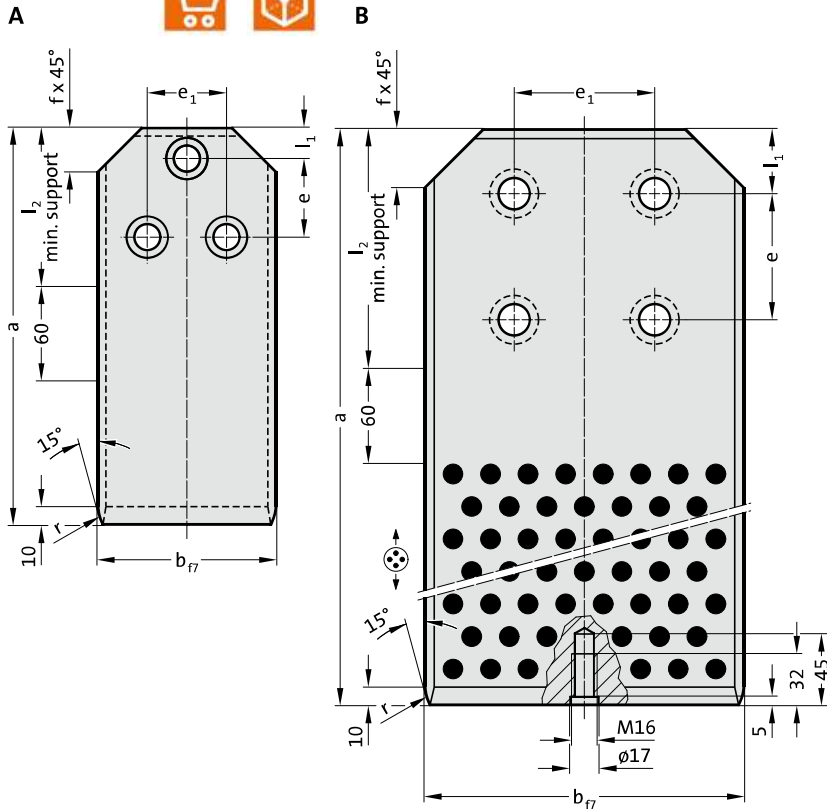
Use socket cap screws
DIN EN ISO 4762.

2960.73. Guide bracket, Steel with solid lubricant, VDI 3387

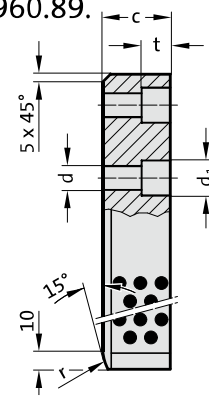
Order No	Shape	b	a	c	l ₁	l ₂	e	e ₁	d	d ₁	f	t	r	Number of screw holes
2960.73.063.180.036	A	63	180	36	20	90	50	36	14	20	18	16	16	3
2960.73.063.200.036	A	63	200	36	20	90	50	36	14	20	18	16	16	3
2960.73.063.224.036	A	63	224	36	20	90	50	36	14	20	18	16	16	3
2960.73.071.180.036	A	71	180	36	20	90	50	36	14	20	18	16	16	3
2960.73.071.200.036	A	71	200	36	20	90	50	36	14	20	18	16	16	3
2960.73.071.224.036	A	71	224	36	20	90	50	36	14	20	18	16	16	3
2960.73.090.200.045	A	90	200	45	20	100	50	50	18	26	28	21	25	3
2960.73.090.224.045	A	90	224	45	20	100	50	50	18	26	28	21	25	3
2960.73.090.250.045	A	90	250	45	20	100	50	50	18	26	28	21	25	3
2960.73.112.200.045	A	112	200	45	20	100	50	50	18	26	28	21	25	3
2960.73.112.224.045	A	112	224	45	20	100	50	50	18	26	28	21	25	3
2960.73.112.250.045	A	112	250	45	20	100	50	50	18	26	28	21	25	3
2960.73.140.315.045	B	140	315	45	40	150	80	90	22	33	36	25.5	31.5	4
2960.73.140.400.045	B	140	400	45	40	150	80	90	22	33	36	25.5	31.5	4
2960.73.140.400.056	B	140	400	56	40	150	80	90	22	33	36	25.5	31.5	4
2960.73.190.400.056	B	190	400	56	40	150	80	90	22	33	36	25.5	31.5	4
2960.73.240.500.056	B	240	500	56	40	250	160	160	26	40	36	30.5	31.5	4
2960.73.240.630.056	B	240	630	56	40	250	160	160	26	40	36	30.5	31.5	4

GUIDE BRACKET, BRONZE WITH SOLID LUBRICANT, VDI 3387

2960.89.



2960.89.



2960.89. Guide bracket, Bronze with solid lubricant, VDI 3387

Order No	Shape	b	a	l ₁	l ₂	e	e ₁	d	d ₁	f	c	t	r	Number of screw holes
2960.89.063.180	A	63	180	20	90	50	36	14	20	18	36	16	16	3
2960.89.063.200	A	63	200	20	90	50	36	14	20	18	36	16	16	3
2960.89.063.224	A	63	224	20	90	50	36	14	20	18	36	16	16	3
2960.89.071.180	A	71	180	20	90	50	36	14	20	18	36	16	16	3
2960.89.071.200	A	71	200	20	90	50	36	14	20	18	36	16	16	3
2960.89.071.224	A	71	224	20	90	50	36	14	20	18	36	16	16	3
2960.89.090.200	A	90	200	20	100	50	50	18	26	28	45	21	25	3
2960.89.090.224	A	90	224	20	100	50	50	18	26	28	45	21	25	3
2960.89.090.250	A	90	250	20	100	50	50	18	26	28	45	21	25	3
2960.89.112.200	A	112	200	20	100	50	50	18	26	28	45	21	25	3
2960.89.112.224	A	112	224	20	100	50	50	18	26	28	45	21	25	3
2960.89.112.250	A	112	250	20	100	50	50	18	26	28	45	21	25	3
2960.89.140.315	B	140	315	40	150	80	90	22	33	36	45	25.5	31.5	4
2960.89.190.400	B	190	400	40	150	80	90	22	33	36	56	25.5	31.5	4
2960.89.240.500	B	240	500	40	250	160	160	26	40	36	56	30.5	31.5	4
2960.89.240.630	B	240	630	40	250	160	160	26	40	36	56	30.5	31.5	4

Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

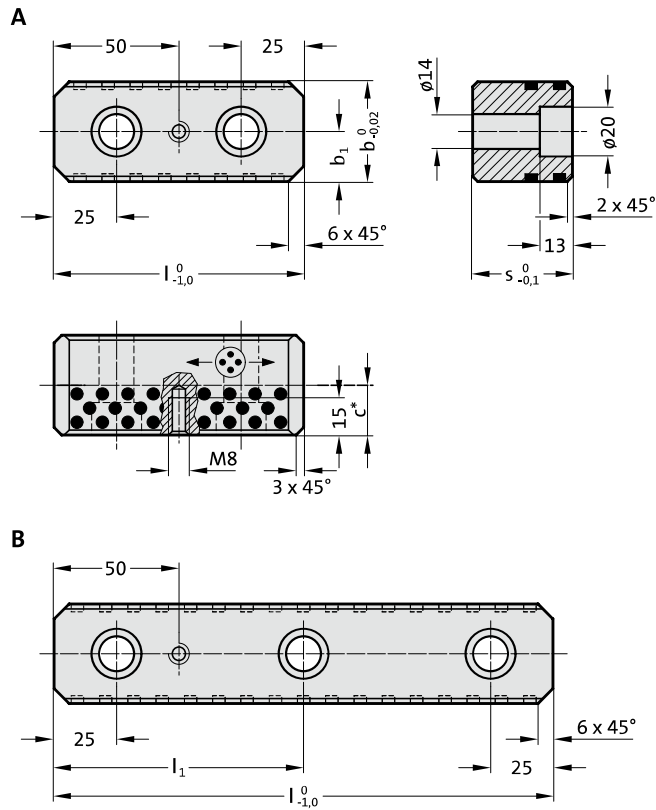
Fixing:

Use socket cap screws
DIN EN ISO 4762.

SLIDE CENTRE GUIDE, BRONZE WITH SOLID LUBRICANT



2966.72.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

Use socket cap screws
DIN EN ISO 4762 M12.



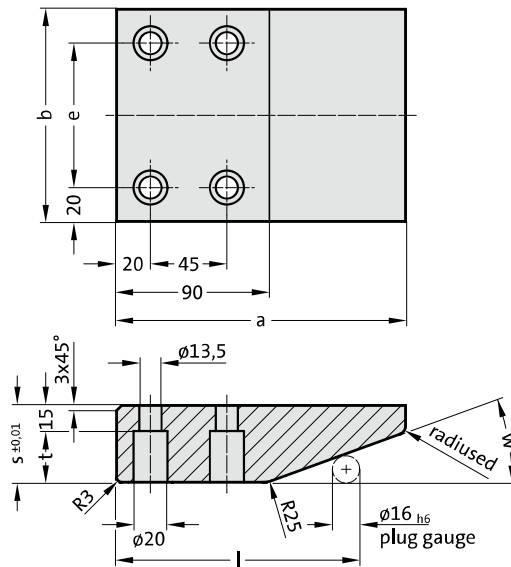
2966.72. Slide centre guide, Bronze with solid lubricant

Order No	Shape	b	l	s	b ₁	l ₁	c*	Number of screw holes
2966.72.030.100.030	A	30	100	30	15	-	18	2
2966.72.030.150.030	A	30	150	30	15	-	18	2
2966.72.030.200.030	B	30	200	30	15	100	18	3
2966.72.030.250.030	B	30	250	30	15	125	18	3
2966.72.030.300.030	B	30	300	30	15	150	18	3
2966.72.030.350.030	B	30	350	30	15	175	18	3
2966.72.040.100.030	A	40	100	30	20	-	18	2
2966.72.040.150.030	A	40	150	30	20	-	18	2
2966.72.040.200.030	B	40	200	30	20	100	18	3
2966.72.040.250.030	B	40	250	30	20	125	18	3
2966.72.040.300.030	B	40	300	30	20	150	18	3
2966.72.040.350.030	B	40	350	30	20	175	18	3
2966.72.040.100.040	A	40	100	40	20	-	20	2
2966.72.040.150.040	A	40	150	40	20	-	20	2
2966.72.040.200.040	B	40	200	40	20	100	20	3
2966.72.040.250.040	B	40	250	40	20	125	20	3
2966.72.040.300.040	B	40	300	40	20	150	20	3
2966.72.040.350.040	B	40	350	40	20	175	20	3

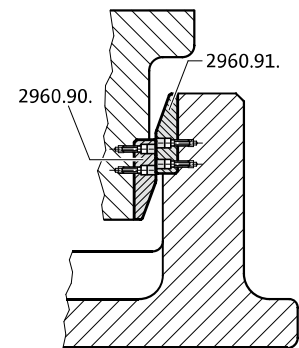
*Solid lubricant area

OVERRUN CAM, STEEL HARDENED, VDI 3357

2960.90.



Mounting example



2960.90. Overrun Cam, Steel hardened, VDI 3357

Order No	b	a	s	e	t	w	l
2960.90.100.170.045	100	170	45	60	30	20	143.37
2960.90.125.170.045	125	170	45	85	30	20	143.37
2960.90.150.170.045	150	170	45	110	30	20	143.37
2960.90.200.170.045	200	170	45	160	30	20	143.37
2960.90.100.150.045	100	150	45	60	30	30	127.86
2960.90.100.170.060	100	170	60	60	45	30	127.86
2960.90.125.150.045	125	150	45	85	30	30	127.86
2960.90.125.170.060	125	170	60	85	45	30	127.86
2960.90.150.150.045	150	150	45	110	30	30	127.86
2960.90.150.170.060	150	170	60	110	45	30	127.86
2960.90.200.150.045	200	150	45	160	30	30	127.86
2960.90.200.170.060	200	170	60	160	45	30	127.86

Material:

Steel, through-hardened

Note:

Screws are not included.

Fixing:

Use socket cap screws
DIN EN ISO 4762 M12.

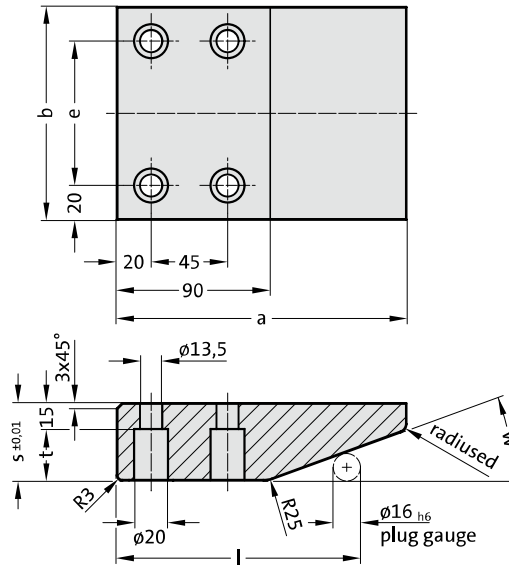
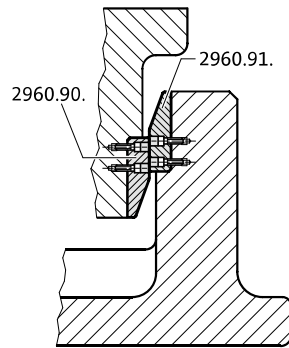
OVERRUN CAM, STEEL HARDENED AND GAS NITRIDED, VDI 3357



2960.91.



Mounting example



Material:

Steel, through-hardened and gas nitrided

Note:

Screws are not included.

Fixing:

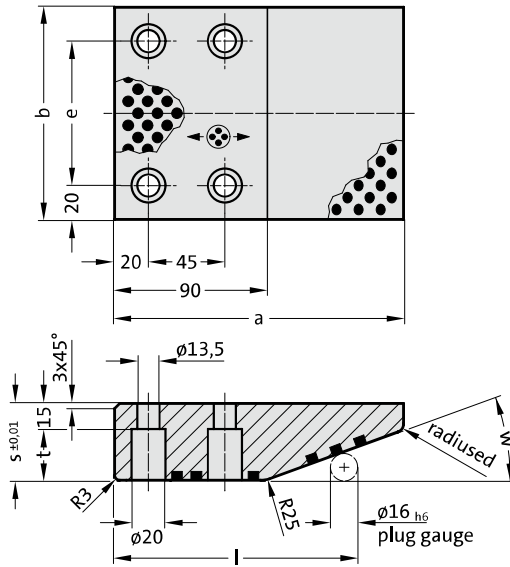
Use socket cap screws
DIN EN ISO 4762 M12.

2960.91. Overrun Cam, Steel hardened and gas nitrided, VDI 3357

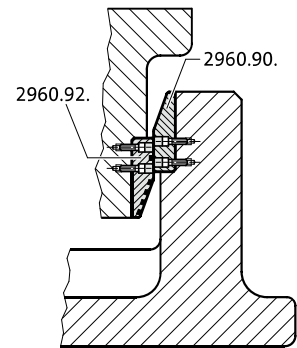
Order No	b	a	s	e	t	w	l
2960.91.100.170.045	100	170	45	60	30	20	143.37
2960.91.125.170.045	125	170	45	85	30	20	143.37
2960.91.150.170.045	150	170	45	110	30	20	143.37
2960.91.200.170.045	200	170	45	160	30	20	143.37
2960.91.100.150.045	100	150	45	60	30	30	127.86
2960.91.100.170.060	100	170	60	60	45	30	127.86
2960.91.125.150.045	125	150	45	85	30	30	127.86
2960.91.125.170.060	125	170	60	85	45	30	127.86
2960.91.150.150.045	150	150	45	110	30	30	127.86
2960.91.150.170.060	150	170	60	110	45	30	127.86
2960.91.200.150.045	200	150	45	160	30	30	127.86
2960.91.200.170.060	200	170	60	160	45	30	127.86

OVERRUN CAM, BRONZE WITH SOLID LUBRICANT, VDI 3357

2960.92.



Mounting example



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

Order No	b	a	s	e	t	w	l
2960.92.100.170.045	100	170	45	60	30	20	143.37
2960.92.125.170.045	125	170	45	85	30	20	143.37
2960.92.150.170.045	150	170	45	110	30	20	143.37
2960.92.200.170.045	200	170	45	160	30	20	143.37
2960.92.100.150.045	100	150	45	60	30	30	127.86
2960.92.100.170.060	100	170	60	60	45	30	127.86
2960.92.125.150.045	125	150	45	85	30	30	127.86
2960.92.125.170.060	125	170	60	85	45	30	127.86
2960.92.150.150.045	150	150	45	110	30	30	127.86
2960.92.150.170.060	150	170	60	110	45	30	127.86
2960.92.200.150.045	200	150	45	160	30	30	127.86
2960.92.200.170.060	200	170	60	160	45	30	127.86

Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

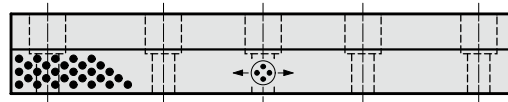
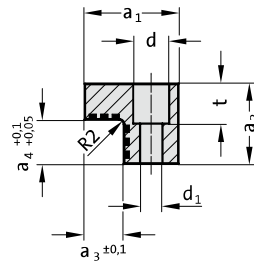
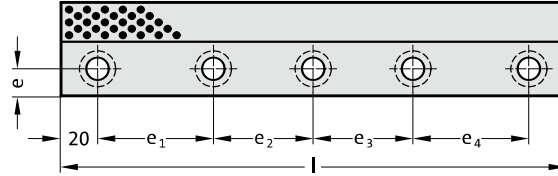
Fixing:

Use socket cap screws
DIN EN ISO 4762 M12.

ANGLED GUIDE GIB, BRONZE WITH SOLID LUBRICANT



2962.70.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

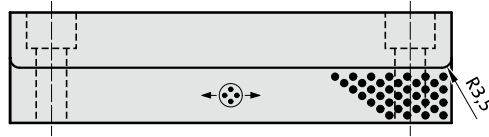
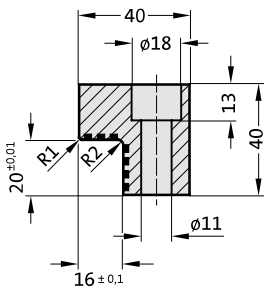
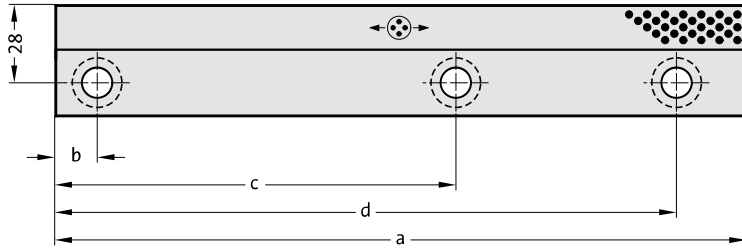
Use socket cap screws DIN EN ISO 4762.

2962.70. Angled guide gib, Bronze with solid lubricant

Order No	a ₁	a ₂	l	a ₃	a ₄	e	e ₁	e ₂	e ₃	e ₄	d	d ₁	t	Number of screw holes
2962.70.026.100	26	20	100	8	10	9	60	-	-	-	15	9	9.6	2
2962.70.026.150	26	20	150	8	10	9	55	55	-	-	15	9	9.6	3
2962.70.026.200	26	20	200	8	10	9	55	50	55	-	15	9	9.6	4
2962.70.032.100	32	30	100	10	15	11	60	-	-	-	11	-	-	2
2962.70.032.150	32	30	150	10	15	11	55	55	-	-	11	-	-	3
2962.70.032.200	32	30	200	10	15	11	55	50	55	-	11	-	-	4
2962.70.032.250	32	30	250	10	15	11	70	70	70	-	11	-	-	4
2962.70.050.200	50	45	200	22	25	14	55	50	55	-	18	11	25	4
2962.70.050.250	50	45	250	22	25	14	70	70	70	-	18	11	25	4
2962.70.050.300	50	45	300	22	25	14	65	65	65	65	18	11	25	5
2962.70.050.350	50	45	350	22	25	14	80	75	75	80	18	11	25	5

ANGLED GUIDE GIB, BRONZE WITH SOLID LUBRICANT, CNOMO

2962.70.45.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762 M10.

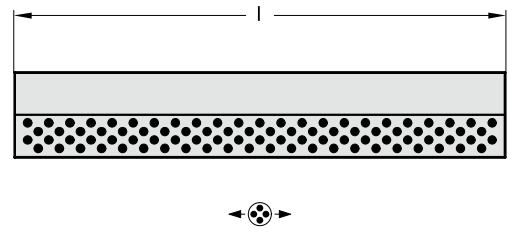
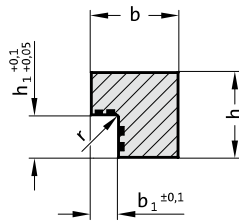
2962.70.45. Angled guide gib, Bronze with solid lubricant, CNOMO

Order No	a	b	c	d	Number of screw holes
2962.70.45.040.160	160	15	145	-	2
2962.70.45.040.250	250	15	145	225	3

ANGLED GUIDE GIB, BRONZE WITH SOLID LUBRICANT



2962.71.



Material:

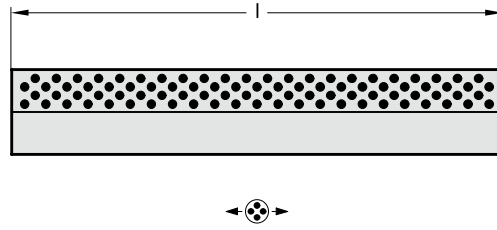
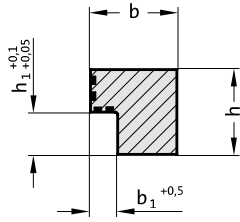
Bronze with solid lubricant, oilless lubricating

2962.71. Angled guide gib, Bronze with solid lubricant

Order No	b	h	b ₁	h ₁	l
2962.71.020.012.0305	20	12	5	6	305
2962.71.025.015.0305	25	15	7	8	305
2962.71.030.020.0305	30	20	9	12	305
2962.71.032.030.0605	32	30	10	15	605
2962.71.032.030.1005	32	30	10	15	1005
2962.71.035.035.0605	35	35	12	24	605
2962.71.035.035.1005	35	35	12	24	1005
2962.71.050.045.0605	50	45	22	25	605
2962.71.050.045.1005	50	45	22	25	1005
2962.71.050.050.0605	50	50	16	34	605
2962.71.050.050.1005	50	50	16	34	1005

ANGLED GUIDE GIB, BRONZE WITH SOLID LUBRICANT

2962.72.



Material:

Bronze with solid lubricant, oilless lubricating

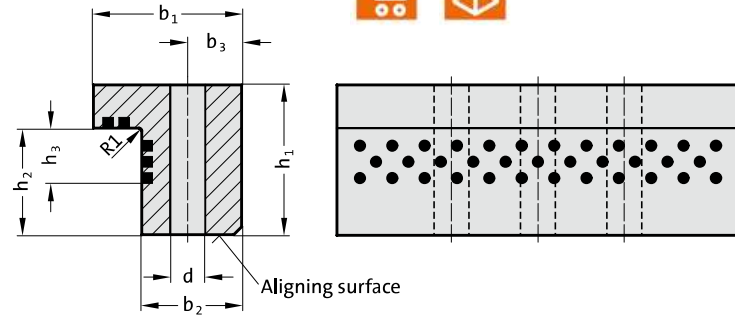
2962.72. Angled guide gib, Bronze with solid lubricant

Order No	b	h	b ₁	h ₁	l
2962.72.015.012.0205	15	12	5	5	205
2962.72.020.022.0205	20	22	5	7	205
2962.72.020.017.0205	20	17	5	7	205
2962.72.020.017.0320	20	17	5	7	320
2962.72.020.022.0320	20	22	5	7	320
2962.72.028.027.0205	28	27	8	10	205
2962.72.028.036.0205	28	36	8	10	205
2962.72.028.046.0205	28	46	8	10	205
2962.72.028.027.0320	28	27	8	10	320
2962.72.028.036.0320	28	36	8	10	320
2962.72.028.046.0320	28	46	8	10	320
2962.72.028.027.0605	28	27	8	10	605
2962.72.028.036.0605	28	36	8	10	605
2962.72.028.046.0605	28	46	8	10	605
2962.72.040.066.0205	40	66	12	22	205
2962.72.040.066.0320	40	66	12	22	320
2962.72.040.066.0605	40	66	12	22	605
2962.72.040.086.0205	40	86	12	26	205
2962.72.040.086.0320	40	86	12	26	320
2962.72.040.086.0605	40	86	12	26	605

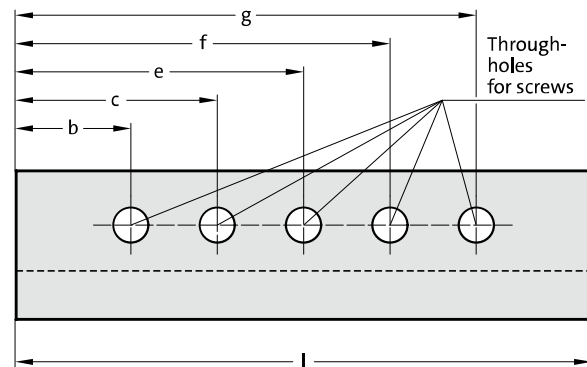
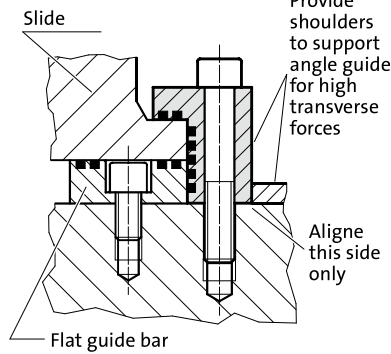
ANGLED GUIDE GIB, BRONZE WITH SOLID LUBRICANT, VDI 3357



2962.73.



Mounting example



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

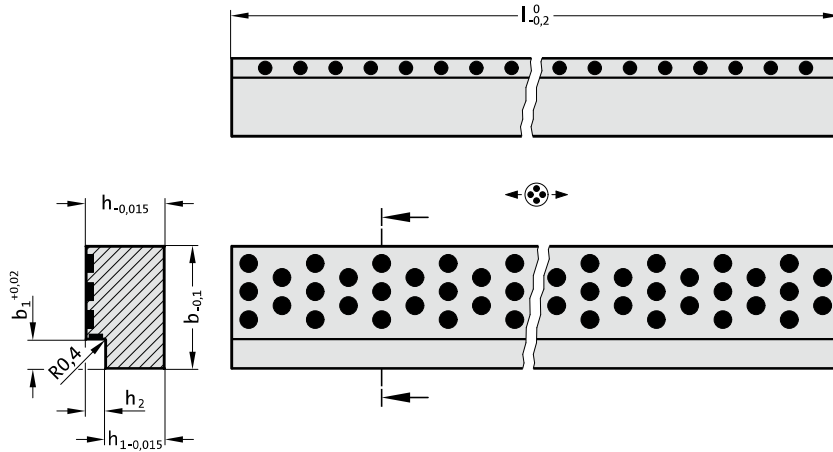
Use socket cap screws DIN EN ISO 4762.

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

Order No	b ₁	h ₁	l	b ₂	b ₃	h ₂	h ₃	b	c	e	f	g	d	Number of screw holes
2962.73.025.125	25	15.5	125	18	9	8.5	6	27.5	-	-	-	97.5	9	2
2962.73.025.160	25	15.5	160	18	9	8.5	6	27.5	-	-	-	132.5	9	2
2962.73.032.125	32	30.5	125	22	11	15.5	9	27.5	-	-	-	97.5	11	2
2962.73.032.160	32	30.5	160	22	11	15.5	9	27.5	-	-	-	132.5	11	2
2962.73.032.200	32	30.5	200	22	11	15.5	9	27.5	-	-	-	172.5	11	2
2962.73.045.100	45	50.5	100	30	15	34.5	18	27.5	-	-	-	72.5	13.5	2
2962.73.045.160	45	50.5	160	30	15	34.5	18	27.5	-	-	-	132.5	13.5	2
2962.73.055.100	55	55.5	100	37	20	39.5	23	27.5	-	-	-	72.5	13.5	2
2962.73.055.160	55	55.5	160	37	20	39.5	23	27.5	-	-	-	132.5	13.5	2
2962.73.070.160	70	75.5	160	50	30	55.5	35	35	-	-	-	125	17.5	2
2962.73.070.200	70	75.5	200	50	30	55.5	35	35	-	-	-	165	17.5	2
2962.73.070.250	70	75.5	250	50	30	55.5	35	35	-	125	-	215	17.5	3
2962.73.070.400	70	75.5	400	50	30	55.5	35	35	125	200	275	365	17.5	5
2962.73.085.160	85	90.5	160	63	38	65.5	45	42.5	-	-	-	117.5	22	2
2962.73.085.200	85	90.5	200	63	38	65.5	45	42.5	-	-	-	157.5	22	2
2962.73.085.250	85	90.5	250	63	38	65.5	45	42.5	-	125	-	207.5	22	3
2962.73.085.400	85	90.5	400	63	38	65.5	45	42.5	125	200	275	357.5	22	5

ANGLED GUIDE GIB, BRONZE WITH SOLID LUBRICANT

2962.81.



Material:
Bronze with solid lubricant, oilless lubricating

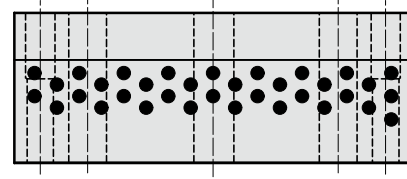
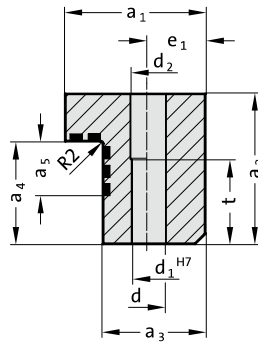
2962.81. Angled guide gib, Bronze with solid lubricant

Order No	h	b	l	h ₁	h ₂	b ₁
2962.81.016.115.040	16	11.5	40	12	4	6
2962.81.016.115.050	16	11.5	50	12	4	6
2962.81.016.115.063	16	11.5	63	12	4	6
2962.81.016.115.080	16	11.5	80	12	4	6
2962.81.016.155.050	16	15.5	50	11	5	8
2962.81.016.155.063	16	15.5	63	11	5	8
2962.81.016.155.080	16	15.5	80	11	5	8
2962.81.016.155.100	16	15.5	100	11	5	8
2962.81.020.195.063	20	19.5	63	15	5	8
2962.81.020.195.080	20	19.5	80	15	5	8
2962.81.020.195.100	20	19.5	100	15	5	8
2962.81.020.195.125	20	19.5	125	15	5	8
2962.81.020.245.080	20	24.5	80	15	5	8
2962.81.020.245.100	20	24.5	100	15	5	8
2962.81.020.245.125	20	24.5	125	15	5	8
2962.81.020.245.160	20	24.5	160	15	5	8
2962.81.025.315.100	25	31.5	100	19	6	10
2962.81.025.315.125	25	31.5	125	19	6	10
2962.81.025.315.160	25	31.5	160	19	6	10
2962.81.025.315.200	25	31.5	200	19	6	10
2962.81.025.395.125	25	39.5	125	19	6	10
2962.81.025.395.160	25	39.5	160	19	6	10
2962.81.025.395.200	25	39.5	200	19	6	10
2962.81.025.395.250	25	39.5	250	19	6	10
2962.81.032.495.160	32	49.5	160	24	8	12
2962.81.032.495.200	32	49.5	200	24	8	12
2962.81.032.495.250	32	49.5	250	24	8	12
2962.81.032.495.315	32	49.5	315	24	8	12

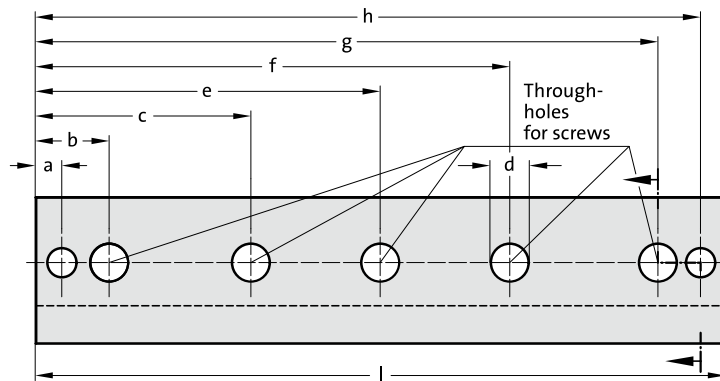
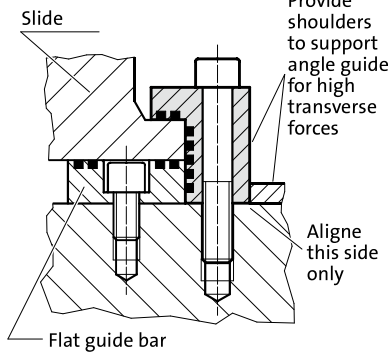
ANGLED GUIDE GIB, BRONZE WITH SOLID LUBRICANT



2962.82.



Mounting example



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws and pins are not included.

Fixing:

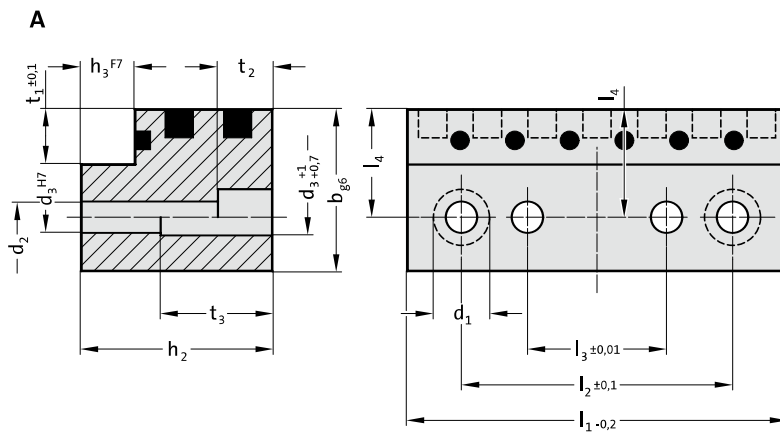
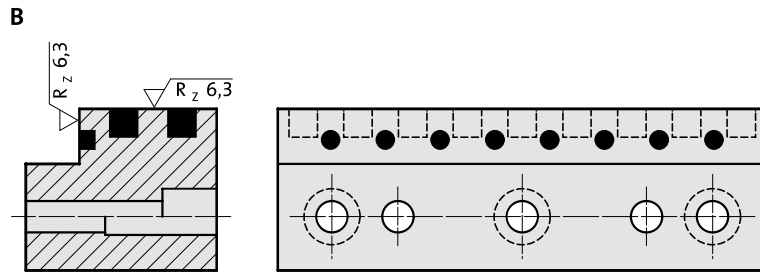
Use socket cap screws DIN EN ISO 4762 and dowel pins DIN 7979.

2962.82. Angled guide gib, Bronze with solid lubricant

Order No	a ₁	a ₂	l	a ₃	a ₄	a ₅	a	b	c	e	e ₁	f	g	h	d	d ₁	d ₂	t	Number of screw holes
2962.82.055.100	55	55	100	37	39	23	10	27.5	-	-	20	-	72.5	90	13.5	10	11	30	2
2962.82.055.160	55	55	160	37	39	23	10	27.5	-	-	20	-	132.5	150	13.5	10	11	30	2
2962.82.070.160	70	75	160	50	55	35	12.5	35	-	-	30	-	125	147.5	17.5	12	13	30	2
2962.82.070.200	70	75	200	50	55	35	12.5	35	-	-	30	-	165	187.5	17.5	12	13	30	2
2962.82.070.250	70	75	250	50	55	35	12.5	35	-	125	30	-	215	237.5	17.5	12	13	30	3
2962.82.070.400	70	75	400	50	55	35	12.5	35	125	200	30	275	365	387.5	17.5	12	13	30	5
2962.82.085.160	85	90	160	63	65	45	15	42.5	-	-	38	-	117.5	145	22	16	17	30	2
2962.82.085.200	85	90	200	63	65	45	15	42.5	-	-	38	-	157.5	185	22	16	17	30	2
2962.82.085.250	85	90	250	63	65	45	15	42.5	-	125	38	-	207.5	235	22	16	17	30	3
2962.82.085.400	85	90	400	63	65	45	15	42.5	125	200	38	275	357.5	385	22	16	17	30	5

ANGLED GUIDE GIB, BRONZE WITH SOLID LUBRICANT

2962.83.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws and pins are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762 and dowel pins DIN 7979.

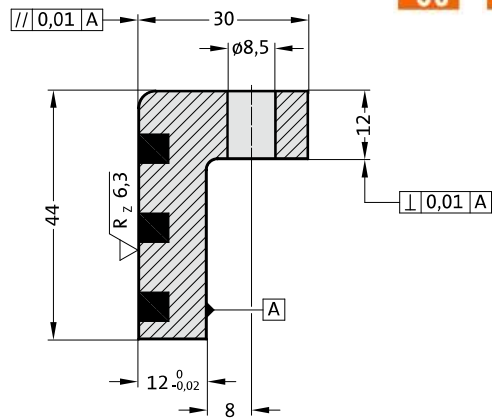
2962.83. Angled guide gib, Bronze with solid lubricant

Order No	Shape	b	h ₁	h ₂	l ₁	h ₃	t ₁	l ₂	l ₃	l ₄	d ₁	d ₂	d ₃	t ₂	t ₃	Number of screw holes
2962.83.016.012.050	A	16	12	11	50	4	5	34	14	9.5	10	5.5	5	5.7	-	2
2962.83.016.012.071	A	16	12	11	71	4	5	55	35	9.5	10	5.5	5	5.7	-	2
2962.83.016.012.090	B	16	12	11	90	4	5	74	54	9.5	10	5.5	5	5.7	-	3
2962.83.020.020.080	A	20	20	19	80	5	5	64	40	12	11	6.6	6	6.8	9.5	2
2962.83.020.020.100	A	20	20	19	100	5	5	84	60	12	11	6.6	6	6.8	9.5	2
2962.83.020.020.125	B	20	20	19	125	5	5	109	85	12	11	6.6	6	6.8	9.5	3
2962.83.025.032.100	A	25	32	31	100	6	6	80	50	15.5	15	9	8	9	19	2
2962.83.025.032.125	A	25	32	31	125	6	6	105	75	15.5	15	9	8	9	19	2
2962.83.025.032.160	B	25	32	31	160	6	6	140	110	15.5	15	9	8	9	19	3
2962.83.030.050.125	A	30	50	49	125	8	7	95	55	18	18	11	10	11	34	2
2962.83.030.050.160	A	30	50	49	160	8	7	130	90	18	18	11	10	11	34	2
2962.83.030.050.200	B	30	50	49	200	8	7	170	130	18	18	11	10	11	34	3

ANGLED GUIDE GIB, BRONZE WITH SOLID LUBRICANT



2962.86.



Material:

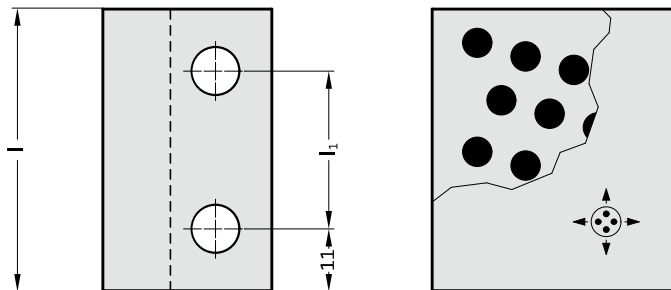
Bronze with solid lubricant, oilless lubricating

Note:

Screws are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762.

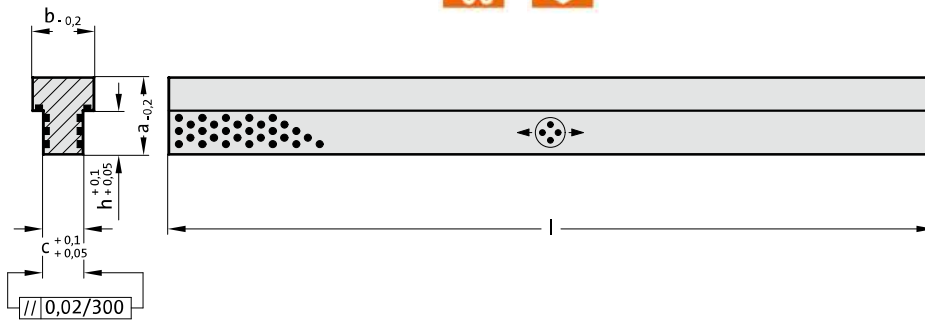


2962.86. Angled guide gib, Bronze with solid lubricant

Order No	l	h
2962.86.044.030.050	50	28
2962.86.044.030.100	100	78
2962.86.044.030.150	150	128
2962.86.044.030.200	200	178

T-GUIDE BAR, BRONZE WITH SOLID LUBRICANT

2964.77.



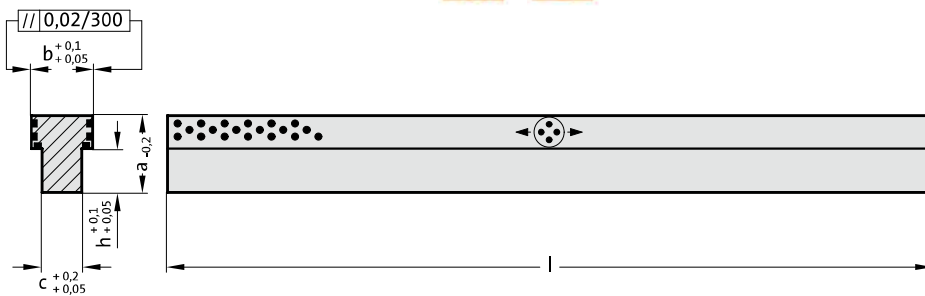
2964.77. T-Guide bar, Bronze with solid lubricant

Order No	a	b	c	h	l
2964.77.012.018.0350	12	18	8	5	350
2964.77.025.022.0350	25	22	12	15	350
2964.77.035.028.0350	35	28	18	20	350

Material:

Bronze with solid lubricant, oilless lubricating

2964.78.



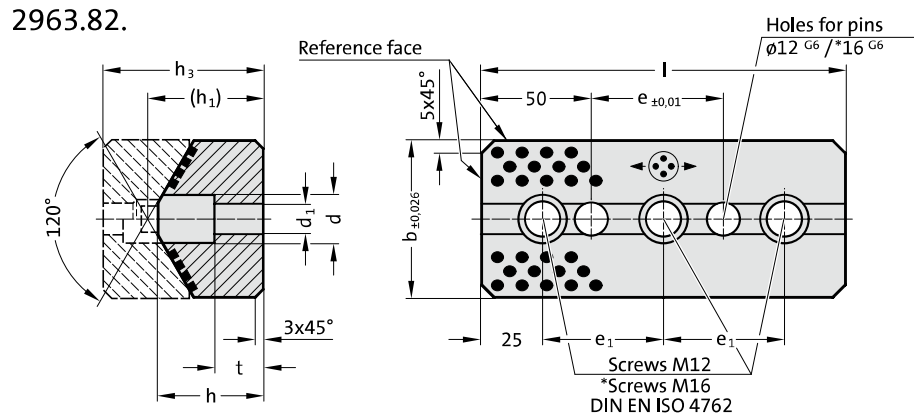
2964.78. T-Guide bar, Bronze with solid lubricant

Order No	a	b	c	h	l
2964.78.012.018.0350	12	18	8	5	350
2964.78.025.022.0350	25	22	12	15	350
2964.78.035.028.0350	35	28	18	20	350

Material:

Bronze with solid lubricant, oilless lubricating

SLIDING BLOCK, BRONZE WITH SOLID LUBRICANT, NAAMS PRISMATIC GUIDE, STEEL, NAAMS



Material:

Bronze with solid lubricant, oilless lubricating

Note:

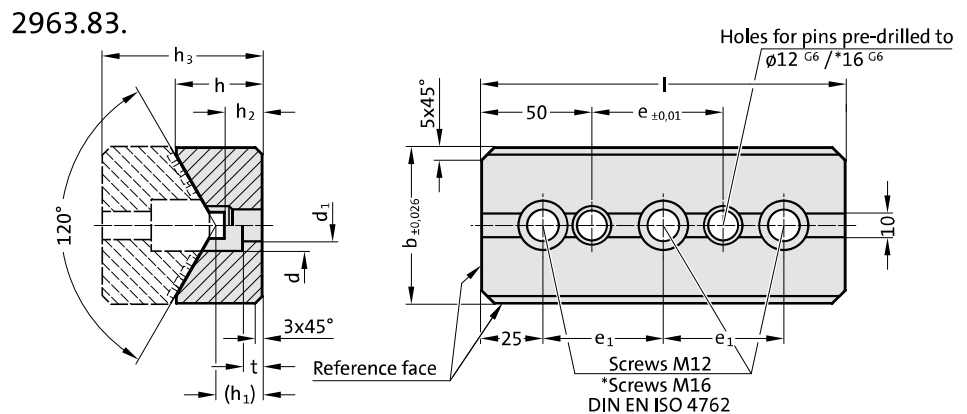
Screws and pins are not included.

* at 2963.82.125.



2963.82. Sliding block, Bronze with solid lubricant, NAAMS

Order No	b	h	h ₁	h ₃	l	e ₁	e	d	d ₁	t	Number of screw holes
2963.82.065.039.0150	65	39	(42)	65	150	100	50	20	13.5	13	2
2963.82.065.039.0200	65	39	(42)	65	200	150	100	20	13.5	13	2
2963.82.065.039.0250	65	39	(42)	65	250	100	150	20	13.5	13	3
2963.82.065.039.0300	65	39	(42)	65	300	125	200	20	13.5	13	3
2963.82.075.039.0150	75	39	(42)	65	150	100	50	20	13.5	13	2
2963.82.075.039.0200	75	39	(42)	65	200	150	100	20	13.5	13	2
2963.82.075.039.0250	75	39	(42)	65	250	100	150	20	13.5	13	3
2963.82.075.039.0300	75	39	(42)	65	300	125	200	20	13.5	13	3
2963.82.125.052.0150	125	52	(57)	85	150	100	50	26	17.5	15	2
2963.82.125.052.0200	125	52	(57)	85	200	150	100	26	17.5	15	2
2963.82.125.052.0250	125	52	(57)	85	250	100	150	26	17.5	15	3
2963.82.125.052.0300	125	52	(57)	85	300	125	200	26	17.5	15	3



Material:

Steel, sliding faces surface hardened

Note:

Screws and pins are not included.

* at 2963.83.125.

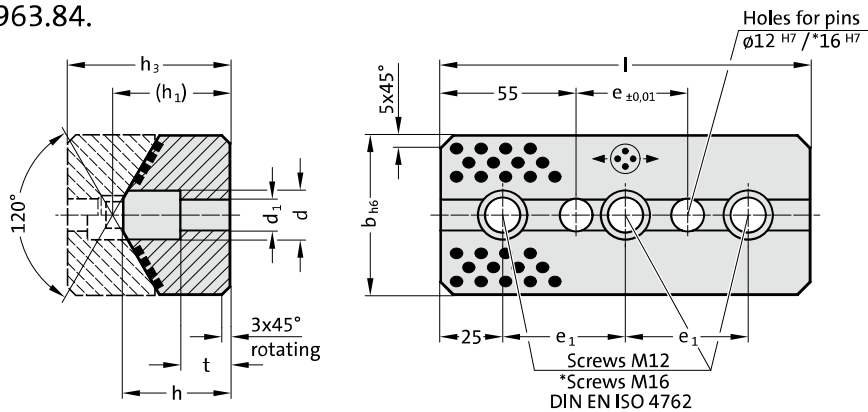


2963.83. Prismatic guide, Steel, NAAMS

Order No	b	h	h ₁	h ₂	h ₃	l	e	e ₁	d	d ₁	t	Number of screw holes
2963.83.065.040.0150	65	40	(23)	21	65	150	50	100	20	13.5	10	2
2963.83.065.040.0200	65	40	(23)	21	65	200	100	150	20	13.5	10	2
2963.83.065.040.0250	65	40	(23)	21	65	250	150	100	20	13.5	10	3
2963.83.065.040.0300	65	40	(23)	21	65	300	200	125	20	13.5	10	3
2963.83.075.040.0150	75	40	(23)	21	65	150	50	100	20	13.5	10	2
2963.83.075.040.0200	75	40	(23)	21	65	200	100	150	20	13.5	10	2
2963.83.075.040.0250	75	40	(23)	21	65	250	150	100	20	13.5	10	3
2963.83.075.040.0300	75	40	(23)	21	65	300	200	125	20	13.5	10	3
2963.83.125.060.0150	125	60	(28)	27	85	150	50	100	26	17.5	15	2
2963.83.125.060.0200	125	60	(28)	27	85	200	100	150	26	17.5	15	2
2963.83.125.060.0250	125	60	(28)	27	85	250	150	100	26	17.5	15	3
2963.83.125.060.0300	125	60	(28)	27	85	300	200	125	26	17.5	15	3

SLIDING BLOCK, BRONZE WITH SOLID LUBRICANT, VDI 3357 PRISMATIC GUIDE, STEEL, VDI 3357

2963.84.



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

Order No	b	h	h ₁	h ₃	l	e	e ₁	d	d ₁	t	Number of screw holes
2963.84.065.044.0150	65	44	(47)	65	150	45	100	20	13.5	20	2
2963.84.065.044.0200	65	44	(47)	65	200	95	150	20	13.5	20	2
2963.84.065.044.0250	65	44	(47)	65	250	145	100	20	13.5	20	3
2963.84.065.044.0300	65	44	(47)	65	300	195	125	20	13.5	20	3
2963.84.125.047.0150	125	47	(52)	85	150	45	100	26	17.5	15	2
2963.84.125.047.0200	125	47	(52)	85	200	95	150	26	17.5	15	2
2963.84.125.047.0250	125	47	(52)	85	250	145	100	26	17.5	15	3
2963.84.125.047.0300	125	47	(52)	85	300	195	125	26	17.5	15	3
2963.84.125.052.0150	125	52	(57)	85	150	45	100	26	17.5	15	2
2963.84.125.052.0200	125	52	(57)	85	200	95	150	26	17.5	15	2
2963.84.125.052.0250	125	52	(57)	85	250	145	100	26	17.5	15	3
2963.84.125.052.0300	125	52	(57)	85	300	195	125	26	17.5	15	3

Material:

Bronze with solid lubricant, oilless lubricating

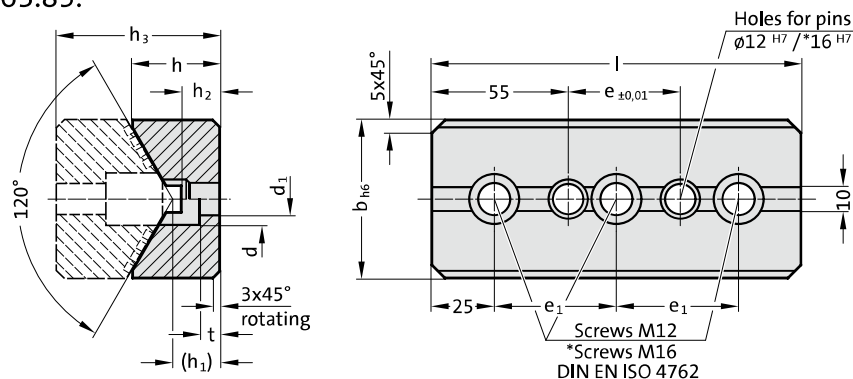
Note:

Screws and pins are not included.

* at 2963.84.125.



2963.85.



2963.85. Prismatic guide, Steel, VDI 3357

Order No	b	h	h ₁	h ₂	h ₃	l	e	e ₁	d	d ₁	t	Number of screw holes
2963.85.065.035.0150	65	35	(18)	17	65	150	45	100	20	13.5	8	2
2963.85.065.035.0200	65	35	(18)	17	65	200	95	150	20	13.5	8	2
2963.85.065.035.0250	65	35	(18)	17	65	250	145	100	20	13.5	8	3
2963.85.065.035.0300	65	35	(18)	17	65	300	195	125	20	13.5	8	3
2963.85.125.060.0150	125	60	(33)	32	85	150	45	100	26	17.5	15	2
2963.85.125.060.0200	125	60	(33)	32	85	200	95	150	26	17.5	15	2
2963.85.125.060.0250	125	60	(33)	32	85	250	145	100	26	17.5	15	3
2963.85.125.060.0300	125	60	(33)	32	85	300	195	125	26	17.5	15	3
2963.85.125.060.0150.1	125	60	(28)	27	85	150	45	100	26	17.5	15	2
2963.85.125.060.0200.1	125	60	(28)	27	85	200	95	150	26	17.5	15	2
2963.85.125.060.0250.1	125	60	(28)	27	85	250	145	100	26	17.5	15	3
2963.85.125.060.0300.1	125	60	(28)	27	85	300	195	125	26	17.5	15	3

Material:

Steel, sliding faces surface hardened

Note:

Screws and pins are not included.

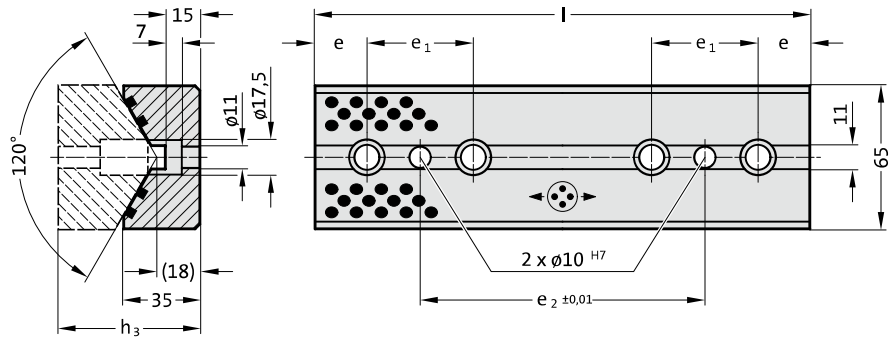
* at 2963.85.125.



PRISMATIC GUIDE, BRONZE WITH SOLID LUBRICANT SLIDING BLOCK, STEEL



2963.70.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws and pins are not included.

Fixing:

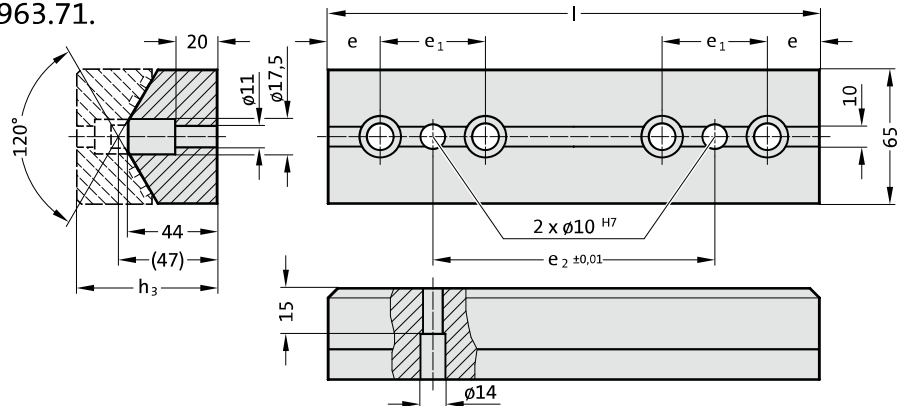
Use socket cap screws
DIN EN ISO 4762 M10.

2963.70. Prismatic guide, Bronze with solid lubricant

Order No	e	e ₁	e ₂	h ₃	l	Number of screw holes
2963.70.065.035.0100	20	60	20	65	100	2
2963.70.065.035.0150	25	50	50	65	150	3
2963.70.065.035.0200	25	50	100	65	200	4
2963.70.065.035.0250	25	50	150	65	250	5
2963.70.065.035.0300	25	50	200	65	300	6



2963.71.



Material:

Steel, sliding faces surface hardened

Note:

Screws and pins are not included.

Fixing:

Use socket cap screws
DIN EN ISO 4762 M10.

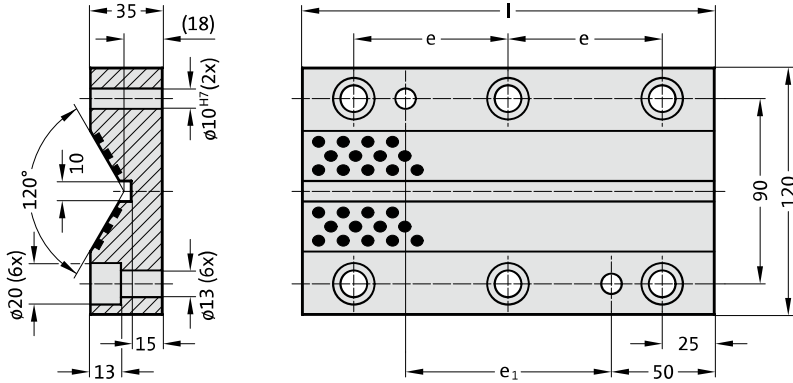
2963.71. Sliding block, Steel

Order No	e	e ₁	e ₂	h ₃	l	Number of screw holes
2963.71.065.044.0100	20	60	20	65	100	2
2963.71.065.044.0150	25	50	50	65	150	3
2963.71.065.044.0200	25	50	100	65	200	4
2963.71.065.044.0250	25	50	150	65	250	5
2963.71.065.044.0300	25	50	200	65	300	6



PRISMATIC GUIDE, BRONZE WITH SOLID LUBRICANT SLIDING BLOCK, STEEL

2963.72.



2963.72. Prismatic guide, Bronze with solid lubricant

Order No	l	e	e ₁	Number of screw holes
2963.72.120.035.0150	150	50	50	6
2963.72.120.035.0200	200	75	100	6
2963.72.120.035.0250	250	100	150	6
2963.72.120.035.0300	300	125	200	6

Material:

Bronze with solid lubricant, oilless lubricating

Note:

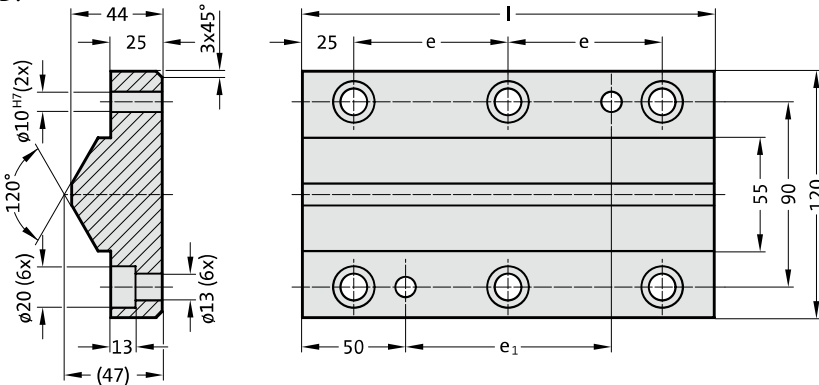
Screws and pins are not included.

Fixing:

Use socket cap screws
DIN EN ISO 4762 M12.



2963.73.



2963.73. Sliding block, Steel

Order No	l	e	e ₁	Number of screw holes
2963.73.120.044.0150	150	50	50	6
2963.73.120.044.0200	200	75	100	6
2963.73.120.044.0250	250	100	150	6
2963.73.120.044.0300	300	125	200	6

Material:

Steel, sliding faces surface hardened

Note:

Screws and pins are not included.

Fixing:

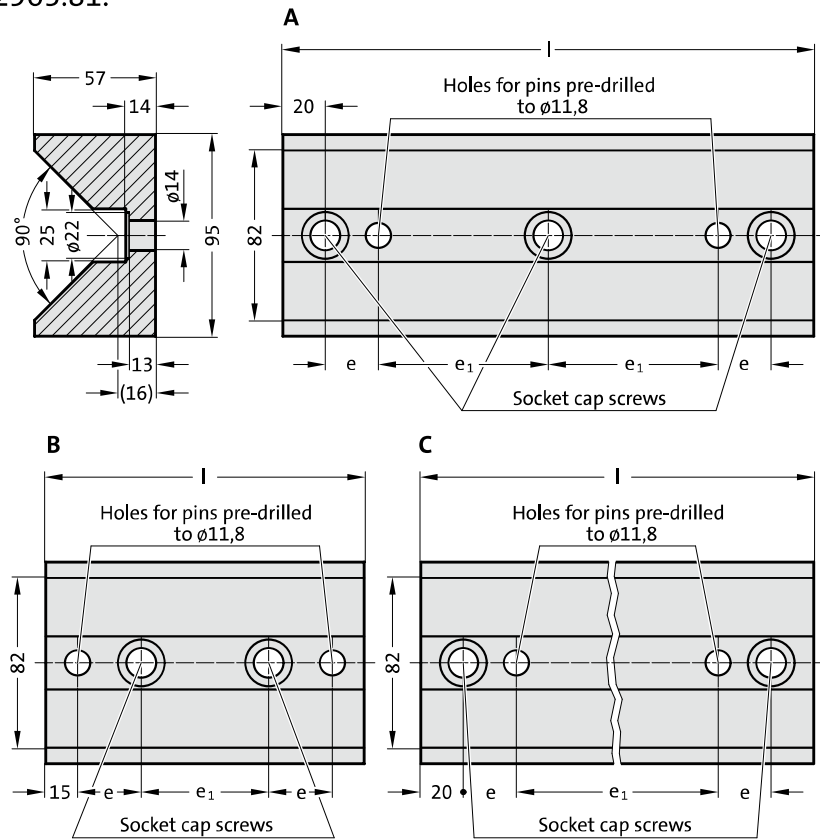
Use socket cap screws
DIN EN ISO 4762 M12.



PRISMATIC GUIDE, STEEL



2963.81.



Material:

Steel, sliding faces surface hardened

Note:

Screws and pins are not included.

Fixing:

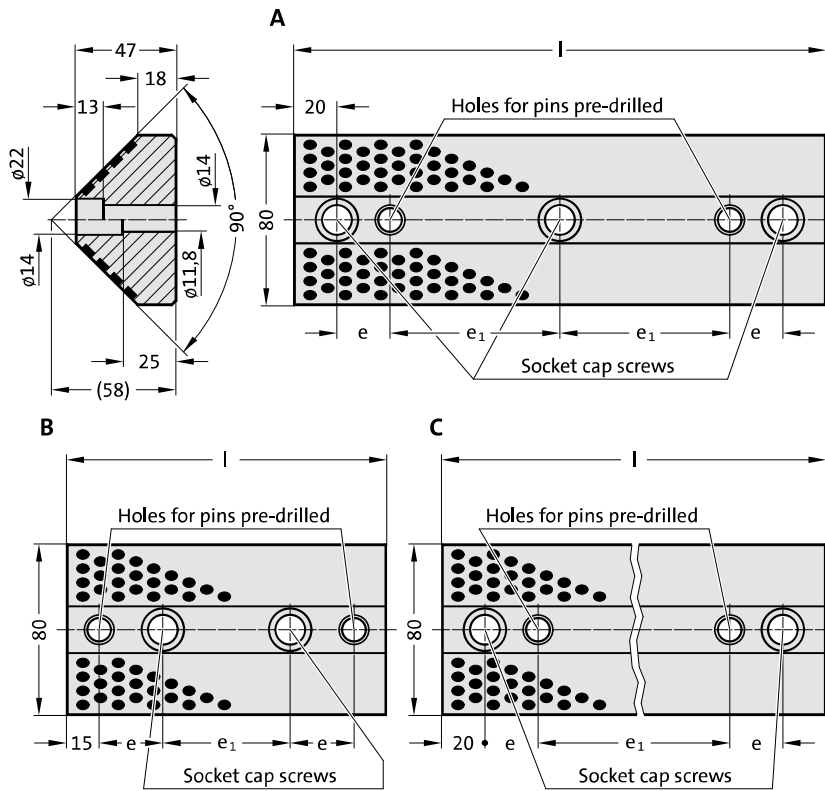
Use socket cap screws DIN EN ISO 4762 M12.

2963.81. Prismatic guide, Steel

Order No	Shape	l	e	e ₁	Number of screw holes
2963.81.095.057.0150	B	150	30	60	2
2963.81.095.057.0200	C	200	25	110	2
2963.81.095.057.0250	A	250	25	80	3
2963.81.095.057.0300	A	300	30	100	3

SLIDING BLOCK, BRONZE WITH SOLID LUBRICANT

2963.80.



Material:

Bronze with solid lubricant, oilless lubricating

Note:

Screws and pins are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762 M12.

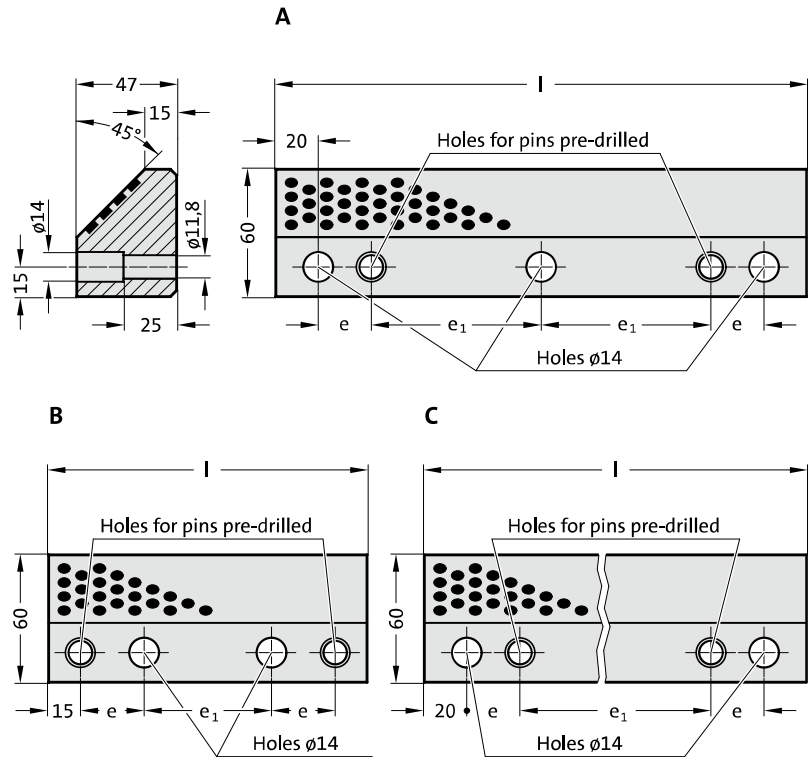
2963.80. Sliding block, Bronze with solid lubricant

Order No	Shape	l	e	e ₁	Number of screw holes
2963.80.080.047.0150	B	150	30	60	2
2963.80.080.047.0200	C	200	25	110	2
2963.80.080.047.0250	A	250	25	80	3
2963.80.080.047.0300	A	300	30	100	3

SINGLE-SIDED PRISMATIC GUIDE, BRONZE WITH SOLID LUBRICANT



2965.81.



Material:

Bronze with solid lubricant, oilless lubricating

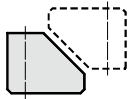
Note:

Matching single-sided prismatic sliding blocks 2965.83.

Screws and pins are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762 M12.

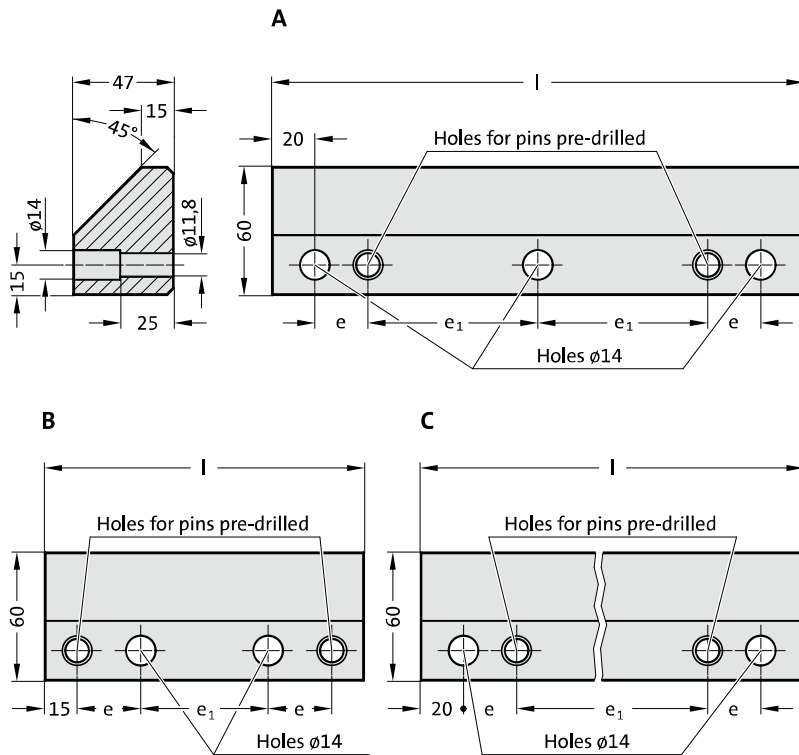


2965.81. Single-sided prismatic guide, Bronze with solid lubricant

Order No	Shape	l	e	e ₁	Number of screw holes
2965.81.060.047.0150	B	150	30	60	2
2965.81.060.047.0200	C	200	25	110	3
2965.81.060.047.0250	A	250	25	80	3
2965.81.060.047.0300	A	300	30	100	3

SINGLE-SIDED PRISMATIC SLIDING BLOCK, STEEL

2965.83.



Material:

Steel, sliding faces surface hardened

Note:

Matching single-sided prismatic guides 2965.81.

Screws and pins are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762 M12.



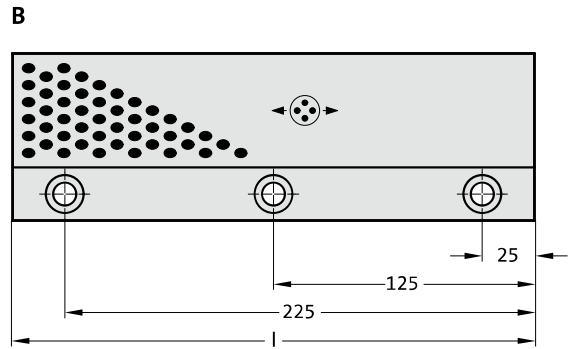
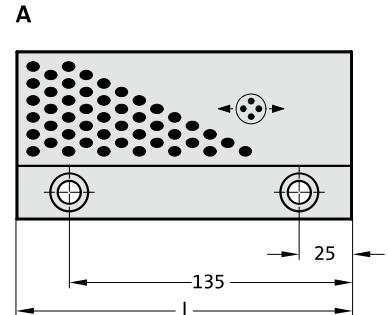
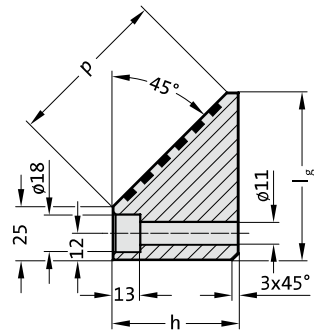
2965.83. Single-sided prismatic sliding block, Steel

Order No	Shape	l	e	e ₁	Number of screw holes
2965.83.060.047.0150	B	150	30	60	2
2965.83.060.047.0200	C	200	25	110	3
2965.83.060.047.0250	A	250	25	80	3
2965.83.060.047.0300	A	300	30	100	3

SINGLE-SIDED PRISMATIC GUIDE, BRONZE WITH SOLID LUBRICANT, CNOMO



2965.80.45.



Material:

Bronze with solid lubricant, oilless lubricating

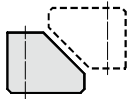
Note:

Matching single-sided prismatic sliding blocks 2965.82.45.

Screws and pins are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762 M10.

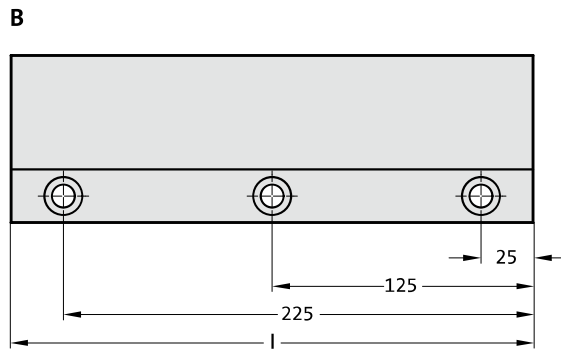
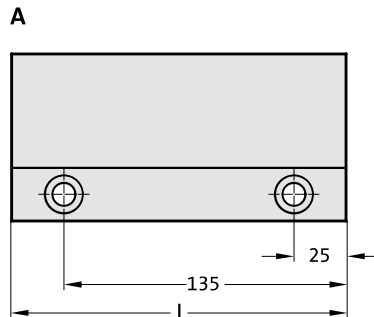
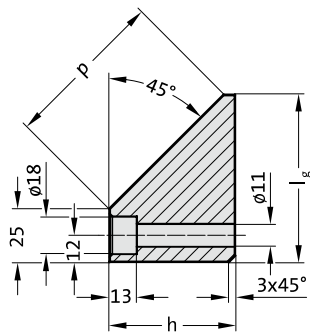


2965.80.45. Single-sided prismatic guide, Bronze with solid lubricant, CNOMO

Order No	Shape	l_g	h	l	p	Number of screw holes
2965.80.45.060.045.160	A	60	45	160	50	2
2965.80.45.060.045.250	B	60	45	250	50	3
2965.80.45.080.060.160	A	80	60	160	80	2
2965.80.45.080.060.250	B	80	60	250	80	3

SINGLE-SIDED PRISMATIC SLIDING BLOCK, STEEL, CNOMO

2965.82.45.



Material:

Steel, sliding faces surface hardened

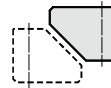
Note:

Matching single-sided prismatic guides 2965.80.45.

Screws and pins are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762 M10.



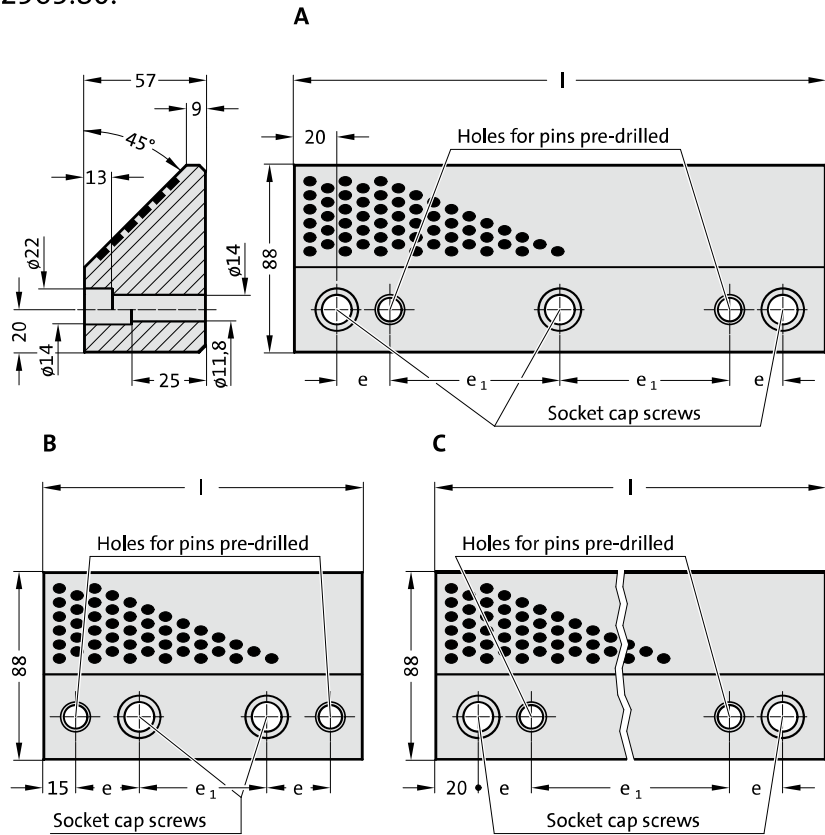
2965.82.45. Single-sided prismatic sliding block, Steel, CNOMO

Order No	Shape	l _g	h	l	p	Number of screw holes
2965.82.45.060.045.160	A	60	45	160	50	2
2965.82.45.060.045.250	B	60	45	250	50	3
2965.82.45.080.060.160	A	80	60	160	80	2
2965.82.45.080.060.250	B	80	60	250	80	3

SINGLE-SIDED PRISMATIC GUIDE, BRONZE WITH SOLID LUBRICANT



2965.80.



Material:

Bronze with solid lubricant, oilless lubricating

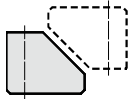
Note:

Matching single-sided prismatic sliding blocks 2965.82.

Screws and pins are not included.

Fixing:

Use socket cap screws DIN EN ISO 4762 M12.

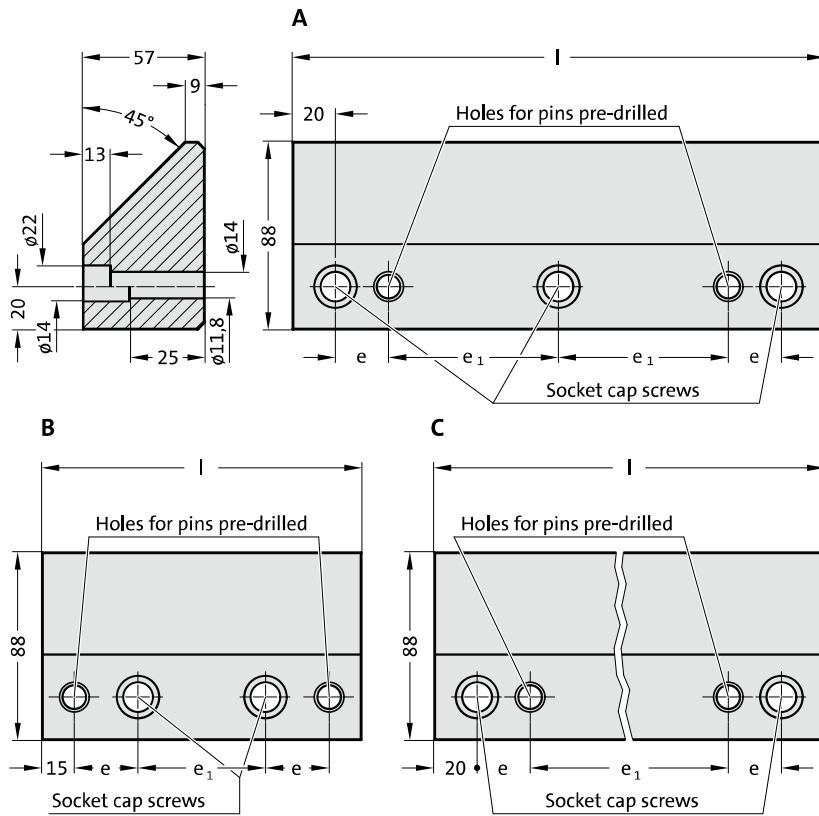


2965.80. Single-sided prismatic guide, Bronze with solid lubricant

Order No	Shape	l	e	e ₁	Number of screw holes
2965.80.088.057.0150	B	150	30	60	2
2965.80.088.057.0200	C	200	25	110	3
2965.80.088.057.0250	A	250	25	80	3
2965.80.088.057.0300	A	300	30	100	3

SINGLE-SIDED PRISMATIC SLIDING BLOCK, STEEL

2965.82.



Material:

Steel, sliding faces surface hardened

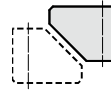
Note:

Matching single-sided prismatic guides 2965.80.

Screws and pins are not included.

Fixing:

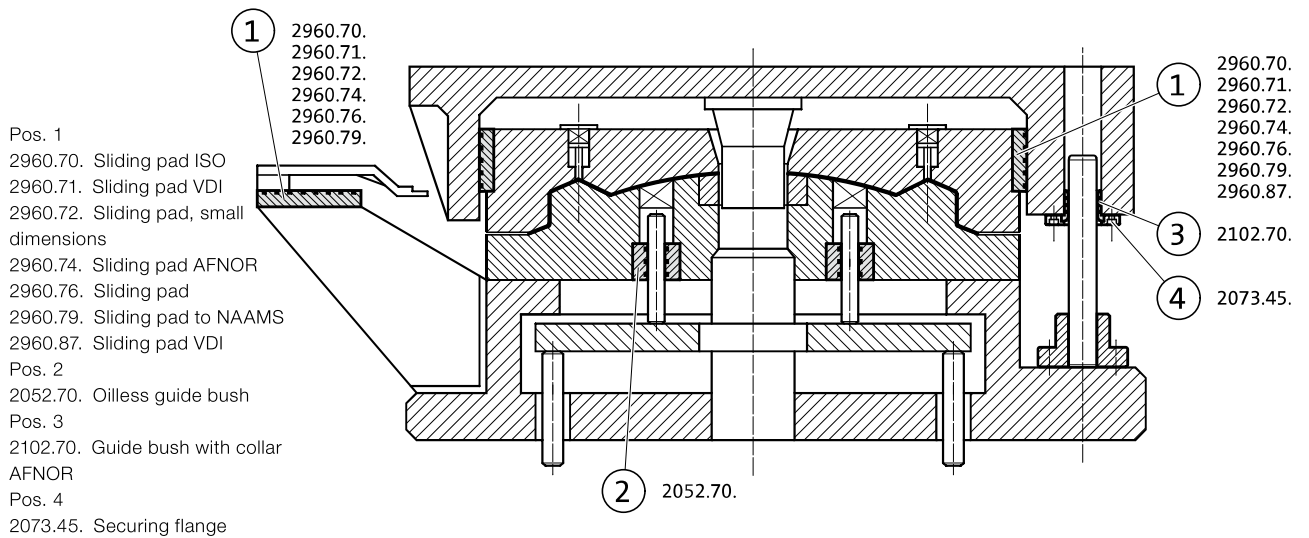
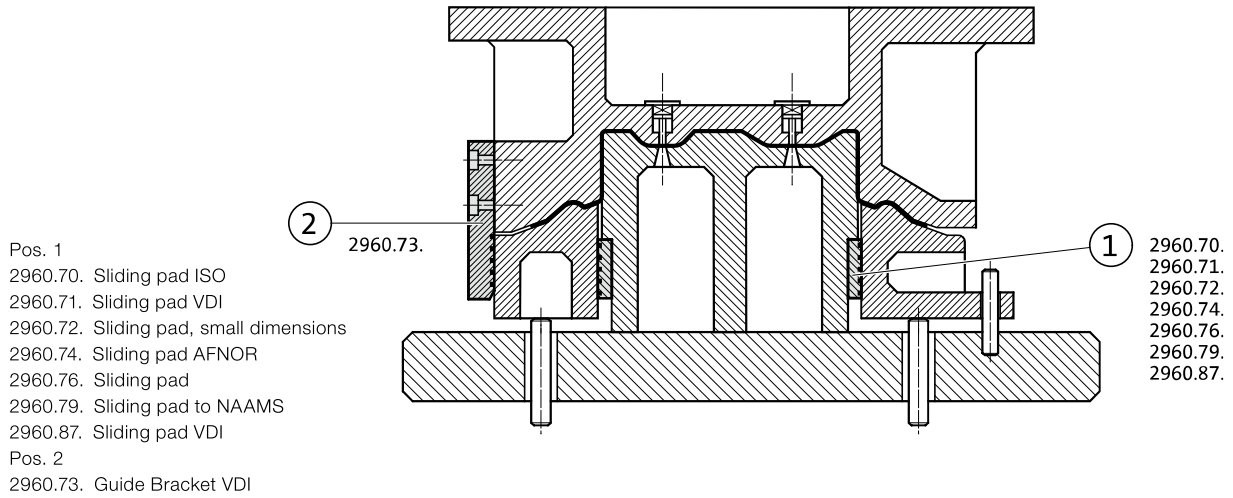
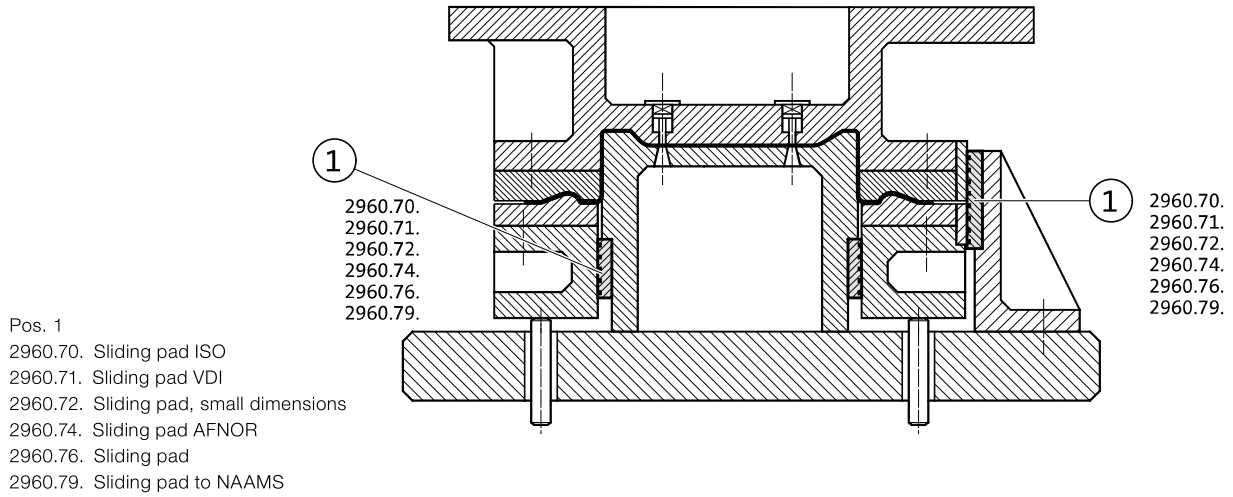
Use socket cap screws DIN EN ISO 4762 M12.



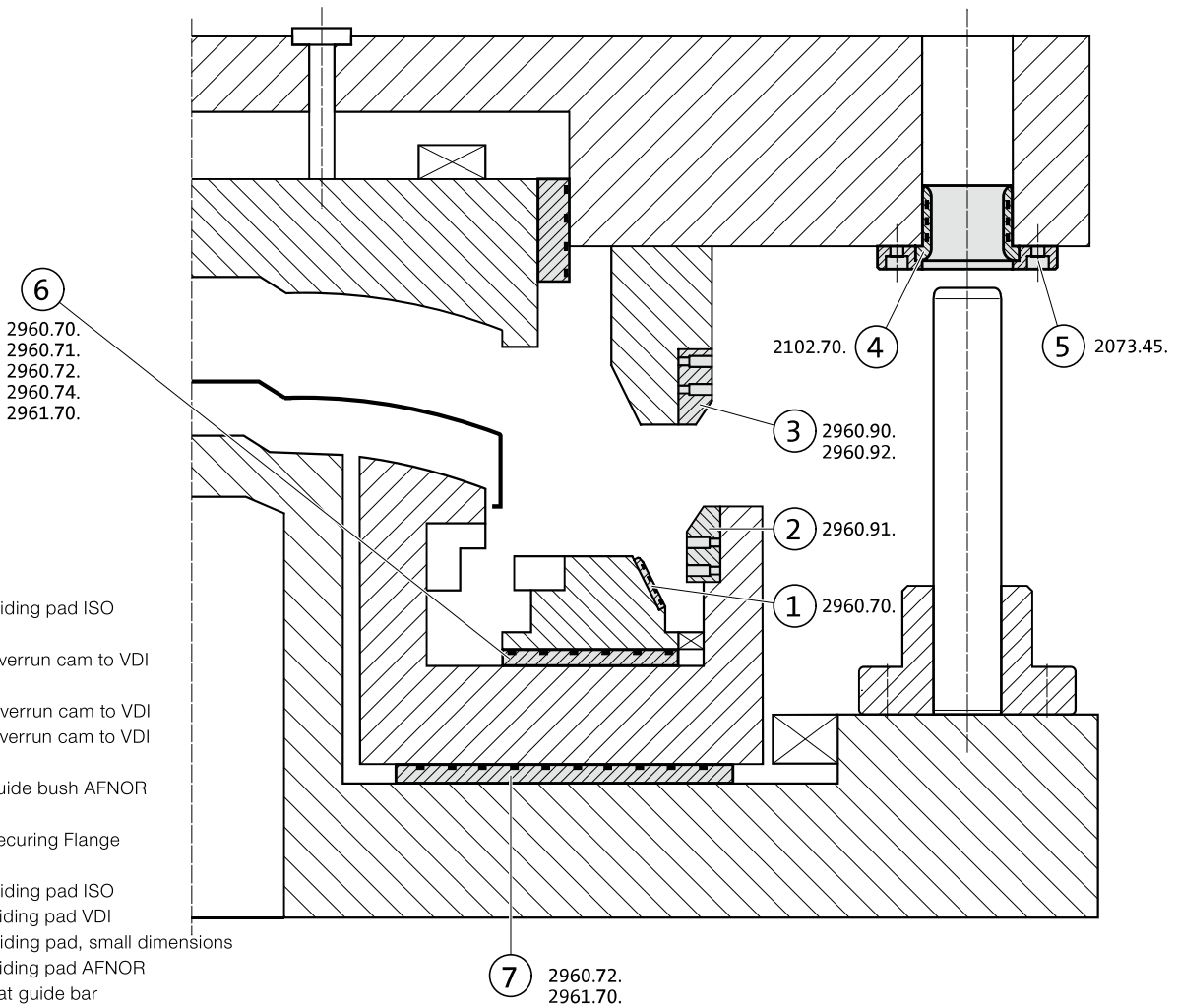
2965.82. Single-sided prismatic sliding block, Steel

Order No	Shape	l	e	e ₁	Number of screw holes
2965.82.088.057.0150	B	150	30	60	2
2965.82.088.057.0200	C	200	25	110	3
2965.82.088.057.0250	A	250	25	80	3
2965.82.088.057.0300	A	300	30	100	3

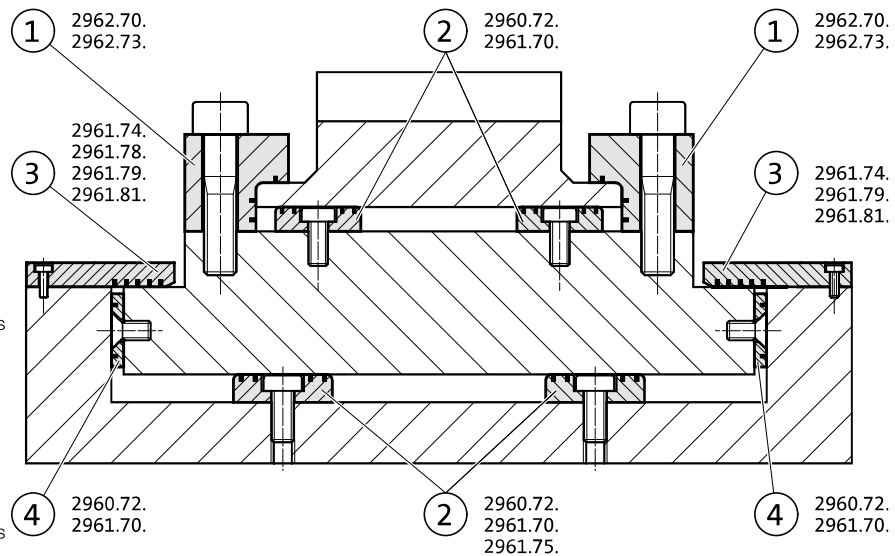
OILLESS GUIDE ELEMENTS - MOUNTING EXAMPLES



OILLESS GUIDE ELEMENTS - MOUNTING EXAMPLES

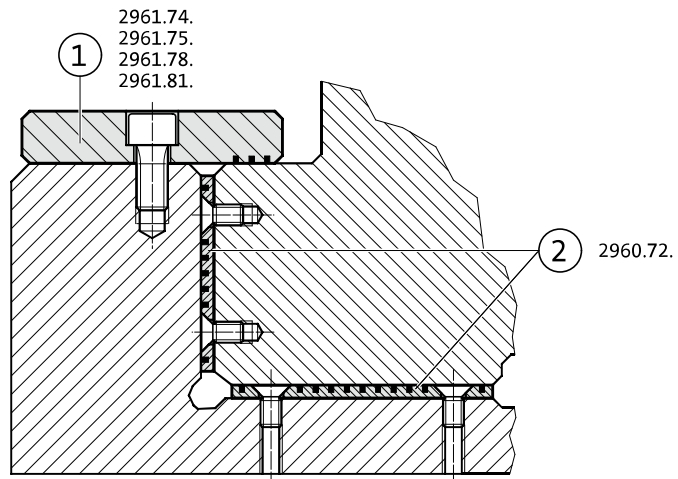


- Pos. 1
2960.70. Sliding pad ISO
- Pos. 2
2960.91. Overrun cam to VDI
- Pos. 3
2960.90. Overrun cam to VDI
2960.92. Overrun cam to VDI
- Pos. 4
2102.70. Guide bush AFNOR
- Pos. 5
2073.45. Securing Flange
- Pos. 6
2960.70. Sliding pad ISO
2960.71. Sliding pad VDI
2960.72. Sliding pad, small dimensions
2960.74. Sliding pad AFNOR
2961.70. Flat guide bar
- Pos. 7
2960.72. Sliding pad, small dimensions
2961.70. Flat guide bar

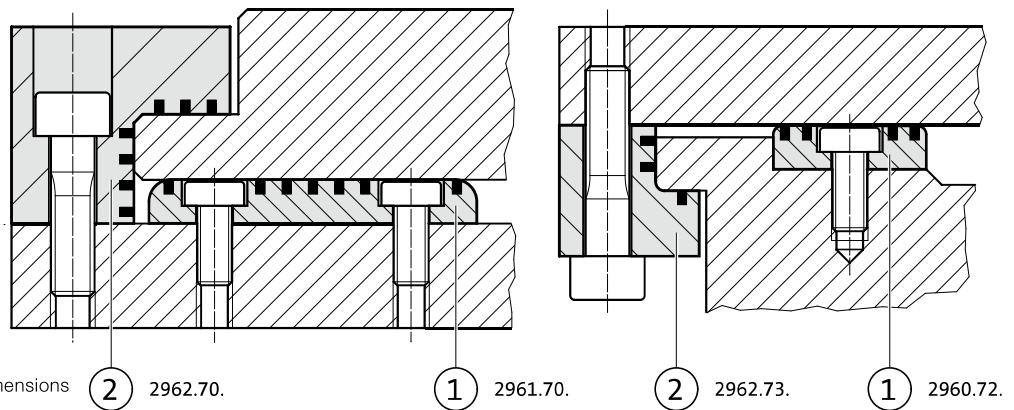


- Pos. 1
2962.70. Angled guide gib
2962.73. Angled guide gib
- Pos. 2
2960.72. Sliding pad, small dimensions
2961.70. Flat guide bar
- Pos. 3
2961.74. Retaining plate to VDI
2961.79.
2961.81.
- Pos. 4
2960.72. Sliding pad, small dimensions
2961.70. Flat guide bar

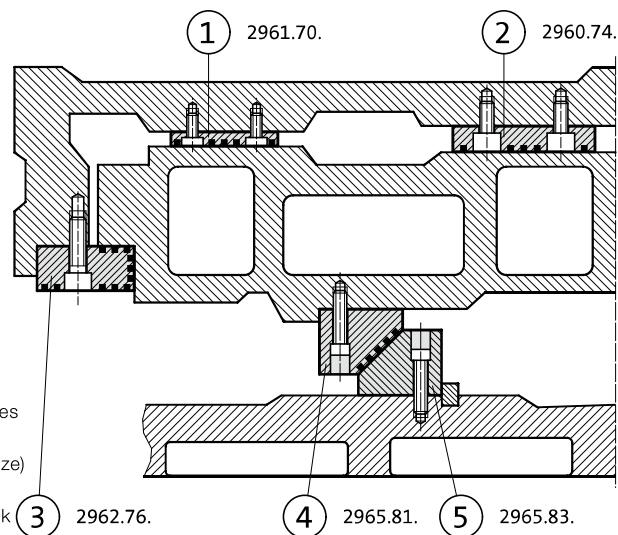
OILLESS GUIDE ELEMENTS - MOUNTING EXAMPLES



- Pos. 1
2961.74. Retaining plate to VDI
- Pos. 2
2960.72. Sliding pad, small dimensions



- Pos. 1
2961.70. Flat guide bar
- 2960.72. Sliding pad, small dimensions
- Pos. 2
2962.70. Angled guide gib
- 2962.73. Angled guide gib



- Pos. 1
2961.70. Guide bar
- Pos. 2
2960.74. Sliding pad AFNOR
- Pos. 3
2962.76. Guide bar with three sliding surfaces
- Pos. 4
2965.81. Single-sided prismatic guide (Bronze)
- Pos. 5
2965.83. Single-sided prismatic sliding block (Steel)

OILLESS GUIDE ELEMENTS - MOUNTING EXAMPLES

