

Guide units

- Guide pillars
- Roller guides
- Sliding guides



Active
elements

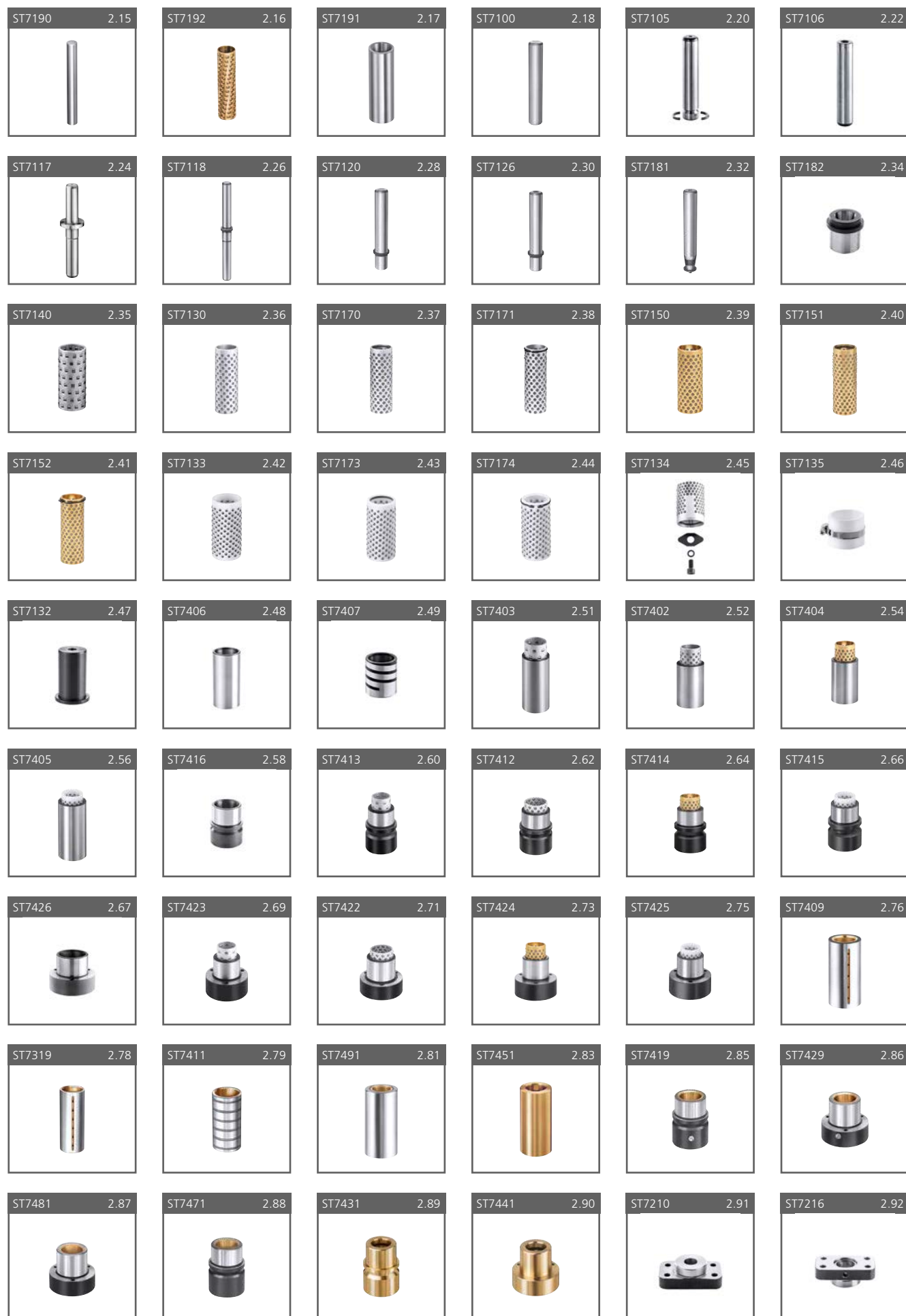
Spring
elements

Nitrogen
systems

Tapping
units

Machining
elements

Accessories



ST7219 2.93	ST7211 2.94	ST7212 2.95	ST7200 2.96	ST7206 2.97	ST7209 2.98
ST7201 2.99	ST7202 2.100	ST7250 2.101	ST7260 2.102	ST7160 2.103	ST7460 2.104
ST7469 2.105	ST9833 2.106	ST9825 2.107	ST9827 2.108	ST9831 2.110	ST9834 2.111
ST7571 2.112	ST7561 2.114	ST7111 2.116	ST7112 2.117	ST7361 2.118	ST7360 2.119
ST7366 2.120	ST7367 2.121	ST7377 2.121	ST7387 2.122	SZ7368 2.122	ST7108 (inch) 2.123
ST7120 (inch) 2.124	ST7130 (inch) 2.126	ST7406 (inch) 2.127	ST7419 (inch) 2.128	ST7416 (inch) 2.129	ST7132 (inch) 2.130
SZ8514 (inch) 2.131					

Active
elements

Spring
elements

Nitrogen
systems

Tapping
units

Maschine
elements

Accessories

General



The highly-precise guide units from STEINEL are used in toolmaking, fixture manufacturing and machine engineering. The range includes three types of sliding guide (bronzed steel, with solid lubricant and solid lubricant rings) and two types of roller guide (roller and ball guides).

Quality criteria of STEINEL guides

Outstanding lifetimes and high loading capacity due to:

- highest part precision
- outstanding surface quality
- optimum material selection
- tailored heat treatment process
- perfect matching

Use of types of guidance

	optimal	good	possible
high stroke speed	(K)	(R)	
large stroke (path)	Gb Gf		(K) (R)
accuracy	(K) (R)		Gb Gf
high lateral forces	Gb (R)		
small cutting clearance	(K)	(R)	Gb Gf
high lateral forces and small cutting clearance	(R)	Gb	
environment (without lubrication)	(K)	Gf (R)	
contamination (environment)	Gb		(K) (R)
contamination (creation)	(K)	(R)	

(K) Ball guide

(R) Roller guide

Gb Bronzed sliding guide

Gf Sliding guide solid lubricant

Guaranteed interchangeability

Thanks to the mounting bore ISO H6, all guide bushes can be used in accordance with DIN 9831 / ISO 9448 in the uniform bore. During the course of a tool's life, a different type of guidance can be switched to without any problems.

Pillar diameter	Mounting bore
10	22
12	
15	28
16	
19	32
20	
24	40
25	
30	48
32	
38	58
40	
48	70
50	
60	85
63	
80	105

Customised guide units

STEINEL develops and manufactures customised guide units for complex applications, individual geometries, contamination-prone processes and many other things, and supplies them with measurement protocols if requested.

Further information about this can be found under: **www.steinell.com**



Guide pillars



Pillars for sliding and roller guides

Version	Diameter	Length	Variant	Properties
smooth, for pressing-in	10-80	90-500	with 2 internal threads	Guide diameter ISO h3, super-finished and subfined, Installation in mounting bore ISO R6
with middle mount shoulder	12-50	90-250		Guide diameter ISO h3, super-finished,
with small middle mount shoulder	12-50	90-250		Fitting diameter ISO js4, Installation in mounting bore ISO H6
with shoulder	15-80	110-560	with 2 internal threads	
with taper shanks	19-63	130-405		Guide diameter ISO h3, super-finished and subfined, mounting taper ground, for assembly in pillar holding bush
Mini pillar	3-10	30-160		Guide diameter ISO h3, super-finished and subfined, Installation in mounting bore ISO P6

Pillars for sliding guides

Version	Diameter	Length	Variant	Properties
with head	10-32	66-275	with oil grooves	Guide diameter ISO h6, super-finished, installation in mounting bore ISO N7 (press fit) or ISO H7, (when secured against slipping out)
with shoulder	15-80	115-560		Guide diameter ISO g6, super-finished, fitting diameter ISO j6, Installation in mounting bore ISO H6
for industrial tools	25-160	125-560	with oil grooves	Guide diameter ISO f6, super-finished, fitting diameter ISO r6, installation in mounting bore ISO R6
			with shoulder	Guide diameter ISO g6, super-finished, fitting diameter ISO r6, installation in mounting bore ISO H7

Roller guides (roller and ball guides)



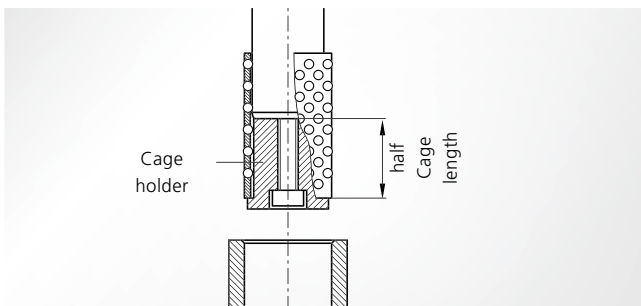
STEINEL roller guides (roller and ball guides) consist of a guide pillar, a roller or ball guide and a guide bush, which are paired together free of clearance. The cage travel is only half as long as the stroke of the guide.

Quality criteria of STEINEL roller guides

- long life time – Profile rollers and balls are helically arranged in the cage, and are free-wheeling mounted.
- fast stroke movements – Speeds of up to 30 m/min. can be achieved as a result of the low friction of the rollers or balls.
- high lateral forces possible – The large number of load-bearing rollers or balls ensures an even force distribution.
- high guide accuracy and interchangeability – Profile rollers or balls of optimum precision and identical sorting are used.
- low maintenance expense

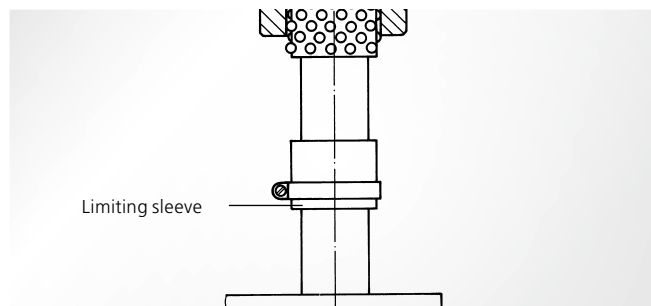
Accessories and options

Cage holder



- The cage holder intercepts the cage upon complete retraction from the guide bush.
- for die sets where the guide pillars are fixed in the upper part.
- for all roller and ball cages
- The length of the cage holder should be half of that of the cage used, and can be shortened accordingly if required.

Limiting sleeve



The limiting sleeve prevents the cage from "wandering". It is moved over the guide pillar and clamped.

Roller guides

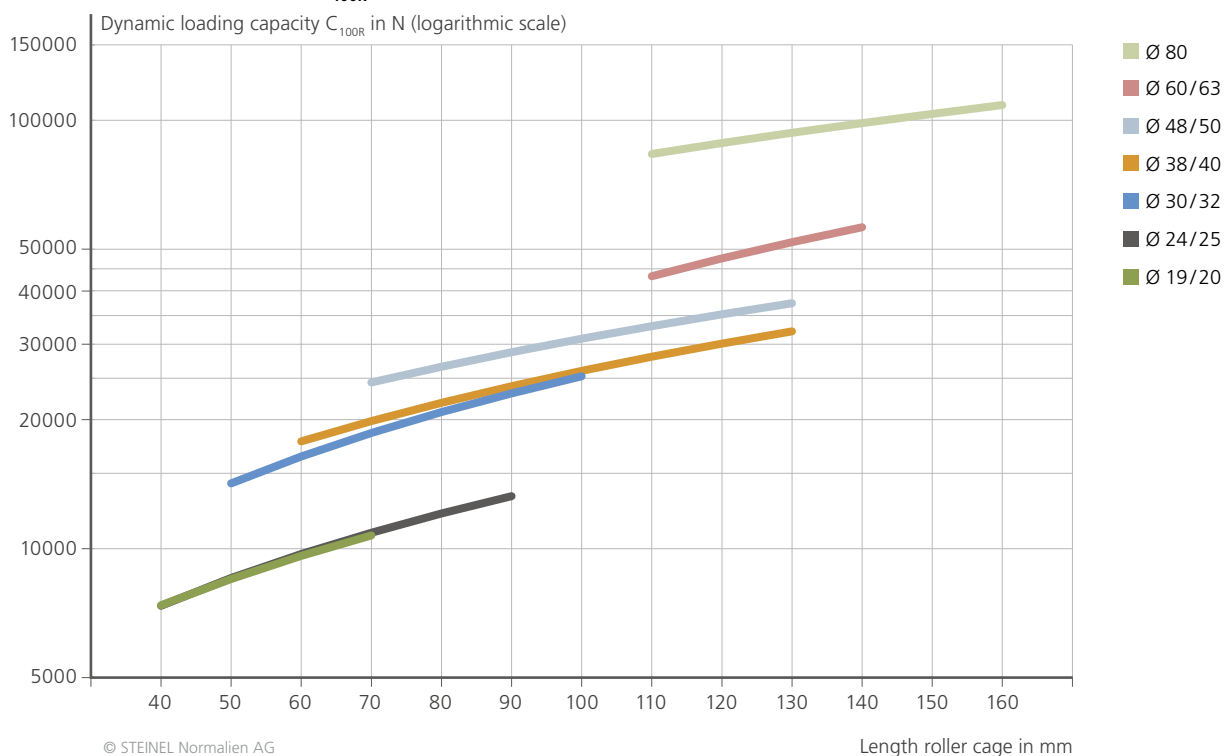


Application

Aluminium roller cages

- can be used in any installation position for longitudinal movements
- rotational motion not possible
- low mass and consequently lower inertia, particularly in the movement turning points
- long life time – The contact radii of the saddle shape are manufactured in such a way that critical loads on the edge area will be avoided. The bending as a result of the load in the middle surface to the external track leads to a compression which can be neglected.
- suitable for high lateral forces and a small cutting clearance – A profile roller can bear loads of 6 to 12 times higher (statically) and 2 to 3 times higher (dynamically) than a ball with the same diameter.

Dynamic loading capacity C_{100R} in accordance with DIN ISO 14728-1 for roller cages with diameters of 19 to 80 mm



Ball guides



Application

Aluminium, brass and plastic ball cages

- can be used in any installation position for longitudinal movements and rotational motions

Aluminium ball cages

- lower mass compared to the brass cage and consequently lower inertia, particularly in the movement turning points
- optimal ratio between stability and mass
- optimal heat resistance

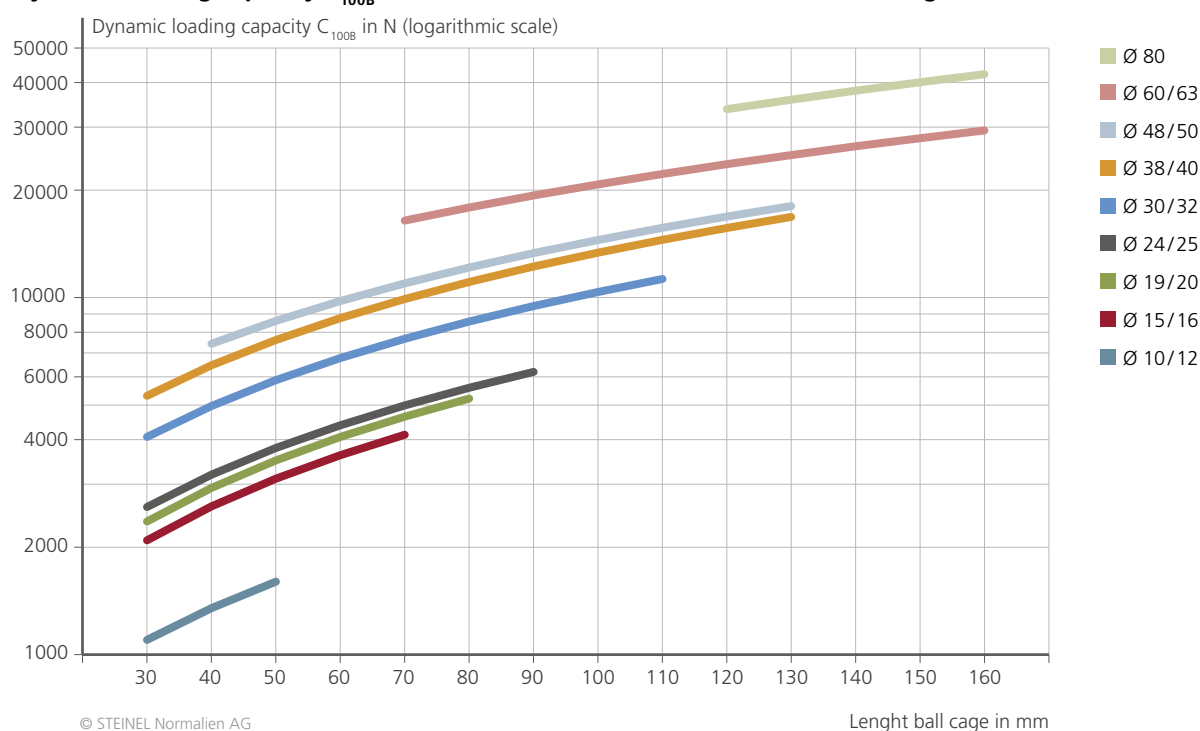
brass ball cage

- high wear resistance and stability
- low friction between the ball and cage
- optimal heat resistance
- Mini-series ball cages are ideally suited as construction elements in optical and electronic measuring devices.

Plastic ball cages

- low mass compared to other materials, and therefore suitable for high stroke frequencies in high-speed tools
- low friction between the ball and cage
- high medium resistance

Dynamic loading capacity C_{100B} in accordance with DIN ISO 14728-1 for ball cages with diameters of 10 to 80 mm



Ball guides

Additional versions

With installation assistance

The installation assistance facilitates the positioning of the cage on the guide pillar, therefore making the assembly of tools with several guide units easier.



With lock ring

In accordance with DIN 471, the lock ring prevents the cage from slipping through the guide bush during the dismantling of the tool. In operation, it can prevent any potential “wandering” of the cage.



With locking device and screw (only for aluminium)

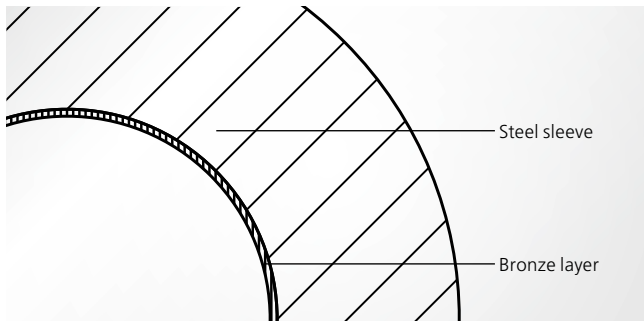
During the complete retraction from the guide bush, the locking plate holds the ball cage on the guide pillar.



Sliding guides



Sliding guides, bronzed steel

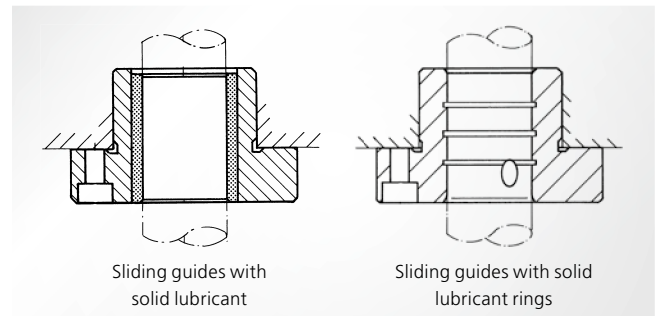


- The hardened steel sleeve takes on lateral forces and prevents the guide bush becoming deformed due to the strong force application.
- The galvanic bronze layer spread across the running surface is hard, extremely wear-resistant and honed to the highest surface quality. In addition to good dry-running properties, it also has excellent thermal conductivity in order to quickly dissipate the resulting friction heat.
- The internal lubrication system, within which parallel transverse oil grooves are connected to each other via longitudinal channels, guarantees an even distance to all sliding points as well as a shielding effect against dirt. Depending on the load of the guide, the internal lubrication system must be regularly supplied with high-performance lubricant. It can be connected to a central lubrication.

Application

- optimal for applications with large strokes, high lateral forces as well as within environments susceptible to contamination.
- Sliding speed up to 20 m/min

Sliding guides with solid lubricant and solid lubricant rings



- The guides are self-lubricating and low-maintenance.
- The solid lubricant particles assume the lubricating function between the bush and pillar.
- The solid lubricant forms an adherent, coherent lubricating film and prevents corrosion between the guide bush and guide pillar.
- The solid lubricant reduces maintenance intervals.
- In order to guarantee an optimal lubricating film for guide bushes with solid lubricant rings, the stroke must always be greater than the distance between the solid lubricant rings.

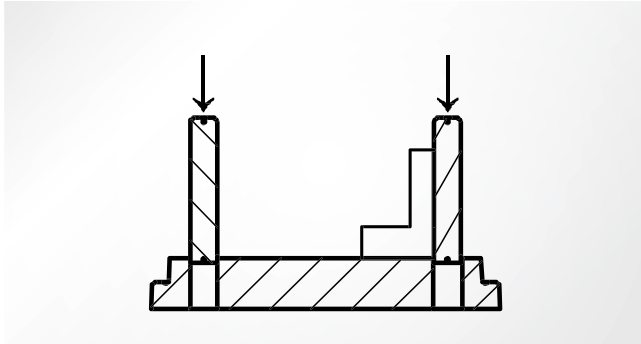
Application

- optimal for applications with large strokes and low maintenance
- Sliding speed up to 20 m/min
- Guide clearance of 2–7 µm – If greater clearance is desired, please specify this when ordering

Guide pillar installation instructions

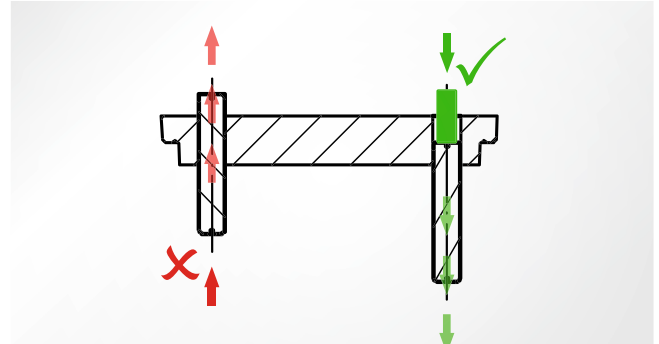
Installation instructions for smooth pillars

Installation of the guide pillar



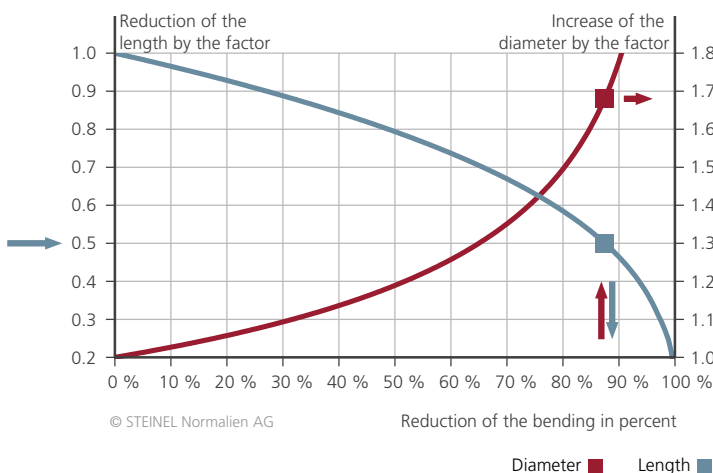
Carefully clean the boreholes in the top and bottom parts and apply oil to them (no grease). Slide the pillars in the top part. Place plane-parallel ground bars between the upper and bottom part. Drive the pillars approx. 3 mm deep into the bottom part. Push in the pillars using a hydraulic press or manual spindle press (the pillar has the fit ISO h3, the borehole has the fit ISO R6, therefore a press fit is guaranteed).

Disassembly of the guide pillar



In order to avoid damage to the surface of the guide pillars and mounting bores, the pillars must never be ejected via the running surface.

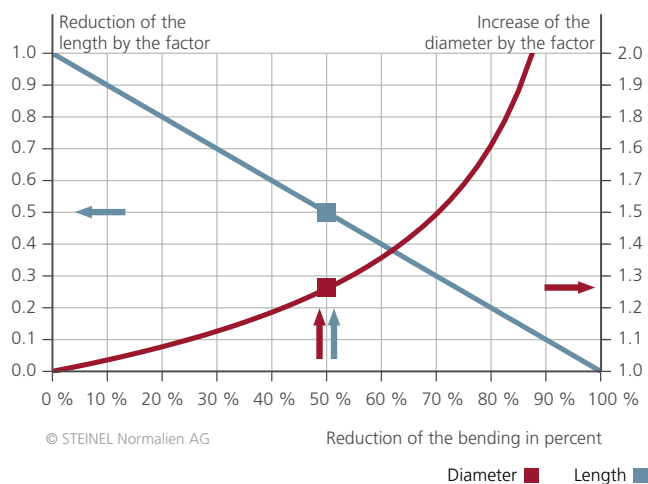
Pillars = bending subject to the length or diameter of the pillar



If the length of a pillar is reduced, the bending of the pillar is also reduced:

- If the length is halved, e.g. by a change from ST7120 (lower plate) to ST7117 (guide plate), the bending of the pillar is reduced by 87.5 %
- A reduction of 87.5 % can also be achieved when the diameter of the pillar is increased by the factor 1.68, e.g. from 25 mm to 42 mm.

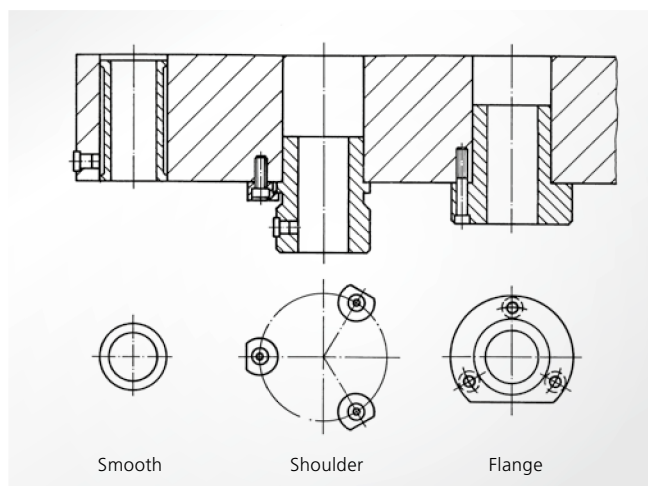
Pillars = bending stress subject to the length or diameter of the pillar



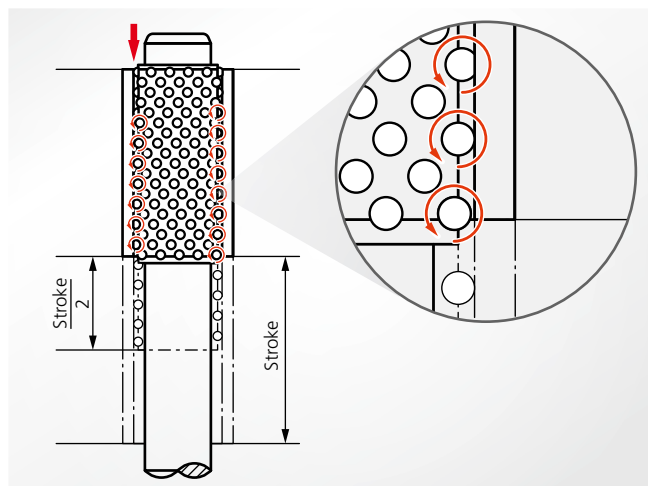
There are two possibilities for the reduction of the bending stress in a pillar by 50 %;

- Halving the pillar length, e.g. from 300 mm to 150 mm
- Increasing the pillar diameter by a factor of 1.26, e.g. from 19 mm to 24 mm

Installation instructions: sliding and roller guides



- The bushes must not be pressed. Pressing may result in deformation of the internal diameter.
- For security, smooth bushes must be stuck in the mounting bore (with Loctite 603, part number SZ9742). Adhesive surfaces must be completely free of grease. Please observe the instructions of the adhesive manufacturer.
- For flange bushes and guide bushings with shoulders, the shoulder and flange surfaces that are rectangular ground to the guide bore are pressed firmly to the plate with holding clamps or screws.
- Guides are to be furnished with a lubricating film.
- Frame plates must be brought together in parallel.
- When the roller guides are brought together, the rollers or balls must perform a rolling movement and must not slide.



Tolerances according to DIN EN ISO 286-2

External dimensions for shafts

Nominal dimension range in mm	1-3		3-6		6-10		10-18		18-30		30-50		50-80		80-120	
f6	-6	-12	-10	-18	-13	-22	-16	-27	-20	-33	-25	-41	-30	-49	-36	-58
f7	-6	-16	-10	-22	-13	-28	-16	-34	-20	-41	-25	-50	-30	-60	-36	-71
g6	-2	-8	-4	-12	-5	-14	-6	-17	-7	-20	-9	-25	-10	-29	-12	-34
h3	0	-2	0	-2.5	0	-2.5	0	-3	0	-4	0	-4	0	-5	0	-6
h4	0	-3	0	-4	0	-4	0	-5	0	-6	0	-7	0	-8	0	-10
h5	0	-4	0	-5	0	-6	0	-8	0	-9	0	-11	0	-13	0	-15
h6	0	-6	0	-8	0	-9	0	-11	0	-13	0	-16	0	-19	0	-22
h8	0	-14	0	-18	0	-22	0	-27	0	-33	0	-39	0	-46	0	-54
h9	0	-25	0	-30	0	-36	0	-43	0	-52	0	-62	0	-74	0	-87
h15	0	-400	0	-480	0	-580	0	-700	0	-840	0	-1000	0	-1200	0	-1400
j6	4	-2	6	-2	7	-2	8	-3	9	-4	11	-5	12	-7	13	-9
js4	1.5	-1.5	2	-2	2	-2	2.5	-2.5	3	-3	3.5	-3.5	4	-4	5	-5
k6	6	0	9	1	10	1	12	1	15	2	18	2	21	2	25	3
m5	6	2	9	4	12	6	15	7	17	8	20	9	24	11	28	13
m6	8	2	12	4	15	6	28	7	21	8	25	9	30	11	35	13
n6	10	4	16	2	19	10	23	12	28	15	33	17	39	20	45	23
p6	12	6	20	12	24	15	29	18	35	22	42	26	51	32	59	37
r6	16	10	23	15	28	19	34	23	41	28	50	34	60	43	73	51

Inner dimensions for boreholes

Nominal dimension range in mm	1-3		3-6		6-10		10-18		18-30		30-50		50-80		80-120	
H5	4	0	5	0	6	0	8	0	9	0	11	0	13	0	15	0
H6	6	0	8	0	9	0	11	0	13	0	16	0	19	0	22	0
H7	10	0	12	0	15	0	18	0	21	0	25	0	30	0	35	0
H8	14	0	18	0	22	0	27	0	33	0	39	0	46	0	54	0
H9	25	0	30	0	36	0	43	0	52	0	62	0	74	0	87	0
H10	40	0	48	0	58	0	70	0	84	0	100	0	120	0	140	0
H11	60	0	75	0	90	0	110	0	130	0	160	0	190	0	220	0
J7	4	-6	6	-6	8	-7	10	-8	12	-9	14	-11	18	-12	22	-13
K6	0	-6	2	-6	2	-7	2	-9	2	-11	3	-13	4	-15	4	-18
M6	-2	-8	-1	-9	-3	-12	-4	-15	-4	-17	-4	-20	-5	-24	-6	-28
N6	-4	-10	-5	-13	-7	-16	-9	-20	-11	-24	-12	-28	-14	-33	-16	-38
P6	-6	-12	-9	-17	-12	-21	-15	-26	-18	-31	-21	-37	-26	-45	-30	-52
P7	-6	-16	-8	-20	-9	-24	-11	-29	-14	-35	-17	-42	-21	-51	-24	-59
R6	-10	-16	-12	-20	-16	-25	-20	-31	-24	-37	-29	-45	-35	-56	-44	-66

Hardness comparison according to DIN EN ISO 18265

Revaluation* for hardness in hardness or hardness in tensile strength for non-alloy and low-alloy steels

Tensile strength N/mm ²	Vickers hardness HV	Brinell hardness HB	Rockwell hardness	
			HRB	HRC
255	80	76.0		
270	85	80.7	41.0	
285	90	85.5	48.0	
305	95	90.2	52.0	
320	100	95.0	56.2	
335	105	99.8		
350	110	105	62.3	
370	115	109		
385	120	114	66.7	
400	125	119		
415	130	124	71.2	
430	135	128		
450	140	133	75.0	
465	145	138		
480	150	143	78.7	
495	155	147		
510	160	152	81.7	
530	165	156		
545	170	162	85.0	
560	175	166		
575	180	171	87.1	
595	185	176		
610	190	181	89.5	
625	195	185		
640	200	190	91.5	
660	205	195	92.5	
675	210	199	93.5	
690	215	204	94.0	
705	220	209	95.0	
720	225	214	96.0	
740	230	219	96.7	
755	235	223		
770	240	228	98.1	20.3
785	245	233		21.3
800	250	238	99.5	22.2
820	255	242		23.1
835	260	247	(101)	24.0
850	265	252		24.8
865	270	257	(102)	25.6
880	275	261		26.4
900	280	266	(104)	27.1
915	285	271		27.8
930	290	276	(105)	28.5
950	295	280		29.2
965	300	285		29.8
995	310	295		31.0
1030	320	304		32.2
1060	330	314		33.3
1095	340	323		34.4

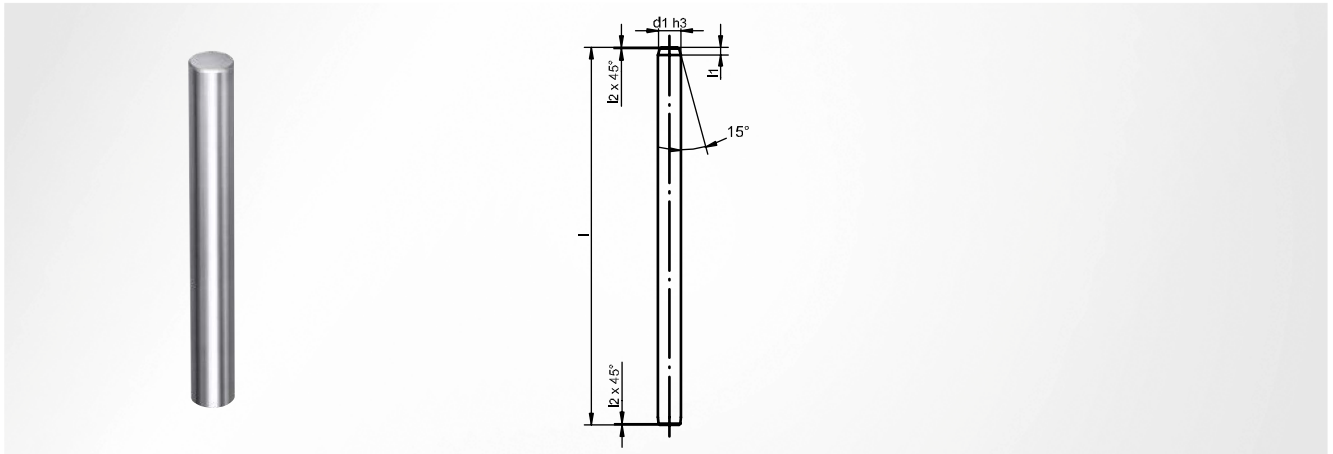
Tensile strength N/mm ²	Vickers hardness HV	Brinell hardness HB	Rockwell hardness	
			HRB	HRC
1125	350	333		35.5
1155	360	342		36.6
1190	370	352		37.7
1220	380	361		38.8
1255	390	371		39.8
1290	400	380		40.8
1320	410	390		41.8
1350	420	399		42.7
1385	430	409		43.6
1420	440	418		44.5
1455	450	428		45.3
1485	460	437		46.1
1520	470	447		46.9
1555	480	456		47.7
1595	490	466		48.4
1630	500	475		49.1
1665	510	485		49.8
1700	520	494		50.5
1740	530	504		51.1
1775	540	513		51.7
1810	550	523		52.3
1845	560	532		53.0
1880	570	542		53.6
1920	580	551		54.1
1955	590	561		54.7
1995	600	570		55.2
2030	610	580		55.7
2070	620	589		56.3
2105	630	599		56.8
2145	640	608		57.3
2180	650	618		57.8
	660			58.3
	670			58.8
	680			59.2
	690			59.7
	700			60.1
	720			61.0
	740			61.8
	760			62.5
	780			63.3
	800			64.0
	820			64.7
	840			65.3
	860			65.9
	880			66.4
	900			67.0
	920			67.5
	940			68.0

The values in this table are only *comparison or standard values and cannot form the basis of complaints.

ST7190 Guide pillar

smooth, Mini-series

STEINEL®



Material

Steel 1.7131; inductively hardened

Hardness

62 ±2 HRC

Guide diameter

ISO h3

Installation instruction

one-sided entry chamfer or centring attachment

Note

Material for Ø 3-6 mm steel 1.2379

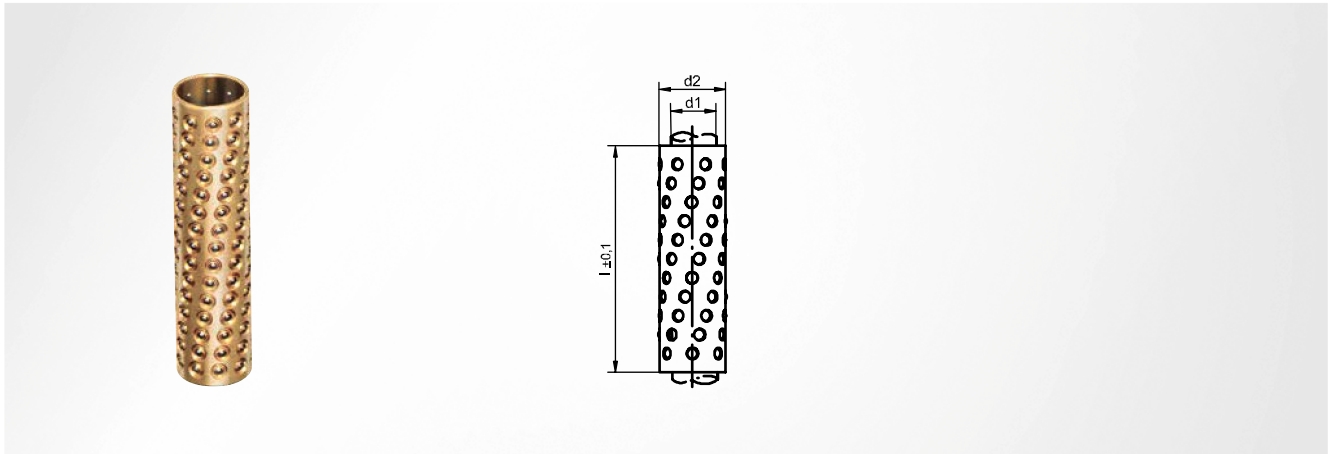
Installation in mounting bore

ISO P6

d_1^{h3}	l	l_1	l_2	Item number
3	30	1.5	0.2	ST7190 03 x 030
	40	1.5	0.2	ST7190 03 x 040
	60	1.5	0.2	ST7190 03 x 060
	80	1.5	0.2	ST7190 03 x 080
4	50	1.5	0.2	ST7190 04 x 050
	60	1.5	0.2	ST7190 04 x 060
	80	1.5	0.2	ST7190 04 x 080
	100	1.5	0.2	ST7190 04 x 100
5	50	1.5	0.2	ST7190 05 x 050
	60	1.5	0.2	ST7190 05 x 060
	80	1.5	0.2	ST7190 05 x 080
	100	1.5	0.2	ST7190 05 x 100
6	60	2.0	0.4	ST7190 06 x 060
	80	2.0	0.4	ST7190 06 x 080
	100	2.0	0.4	ST7190 06 x 100
	125	2.0	0.4	ST7190 06 x 125
8	80	2.0	0.4	ST7190 08 x 080
	100	2.0	0.4	ST7190 08 x 100
	125	2.0	0.4	ST7190 08 x 125
	160	2.0	0.4	ST7190 08 x 160
10	80	3.0	0.6	ST7190 10 x 080
	100	3.0	0.6	ST7190 10 x 100
	125	3.0	0.6	ST7190 10 x 125
	160	3.0	0.6	ST7190 10 x 160

ST7192 Ball cage

Brass, Mini-series



Material

Brass 2.0401

Ball property

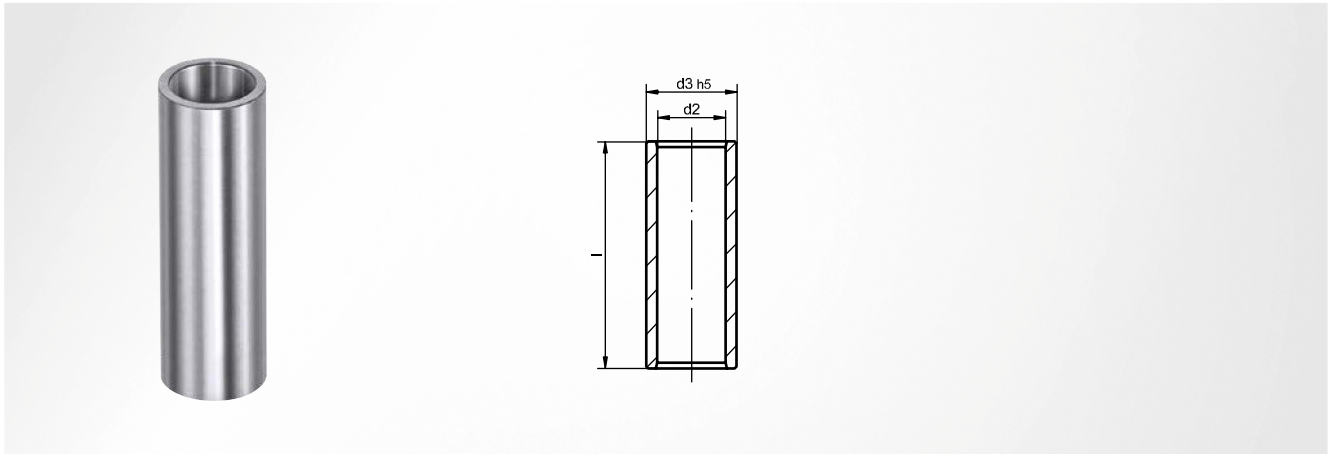
Steel; hardened; quality class 1; sorted

d_1	d_2	$l \pm 0.1$	Item number
3	5	10	ST7192 03 x 10
		20	ST7192 03 x 20
		30	ST7192 03 x 30
4	6	10	ST7192 04 x 10
		20	ST7192 04 x 20
		30	ST7192 04 x 30
5	7	10	ST7192 05 x 10
		20	ST7192 05 x 20
		30	ST7192 05 x 30
6	9	20	ST7192 06 x 20
		30	ST7192 06 x 30
		40	ST7192 06 x 40
8	11	20	ST7192 08 x 20
		30	ST7192 08 x 30
		40	ST7192 08 x 40
10	13	20	ST7192 10 x 20
		30	ST7192 10 x 30
		40	ST7192 10 x 40

ST7191 Guide bush

smooth, Mini-series

STEINEL®



Material

Steel 1.3505 (100 Cr6); hardened

Installation in mounting bore

ISO H6

Hardness

64 ±1 HRC

Optional accessories

SZ9742

Installation instruction

Secure with adhesive; do not press in

d_1^{h3}	d_2	d_3^{h5}	l	Item number
3	5	7	10	ST7191 03 x 10
			20	ST7191 03 x 20
			30	ST7191 03 x 30
4	6	8	10	ST7191 04 x 10
			20	ST7191 04 x 20
			30	ST7191 04 x 30
5	7	10	10	ST7191 05 x 10
			20	ST7191 05 x 20
			30	ST7191 05 x 30
6	9	12	20	ST7191 06 x 20
			30	ST7191 06 x 30
			40	ST7191 06 x 40
8	11	15	20	ST7191 08 x 20
			30	ST7191 08 x 30
			40	ST7191 08 x 40
10	13	19	20	ST7191 10 x 20
			30	ST7191 10 x 30
			40	ST7191 10 x 40

Active
elements

Spring
elements

Nitrogen
systems

Tapping
units

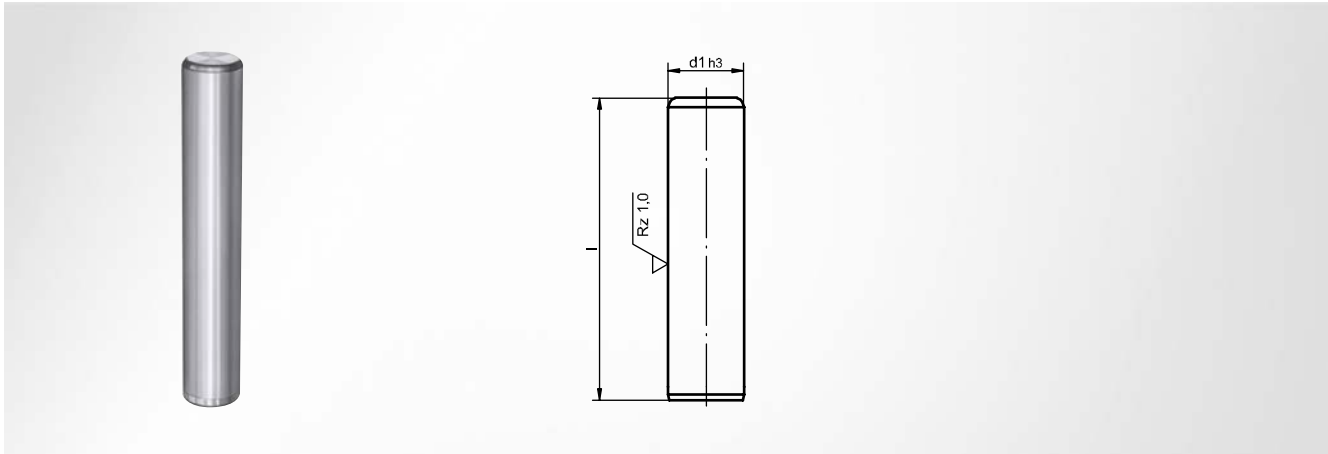
Machining
elements

Accessories

ST7100 Guide pillar

STEINEL®

smooth



Referring to DIN 9825 / ISO 9182

Material

Steel 1.1221 (C60E); inductively hardened

Hardness

63 ±1 HRC

Installation instruction

press in; one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO R6

d_1^{h3}	l	Item number
10	90	ST7100 10 x 090
	100	ST7100 10 x 100
	112	ST7100 10 x 112
	125	ST7100 10 x 125
	140	ST7100 10 x 140
12	90	ST7100 12 x 090
	100	ST7100 12 x 100
	112	ST7100 12 x 112
	125	ST7100 12 x 125
	140	ST7100 12 x 140
15	90	ST7100 15 x 090
	100	ST7100 15 x 100
	112	ST7100 15 x 112
	125	ST7100 15 x 125
	140	ST7100 15 x 140
	160	ST7100 15 x 160
	180	ST7100 15 x 180
	200	ST7100 15 x 200
	224	ST7100 15 x 224
16	250	ST7100 15 x 250
	90	ST7100 16 x 090
	100	ST7100 16 x 100
	112	ST7100 16 x 112
	125	ST7100 16 x 125
	140	ST7100 16 x 140
	160	ST7100 16 x 160
	180	ST7100 16 x 180
	200	ST7100 16 x 200
19	224	ST7100 16 x 224
	250	ST7100 16 x 250
	100	ST7100 19 x 100
	112	ST7100 19 x 112
	125	ST7100 19 x 125
	140	ST7100 19 x 140

d_1^{h3}	l	Item number
19	160	ST7100 19 x 160
	180	ST7100 19 x 180
	200	ST7100 19 x 200
	224	ST7100 19 x 224
	250	ST7100 19 x 250
	280	ST7100 19 x 280
20	100	ST7100 20 x 100
	112	ST7100 20 x 112
	125	ST7100 20 x 125
	140	ST7100 20 x 140
	160	ST7100 20 x 160
	180	ST7100 20 x 180
	200	ST7100 20 x 200
	224	ST7100 20 x 224
	250	ST7100 20 x 250
	280	ST7100 20 x 280
24	112	ST7100 24 x 112
	125	ST7100 24 x 125
	140	ST7100 24 x 140
	160	ST7100 24 x 160
	180	ST7100 24 x 180
	200	ST7100 24 x 200
	224	ST7100 24 x 224
	250	ST7100 24 x 250
	280	ST7100 24 x 280
	315	ST7100 24 x 315
	355	ST7100 24 x 355
	400	ST7100 24 x 400
25	112	ST7100 25 x 112
	125	ST7100 25 x 125
	140	ST7100 25 x 140
	160	ST7100 25 x 160
	180	ST7100 25 x 180
	200	ST7100 25 x 200

smooth

d_1^{h3}	l	Item number
25	224	ST7100 25 x 224
	250	ST7100 25 x 250
	280	ST7100 25 x 280
	315	ST7100 25 x 315
	355	ST7100 25 x 355
	400	ST7100 25 x 400
30	125	ST7100 30 x 125
	140	ST7100 30 x 140
	160	ST7100 30 x 160
	180	ST7100 30 x 180
	200	ST7100 30 x 200
	224	ST7100 30 x 224
	250	ST7100 30 x 250
	280	ST7100 30 x 280
	315	ST7100 30 x 315
	355	ST7100 30 x 355
	400	ST7100 30 x 400
	125	ST7100 32 x 125
	140	ST7100 32 x 140
	160	ST7100 32 x 160
32	180	ST7100 32 x 180
	200	ST7100 32 x 200
	224	ST7100 32 x 224
	250	ST7100 32 x 250
	280	ST7100 32 x 280
	315	ST7100 32 x 315
	355	ST7100 32 x 355
	400	ST7100 32 x 400
	160	ST7100 38 x 160
	180	ST7100 38 x 180
	200	ST7100 38 x 200
	224	ST7100 38 x 224
	250	ST7100 38 x 250
	280	ST7100 38 x 280
38	315	ST7100 38 x 315
	355	ST7100 38 x 355
	400	ST7100 38 x 400
	450	ST7100 38 x 450
	160	ST7100 40 x 160
	180	ST7100 40 x 180
	200	ST7100 40 x 200
	224	ST7100 40 x 224
	250	ST7100 40 x 250
	280	ST7100 40 x 280
	315	ST7100 40 x 315
	40	

d_1^{h3}	l	Item number
40	355	ST7100 40 x 355
	400	ST7100 40 x 400
	450	ST7100 40 x 450
	180	ST7100 48 x 180
48	200	ST7100 48 x 200
	224	ST7100 48 x 224
	250	ST7100 48 x 250
	280	ST7100 48 x 280
	315	ST7100 48 x 315
	355	ST7100 48 x 355
	400	ST7100 48 x 400
	450	ST7100 48 x 450
	500	ST7100 48 x 500
	180	ST7100 50 x 180
	200	ST7100 50 x 200
	224	ST7100 50 x 224
	250	ST7100 50 x 250
	280	ST7100 50 x 280
50	315	ST7100 50 x 315
	355	ST7100 50 x 355
	400	ST7100 50 x 400
	450	ST7100 50 x 450
	500	ST7100 50 x 500
	224	ST7100 60 x 224
	250	ST7100 60 x 250
	280	ST7100 60 x 280
	315	ST7100 60 x 315
	355	ST7100 60 x 355
	400	ST7100 60 x 400
	450	ST7100 60 x 450
	500	ST7100 60 x 500
	224	ST7100 63 x 224
60	250	ST7100 63 x 250
	280	ST7100 63 x 280
	315	ST7100 63 x 315
	355	ST7100 63 x 355
	400	ST7100 63 x 400
	450	ST7100 63 x 450
	500	ST7100 63 x 500
	224	ST7100 63 x 224
	250	ST7100 63 x 250
	280	ST7100 63 x 280
	315	ST7100 63 x 315
	355	ST7100 63 x 355
	400	ST7100 63 x 400
	450	ST7100 63 x 450
63	500	ST7100 63 x 500
	280	ST7100 80 x 280
	315	ST7100 80 x 315
	355	ST7100 80 x 355
	400	ST7100 80 x 400
	450	ST7100 80 x 450
	500	ST7100 80 x 500
	280	ST7100 80 x 280
	315	ST7100 80 x 315
	355	ST7100 80 x 355
	400	ST7100 80 x 400
	450	ST7100 80 x 450
	500	ST7100 80 x 500
	80	

Active
elements

Spring
elements

Nitrogen
systems

Tapping
units

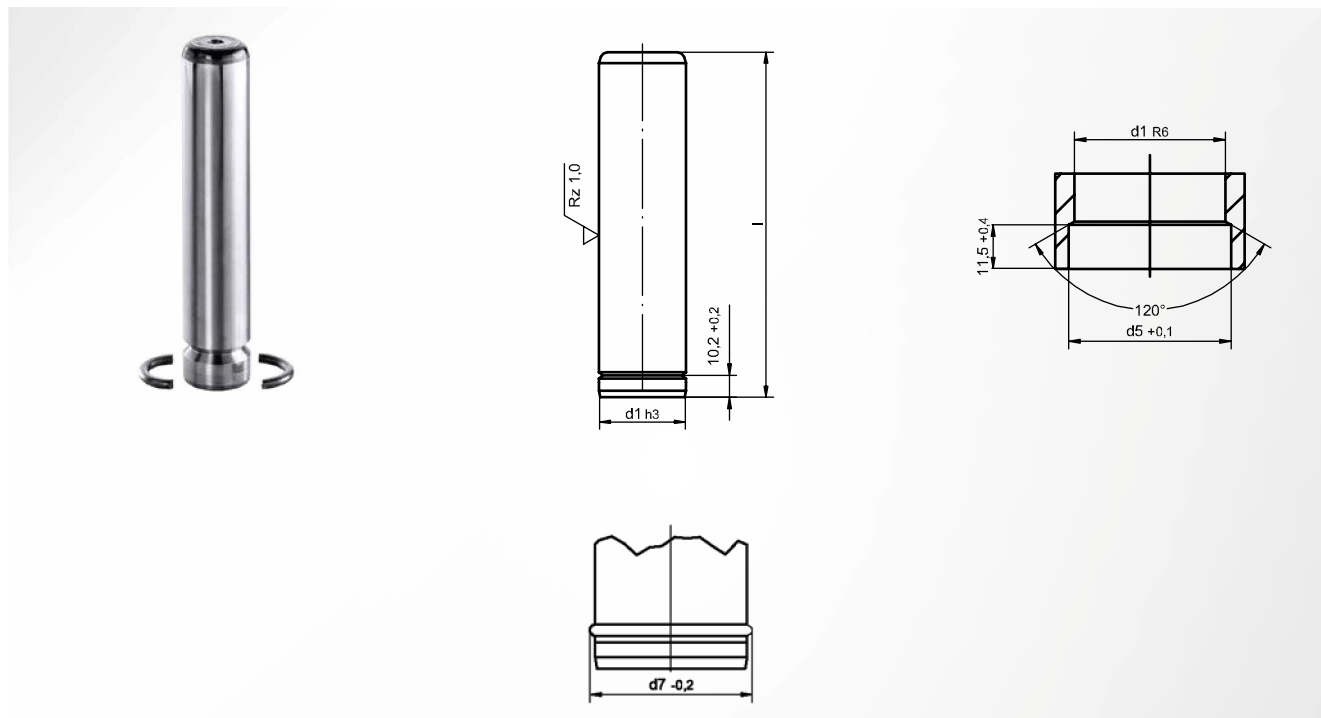
Maschine
elements

Accessories

ST7105 Guide pillar

STEINEL®

smooth, with recess and holding ring



Referring to DIN 9825 / ISO 9182

Material

Steel 1.1221 (C60E); inductively hardened

Installation instruction

press in; one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO R6

Scope of supply

Holding ring

d_1^{h3}	d_5	$d_7^{-0.2}$	l	Item number
10	13	13	90	ST7105 10 x 090
			100	ST7105 10 x 100
			112	ST7105 10 x 112
			125	ST7105 10 x 125
			140	ST7105 10 x 140
12	15	15	90	ST7105 12 x 090
			100	ST7105 12 x 100
			112	ST7105 12 x 112
			125	ST7105 12 x 125
			140	ST7105 12 x 140
15	18	18	90	ST7105 15 x 090
			100	ST7105 15 x 100
			112	ST7105 15 x 112
			125	ST7105 15 x 125
			140	ST7105 15 x 140
			160	ST7105 15 x 160
			180	ST7105 15 x 180
			200	ST7105 15 x 200
			224	ST7105 15 x 224
16	19	19	250	ST7105 15 x 250
			90	ST7105 16 x 090
			100	ST7105 16 x 100
			112	ST7105 16 x 112
			125	ST7105 16 x 125
			140	ST7105 16 x 140
			160	ST7105 16 x 160

d_1^{h3}	d_5	$d_7^{-0.2}$	l	Item number
16	19	19	180	ST7105 16 x 180
			200	ST7105 16 x 200
			224	ST7105 16 x 224
			250	ST7105 16 x 250
			250	ST7105 16 x 250
19	22	22	100	ST7105 19 x 100
			112	ST7105 19 x 112
			125	ST7105 19 x 125
			140	ST7105 19 x 140
			160	ST7105 19 x 160
			180	ST7105 19 x 180
			200	ST7105 19 x 200
			224	ST7105 19 x 224
20	23	23	250	ST7105 19 x 250
			280	ST7105 19 x 280
			100	ST7105 20 x 100
			112	ST7105 20 x 112
			125	ST7105 20 x 125
			140	ST7105 20 x 140
			160	ST7105 20 x 160
			180	ST7105 20 x 180
24	27	27	200	ST7105 20 x 200
			224	ST7105 20 x 224
			250	ST7105 20 x 250
			280	ST7105 20 x 280
			112	ST7105 24 x 112
			125	ST7105 24 x 125
			125	ST7105 24 x 125
			125	ST7105 24 x 125

smooth, with recess and holding ring

d_1^{h3}	d_5	$d_7^{-0.2}$	l	Item number
24	27	27	140	ST7105 24 x 140
			160	ST7105 24 x 160
			180	ST7105 24 x 180
			200	ST7105 24 x 200
			224	ST7105 24 x 224
			250	ST7105 24 x 250
			280	ST7105 24 x 280
			315	ST7105 24 x 315
			355	ST7105 24 x 355
			400	ST7105 24 x 400
25	28	28	112	ST7105 25 x 112
			125	ST7105 25 x 125
			140	ST7105 25 x 140
			160	ST7105 25 x 160
			180	ST7105 25 x 180
			200	ST7105 25 x 200
			224	ST7105 25 x 224
			250	ST7105 25 x 250
			280	ST7105 25 x 280
			315	ST7105 25 x 315
			355	ST7105 25 x 355
			400	ST7105 25 x 400
30	33	33	125	ST7105 30 x 125
			140	ST7105 30 x 140
			160	ST7105 30 x 160
			180	ST7105 30 x 180
			200	ST7105 30 x 200
			224	ST7105 30 x 224
			250	ST7105 30 x 250
			280	ST7105 30 x 280
			315	ST7105 30 x 315
			355	ST7105 30 x 355
			400	ST7105 30 x 400
32	35	35	125	ST7105 32 x 125
			140	ST7105 32 x 140
			160	ST7105 32 x 160
			180	ST7105 32 x 180
			200	ST7105 32 x 200
			224	ST7105 32 x 224
			250	ST7105 32 x 250
			280	ST7105 32 x 280
			315	ST7105 32 x 315
			355	ST7105 32 x 355
			400	ST7105 32 x 400
38	41	41	160	ST7105 38 x 160
			180	ST7105 38 x 180
			200	ST7105 38 x 200
			224	ST7105 38 x 224
			250	ST7105 38 x 250
			280	ST7105 38 x 280
			315	ST7105 38 x 315
			355	ST7105 38 x 355
400			400	ST7105 38 x 400

d_1^{h3}	d_5	$d_7^{-0.2}$	l	Item number
38	41	41	450	ST7105 38 x 450
40	43	43	160	ST7105 40 x 160
			180	ST7105 40 x 180
			200	ST7105 40 x 200
			224	ST7105 40 x 224
			250	ST7105 40 x 250
			280	ST7105 40 x 280
			315	ST7105 40 x 315
			355	ST7105 40 x 355
			400	ST7105 40 x 400
			450	ST7105 40 x 450
48	51	51	180	ST7105 48 x 180
			200	ST7105 48 x 200
			224	ST7105 48 x 224
			250	ST7105 48 x 250
			280	ST7105 48 x 280
			315	ST7105 48 x 315
			355	ST7105 48 x 355
			400	ST7105 48 x 400
			450	ST7105 48 x 450
			500	ST7105 48 x 500
50	53	53	180	ST7105 50 x 180
			200	ST7105 50 x 200
			224	ST7105 50 x 224
			250	ST7105 50 x 250
			280	ST7105 50 x 280
			315	ST7105 50 x 315
			355	ST7105 50 x 355
			400	ST7105 50 x 400
			450	ST7105 50 x 450
			500	ST7105 50 x 500
60	63	63	224	ST7105 60 x 224
			250	ST7105 60 x 250
			280	ST7105 60 x 280
			315	ST7105 60 x 315
			355	ST7105 60 x 355
			400	ST7105 60 x 400
			450	ST7105 60 x 450
			500	ST7105 60 x 500
			224	ST7105 60 x 224
			250	ST7105 60 x 250
			280	ST7105 60 x 280
			315	ST7105 60 x 315
			355	ST7105 60 x 355
			400	ST7105 60 x 400
			450	ST7105 60 x 450
			500	ST7105 60 x 500
63	66	66	224	ST7105 63 x 224
			250	ST7105 63 x 250
			280	ST7105 63 x 280
			315	ST7105 63 x 315
			355	ST7105 63 x 355
			400	ST7105 63 x 400
			450	ST7105 63 x 450
			500	ST7105 63 x 500
80	83	83	280	ST7105 80 x 280
			315	ST7105 80 x 315
			355	ST7105 80 x 355
			400	ST7105 80 x 400
			450	ST7105 80 x 450
			500	ST7105 80 x 500

Active
elements

Spring
elements

Nitrogen
systems

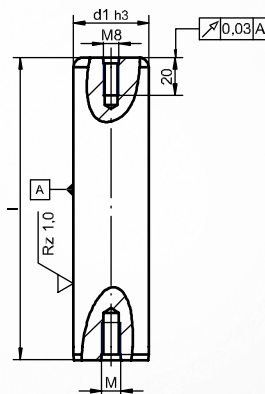
Tapping
units

Maschine
elements

Accessories

ST7106 Guide pillar

smooth, with internal thread, both-sided



Referring to DIN 9825 / ISO 9182

Material

Steel 1.1221 (C60E); inductively hardened

Hardness

63 ±1 HRC

Installation instruction

press in; one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO R6

d_1^{h3}	Thread pressing site M	l	Item number
19	M8	100	ST7106 19 x 100
		112	ST7106 19 x 112
		125	ST7106 19 x 125
		140	ST7106 19 x 140
		160	ST7106 19 x 160
		180	ST7106 19 x 180
		200	ST7106 19 x 200
		224	ST7106 19 x 224
		250	ST7106 19 x 250
		280	ST7106 19 x 280
20	M8	100	ST7106 20 x 100
		112	ST7106 20 x 112
		125	ST7106 20 x 125
		140	ST7106 20 x 140
		160	ST7106 20 x 160
		180	ST7106 20 x 180
		200	ST7106 20 x 200
		224	ST7106 20 x 224
		250	ST7106 20 x 250
		280	ST7106 20 x 280
24	M8	112	ST7106 24 x 112
		125	ST7106 24 x 125
		140	ST7106 24 x 140
		160	ST7106 24 x 160
		180	ST7106 24 x 180
		200	ST7106 24 x 200
		224	ST7106 24 x 224
		250	ST7106 24 x 250
		280	ST7106 24 x 280
		315	ST7106 24 x 315
		355	ST7106 24 x 355
		400	ST7106 24 x 400
25	M8	112	ST7106 25 x 112

d_1^{h3}	Thread pressing site M	l	Item number
25	M8	125	ST7106 25 x 125
		140	ST7106 25 x 140
		160	ST7106 25 x 160
		180	ST7106 25 x 180
		200	ST7106 25 x 200
		224	ST7106 25 x 224
		250	ST7106 25 x 250
		280	ST7106 25 x 280
		315	ST7106 25 x 315
		355	ST7106 25 x 355
		400	ST7106 25 x 400
30	M8	125	ST7106 30 x 125
		140	ST7106 30 x 140
		160	ST7106 30 x 160
		180	ST7106 30 x 180
		200	ST7106 30 x 200
		224	ST7106 30 x 224
		250	ST7106 30 x 250
		280	ST7106 30 x 280
		315	ST7106 30 x 315
		355	ST7106 30 x 355
		400	ST7106 30 x 400
32	M8	125	ST7106 32 x 125
		140	ST7106 32 x 140
		160	ST7106 32 x 160
		180	ST7106 32 x 180
		200	ST7106 32 x 200
		224	ST7106 32 x 224
		250	ST7106 32 x 250
		280	ST7106 32 x 280
		315	ST7106 32 x 315
		355	ST7106 32 x 355
		400	ST7106 32 x 400

smooth, with internal thread, both-sided

d_1^{h3}	Thread pressing site M	l	Item number
38	M10	160	ST7106 38 x 160
		180	ST7106 38 x 180
		200	ST7106 38 x 200
		224	ST7106 38 x 224
		250	ST7106 38 x 250
		280	ST7106 38 x 280
		315	ST7106 38 x 315
		355	ST7106 38 x 355
		400	ST7106 38 x 400
		450	ST7106 38 x 450
40	M10	160	ST7106 40 x 160
		180	ST7106 40 x 180
		200	ST7106 40 x 200
		224	ST7106 40 x 224
		250	ST7106 40 x 250
		280	ST7106 40 x 280
		315	ST7106 40 x 315
		355	ST7106 40 x 355
		400	ST7106 40 x 400
		450	ST7106 40 x 450
48	M10	180	ST7106 48 x 180
		200	ST7106 48 x 200
		224	ST7106 48 x 224
		250	ST7106 48 x 250
		280	ST7106 48 x 280
		315	ST7106 48 x 315
		355	ST7106 48 x 355
		400	ST7106 48 x 400
		450	ST7106 48 x 450
		500	ST7106 48 x 500
50	M10	180	ST7106 50 x 180

d_1^{h3}	Thread pressing site M	l	Item number
50	M10	200	ST7106 50 x 200
		224	ST7106 50 x 224
		250	ST7106 50 x 250
		280	ST7106 50 x 280
		315	ST7106 50 x 315
		355	ST7106 50 x 355
		400	ST7106 50 x 400
		450	ST7106 50 x 450
		500	ST7106 50 x 500
60	M12	224	ST7106 60 x 224
		250	ST7106 60 x 250
		280	ST7106 60 x 280
		315	ST7106 60 x 315
		355	ST7106 60 x 355
		400	ST7106 60 x 400
		450	ST7106 60 x 450
63	M12	224	ST7106 63 x 224
		250	ST7106 63 x 250
		280	ST7106 63 x 280
		315	ST7106 63 x 315
		355	ST7106 63 x 355
		400	ST7106 63 x 400
		450	ST7106 63 x 450
80	M12	280	ST7106 80 x 280
		315	ST7106 80 x 315
		355	ST7106 80 x 355
		400	ST7106 80 x 400
		450	ST7106 80 x 450
		500	ST7106 80 x 500

Active elements

Spring elements

Nitrogen systems

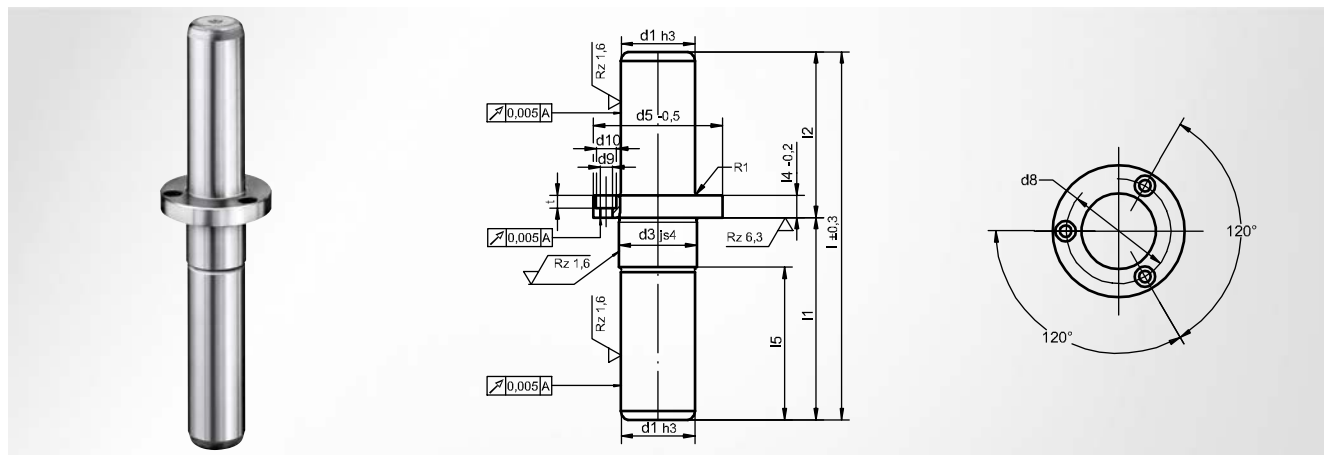
Tapping units

Maschine elements

Accessories

ST7117 Guide pillar

with middle mount shoulder



Material

Steel 1.1221 (C60E); inductively hardened

Hardness

63 ±1 HRC

Installation instruction

Fixing with 3 socket-head screws (not included in the scope of delivery); one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO H6

d_1^{h3}	d_3^{js4}	$d_5^{-0.5}$	d_8	d_9	d_{10}	$l_4^{-0.2}$	t	$l_{\pm 0.3}$	l_1	l_2	l_5	Item number
12	13	28	20	3.4	6	6	3.4	90	50	40	38	ST7117 12 x 050 x 040
								100	60	40	48	ST7117 12 x 060 x 040
								110	60	50	48	ST7117 12 x 060 x 050
								120	70	50	58	ST7117 12 x 070 x 050
								120	70	60	58	ST7117 12 x 070 x 060
								140	70	70	58	ST7117 12 x 070 x 070
								200	100	100	88	ST7117 12 x 100 x 100
16	18	38	28	4.5	8	8	4.6	140	80	60	64	ST7117 16 x 080 x 060
								150	90	60	74	ST7117 16 x 090 x 060
								160	90	70	74	ST7117 16 x 090 x 070
								170	100	70	84	ST7117 16 x 100 x 070
								180	100	80	84	ST7117 16 x 100 x 080
								190	100	90	84	ST7117 16 x 100 x 090
								270	140	130	124	ST7117 16 x 140 x 130
19	22	42	32	4.5	8	8	4.6	160	90	70	70	ST7117 19 x 090 x 070
								170	100	70	80	ST7117 19 x 100 x 070
								180	100	80	80	ST7117 19 x 100 x 080
								190	110	80	90	ST7117 19 x 110 x 080
								200	110	90	90	ST7117 19 x 110 x 090
								210	110	100	90	ST7117 19 x 110 x 100
								310	160	150	140	ST7117 19 x 160 x 150
25	26	48	38	4.5	8	8	4.6	180	100	80	78	ST7117 25 x 100 x 080
								190	110	80	88	ST7117 25 x 110 x 080
								200	110	90	88	ST7117 25 x 110 x 090
								210	120	90	98	ST7117 25 x 120 x 090
								220	120	100	98	ST7117 25 x 120 x 100
								230	120	110	98	ST7117 25 x 120 x 110
								330	170	160	148	ST7117 25 x 170 x 160
32	34	60	48	5.5	10	10	5.7	180	100	80	75	ST7117 32 x 100 x 080
								190	110	80	85	ST7117 32 x 110 x 080
								200	110	90	85	ST7117 32 x 110 x 090
								210	120	90	95	ST7117 32 x 120 x 090
								220	120	100	95	ST7117 32 x 120 x 100
								230	130	100	105	ST7117 32 x 130 x 100

with middle mount shoulder

d_1^{H3}	d_3^{js4}	$d_5^{-0.5}$	d_8	d_9	d_{10}	$l_4^{-0.2}$	t	$l_{\pm 0.3}$	l_1	l_2	l_5	Item number
32	34	60	48	5.5	10	10	5.7	240	130	110	105	ST7117 32 x 130 x 110
								260	130	130	105	ST7117 32 x 130 x 130
								250	140	110	115	ST7117 32 x 140 x 110
								350	190	160	165	ST7117 32 x 190 x 160
40	42	70	56	6.6	11	12	6.8	200	110	90	83	ST7117 40 x 110 x 090
								210	120	90	93	ST7117 40 x 120 x 090
								220	120	100	93	ST7117 40 x 120 x 100
								230	130	100	103	ST7117 40 x 130 x 100
								240	130	110	103	ST7117 40 x 130 x 110
								250	140	110	113	ST7117 40 x 140 x 110
								260	140	120	113	ST7117 40 x 140 x 120
								380	200	180	173	ST7117 40 x 200 x 180
50	52	80	66	6.6	11	15	6.8	260	150	110	113	ST7117 50 x 150 x 110
								280	150	120	123	ST7117 50 x 160 x 120
								300	160	130	133	ST7117 50 x 170 x 130
								320	170	140	143	ST7117 50 x 180 x 140
								360	180	160	163	ST7117 50 x 200 x 160
								400	200	180	183	ST7117 50 x 220 x 180
								520	220	240	243	ST7117 50 x 280 x 240

Active
elements

Spring
elements

Nitrogen
systems

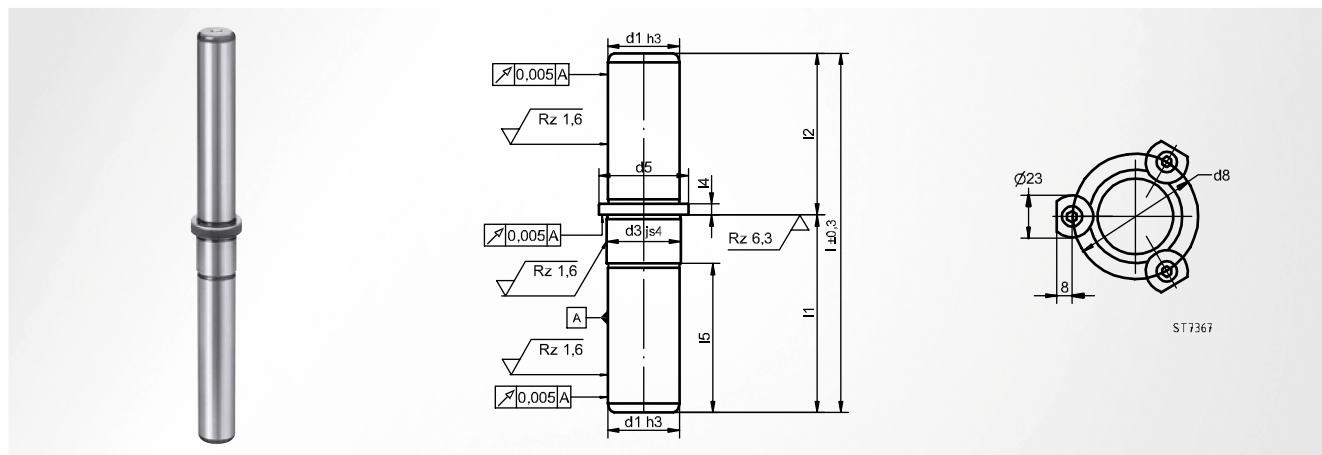
Tapping
units

Maschine
elements

Accessories

ST7118 Guide pillar

with middle mount shoulder, small



Material

Steel 1.1221 (C60E); inductively hardened

Hardness

63 ±1 HRC

Installation instruction

Fixing with 3 holding clamps; one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO H6

d_1^{h3}	d_3^{js4}	d_5	d_8	l_4	$l_{\pm 0.3}$	l_1	l_2	l_5	Item number
12	13	18	35	6.1	90	50	40	38	ST7118 12 x 050 x 040
					100	60	40	48	ST7118 12 x 060 x 040
					110	60	50	48	ST7118 12 x 060 x 050
					120	70	50	58	ST7118 12 x 070 x 050
					130	70	60	58	ST7118 12 x 070 x 060
					140	70	70	58	ST7118 12 x 070 x 070
					200	100	100	88	ST7118 12 x 100 x 100
16	17	22	39	6.1	140	80	60	64	ST7118 16 x 080 x 060
					150	90	60	74	ST7118 16 x 090 x 060
					160	90	70	74	ST7118 16 x 090 x 070
					170	100	70	84	ST7118 16 x 100 x 070
					180	100	80	84	ST7118 16 x 100 x 080
					190	100	90	84	ST7118 16 x 100 x 090
					270	140	130	124	ST7118 16 x 140 x 130
19	20	25	42	6.1	160	90	70	70	ST7118 19 x 090 x 070
					170	100	70	80	ST7118 19 x 100 x 070
					180	100	80	80	ST7118 19 x 100 x 080
					190	110	80	90	ST7118 19 x 110 x 080
					200	110	90	90	ST7118 19 x 110 x 090
					210	110	100	90	ST7118 19 x 110 x 100
					310	160	150	140	ST7118 19 x 160 x 150
25	26	32	49	6.1	180	100	80	78	ST7118 25 x 100 x 080
					190	110	80	88	ST7118 25 x 110 x 080
					200	110	90	88	ST7118 25 x 110 x 090
					210	120	90	98	ST7118 25 x 120 x 090
					220	120	100	98	ST7118 25 x 120 x 100
					230	120	110	98	ST7118 25 x 120 x 110
					330	170	160	148	ST7118 25 x 170 x 160
32	33	40	57	6.1	180	100	80	75	ST7118 32 x 100 x 080
					190	110	80	85	ST7118 32 x 110 x 080
					200	110	90	85	ST7118 32 x 110 x 090
					210	120	90	95	ST7118 32 x 120 x 090
					220	120	100	95	ST7118 32 x 120 x 100
					230	130	100	105	ST7118 32 x 130 x 100
					240	130	110	105	ST7118 32 x 130 x 110

with middle mount shoulder, small

d_1^{H3}	d_3^{js4}	d_5	d_8	l_4	$l \pm 0.3$	l_1	l_2	l_5	Item number
32	33	40	57	6.1	250	140	110	115	ST7118 32 x 140 x 110
					350	190	160	165	ST7118 32 x 190 x 160
40	41	50	67	6.1	200	110	90	83	ST7118 40 x 110 x 090
					210	120	90	93	ST7118 40 x 120 x 090
					220	120	100	93	ST7118 40 x 120 x 100
					230	130	100	103	ST7118 40 x 130 x 100
					240	130	110	103	ST7118 40 x 130 x 110
					250	140	110	113	ST7118 40 x 140 x 110
					260	140	120	113	ST7118 40 x 140 x 120
					380	200	180	173	ST7118 40 x 200 x 180
50	51	63	80	6.1	260	150	110	113	ST7118 50 x 150 x 110
					280	160	120	123	ST7118 50 x 160 x 120
					300	170	130	133	ST7118 50 x 170 x 130
					320	180	140	143	ST7118 50 x 180 x 140
					360	200	160	163	ST7118 50 x 200 x 160
					400	220	180	183	ST7118 50 x 220 x 180
					520	280	240	243	ST7118 50 x 280 x 240

Active
elements

Spring
elements

Nitrogen
systems

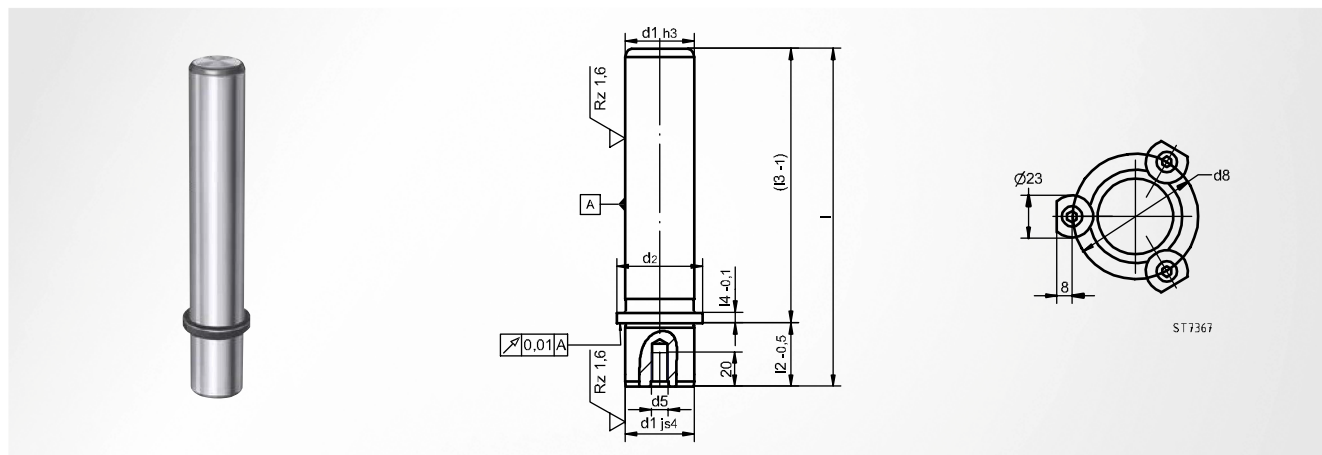
Tapping
units

Maschine
elements

Accessories

ST7120 Guide pillar

with shoulder and internal thread



Referring to DIN 9825 / ISO 9182

Material

Steel 1.1221 (C60E); inductively hardened

Hardness

63 ±1 HRC

Installation instruction

Fixing with 3 holding clamps; one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO H6

Scope of supply

ST7367

Optional accessories

ST7387

d_1^{h3}	d_2	d_5	d_8	$l_2^{-0.5}$	$l_4^{-0.1}$	l	l_3^{-1}	Item number
15	21	M8	38	20	6.1	110	90	ST7120 15 x 090 x 110
						120	100	ST7120 15 x 100 x 120
						132	112	ST7120 15 x 112 x 132
						145	125	ST7120 15 x 125 x 145
						160	140	ST7120 15 x 140 x 160
						180	160	ST7120 15 x 160 x 180
						200	180	ST7120 15 x 180 x 200
						220	200	ST7120 15 x 200 x 220
16	21	M8	38	20	6.1	110	90	ST7120 16 x 090 x 110
						120	100	ST7120 16 x 100 x 120
						132	112	ST7120 16 x 112 x 132
						145	125	ST7120 16 x 125 x 145
						160	140	ST7120 16 x 140 x 160
						180	160	ST7120 16 x 160 x 180
						200	180	ST7120 16 x 180 x 200
						220	200	ST7120 16 x 200 x 220
19	25	M8	42	23	6.1	123	100	ST7120 19 x 100 x 123
						135	112	ST7120 19 x 112 x 135
						148	125	ST7120 19 x 125 x 148
						163	140	ST7120 19 x 140 x 163
						183	160	ST7120 19 x 160 x 183
						203	180	ST7120 19 x 180 x 203
						223	200	ST7120 19 x 200 x 223
						247	224	ST7120 19 x 224 x 247
						273	250	ST7120 19 x 250 x 273
20	25	M8	42	23	6.1	123	100	ST7120 20 x 100 x 123
						135	112	ST7120 20 x 112 x 135
						148	125	ST7120 20 x 125 x 148
						163	140	ST7120 20 x 140 x 163
						183	160	ST7120 20 x 160 x 183
						203	180	ST7120 20 x 180 x 203

d_1^{h3}	d_2	d_5	d_8	$l_2^{-0.5}$	$l_4^{-0.1}$	l	l_3^{-1}	Item number
20	25	M8	42	23	6.1	223	200	ST7120 20 x 200 x 223
						247	224	ST7120 20 x 224 x 247
						273	250	ST7120 20 x 250 x 273
24	32	M8	49	27	6.1	127	100	ST7120 24 x 100 x 127
						139	112	ST7120 24 x 112 x 139
						152	125	ST7120 24 x 125 x 152
						167	140	ST7120 24 x 140 x 167
						187	160	ST7120 24 x 160 x 187
						207	180	ST7120 24 x 180 x 207
						227	200	ST7120 24 x 200 x 227
						251	224	ST7120 24 x 224 x 251
						277	250	ST7120 24 x 250 x 277
						307	280	ST7120 24 x 280 x 307
25	32	M8	49	27	6.1	342	315	ST7120 24 x 315 x 342
						127	100	ST7120 25 x 100 x 127
						139	112	ST7120 25 x 112 x 139
						152	125	ST7120 25 x 125 x 152
						167	140	ST7120 25 x 140 x 167
						187	160	ST7120 25 x 160 x 187
						207	180	ST7120 25 x 180 x 207
						227	200	ST7120 25 x 200 x 227
						251	224	ST7120 25 x 224 x 251
30	40	M8	57	37	6.1	277	250	ST7120 25 x 250 x 277
						307	280	ST7120 25 x 280 x 307
						342	315	ST7120 25 x 315 x 342
						149	112	ST7120 30 x 112 x 149
						162	125	ST7120 30 x 125 x 162
						177	140	ST7120 30 x 140 x 177
						197	160	ST7120 30 x 160 x 197
						217	180	ST7120 30 x 180 x 217
						237	200	ST7120 30 x 200 x 237

ST7120 Guide pillar

with shoulder and internal thread

d_1^{h3}	d_2	d_5	d_8	$l_2^{-0.5}$	$l_4^{-0.1}$	l	l_3^{-1}	Item number
30	40	M8	57	37	6.1	261	224	ST7120 30 x 224 x 261
						287	250	ST7120 30 x 250 x 287
						317	280	ST7120 30 x 280 x 317
						352	315	ST7120 30 x 315 x 352
						392	355	ST7120 30 x 355 x 392
32	40	M8	57	37	6.1	149	112	ST7120 32 x 112 x 149
						162	125	ST7120 32 x 125 x 162
						177	140	ST7120 32 x 140 x 177
						197	160	ST7120 32 x 160 x 197
						217	180	ST7120 32 x 180 x 217
						237	200	ST7120 32 x 200 x 237
						261	224	ST7120 32 x 224 x 261
						287	250	ST7120 32 x 250 x 287
						317	280	ST7120 32 x 280 x 317
						352	315	ST7120 32 x 315 x 352
38	50	M10	67	37	6.1	162	125	ST7120 38 x 125 x 162
						177	140	ST7120 38 x 140 x 177
						197	160	ST7120 38 x 160 x 197
						217	180	ST7120 38 x 180 x 217
						237	200	ST7120 38 x 200 x 237
						261	224	ST7120 38 x 224 x 261
						287	250	ST7120 38 x 250 x 287
						317	280	ST7120 38 x 280 x 317
						352	315	ST7120 38 x 315 x 352
						392	355	ST7120 38 x 355 x 392
40	50	M10	67	37	6.1	162	125	ST7120 40 x 125 x 162
						177	140	ST7120 40 x 140 x 177
						197	160	ST7120 40 x 160 x 197
						217	180	ST7120 40 x 180 x 217
						237	200	ST7120 40 x 200 x 237
						261	224	ST7120 40 x 224 x 261
						287	250	ST7120 40 x 250 x 287
						317	280	ST7120 40 x 280 x 317
						352	315	ST7120 40 x 315 x 352
						392	355	ST7120 40 x 355 x 392
48	63	M10	80	47	6.1	187	140	ST7120 48 x 140 x 187
						207	160	ST7120 48 x 160 x 207
						227	180	ST7120 48 x 180 x 227
						247	200	ST7120 48 x 200 x 247

d_1^{h3}	d_2	d_5	d_8	$l_2^{-0.5}$	$l_4^{-0.1}$	l	l_3^{-1}	Item number
48	63	M10	80	47	6.1	271	224	ST7120 48 x 224 x 271
						297	250	ST7120 48 x 250 x 297
						327	280	ST7120 48 x 280 x 327
						362	315	ST7120 48 x 315 x 362
						402	355	ST7120 48 x 355 x 402
50	63	M10	80	47	6.1	447	400	ST7120 48 x 400 x 447
						497	450	ST7120 48 x 450 x 497
						187	140	ST7120 50 x 140 x 187
						207	160	ST7120 50 x 160 x 207
						227	180	ST7120 50 x 180 x 227
60	80	M12	97	47	6.1	247	200	ST7120 50 x 200 x 247
						271	224	ST7120 50 x 224 x 271
						297	250	ST7120 50 x 250 x 297
						327	280	ST7120 50 x 280 x 327
						362	315	ST7120 50 x 315 x 362
						402	355	ST7120 50 x 355 x 402
						447	400	ST7120 50 x 400 x 447
						497	450	ST7120 50 x 450 x 497
						247	200	ST7120 60 x 200 x 247
						271	224	ST7120 60 x 224 x 271
63	80	M12	97	47	6.1	297	250	ST7120 60 x 250 x 297
						327	280	ST7120 60 x 280 x 327
						362	315	ST7120 60 x 315 x 362
						402	355	ST7120 60 x 355 x 402
						447	400	ST7120 60 x 400 x 447
						497	450	ST7120 60 x 450 x 497
						247	200	ST7120 63 x 200 x 247
						271	224	ST7120 63 x 224 x 271
						297	250	ST7120 63 x 250 x 297
						327	280	ST7120 63 x 280 x 327
80	95	M12	112	60	6.1	362	315	ST7120 63 x 315 x 362
						402	355	ST7120 63 x 355 x 402
						447	400	ST7120 63 x 400 x 447
						497	450	ST7120 63 x 450 x 497
						310	250	ST7120 80 x 250 x 310
						340	280	ST7120 80 x 280 x 340
						375	315	ST7120 80 x 315 x 375
						415	355	ST7120 80 x 355 x 415
						460	400	ST7120 80 x 400 x 460
						510	450	ST7120 80 x 450 x 510
						560	500	ST7120 80 x 500 x 560

Active
elements

Spring
elements

Nitrogen
systems

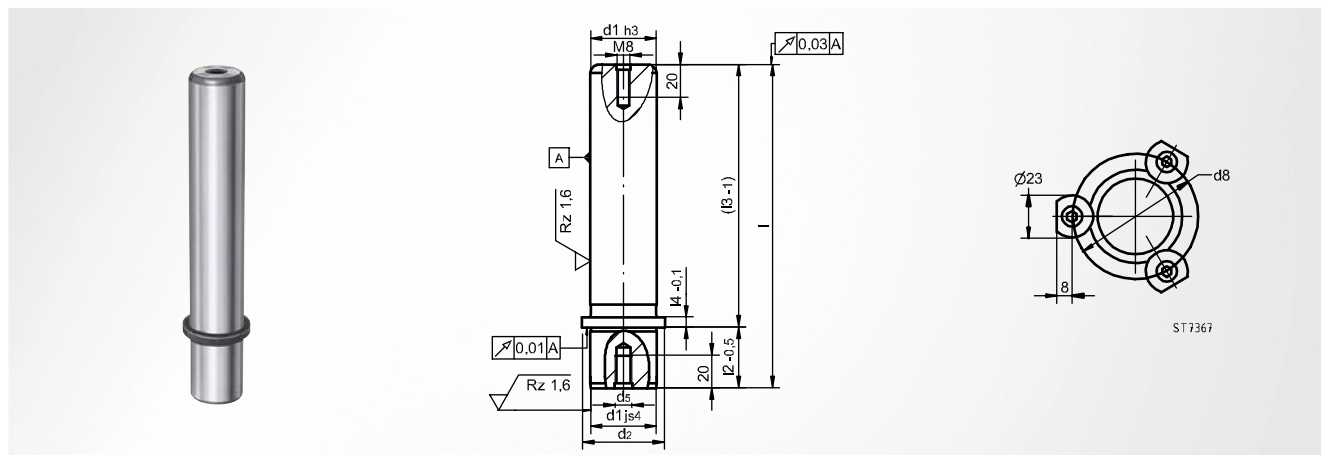
Tapping
units

Maschine
elements

Accessories

ST7126 Guide pillar

with shoulder and internal thread, both-sided



Referring to DIN 9825 / ISO 9182

Material

Steel 1.1221 (C60E); inductively hardened

Hardness

63 ±1 HRC

Installation instruction

Fixing with 3 holding clamps; one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO H6

Scope of supply

ST7367

Optional accessories

ST7387

d_1^{h3}	d_2	d_5	d_8	$l_2^{-0,5}$	$l_4^{-0,1}$	l	l_3^{-1}	Item number
15	21	M8	38	20	6.1	110	90	ST7126 15 x 090 x 110
						120	100	ST7126 15 x 100 x 120
						132	112	ST7126 15 x 112 x 132
						145	125	ST7126 15 x 125 x 145
						160	140	ST7126 15 x 140 x 160
						180	160	ST7126 15 x 160 x 180
						200	180	ST7126 15 x 180 x 200
						220	200	ST7126 15 x 200 x 220
16	21	M8	38	20	6.1	110	90	ST7126 16 x 090 x 110
						120	100	ST7126 16 x 100 x 120
						132	112	ST7126 16 x 112 x 132
						145	125	ST7126 16 x 125 x 145
						160	140	ST7126 16 x 140 x 160
						180	160	ST7126 16 x 160 x 180
						200	180	ST7126 16 x 180 x 200
						220	200	ST7126 16 x 200 x 220
19	25	M8	42	23	6.1	123	100	ST7126 19 x 100 x 123
						135	112	ST7126 19 x 112 x 135
						148	125	ST7126 19 x 125 x 148
						163	140	ST7126 19 x 140 x 163
						183	160	ST7126 19 x 160 x 183
						203	180	ST7126 19 x 180 x 203
						223	200	ST7126 19 x 200 x 223
						247	224	ST7126 19 x 224 x 247
						273	250	ST7126 19 x 250 x 273
20	25	M8	42	23	6.1	123	100	ST7126 20 x 100 x 123
						135	112	ST7126 20 x 112 x 135
						148	125	ST7126 20 x 125 x 148
						163	140	ST7126 20 x 140 x 163
						183	160	ST7126 20 x 160 x 183
						203	180	ST7126 20 x 180 x 203

d_1^{h3}	d_2	d_5	d_8	$l_2^{-0,5}$	$l_4^{-0,1}$	l	l_3^{-1}	Item number
20	25	M8	42	23	6.1	223	200	ST7126 20 x 200 x 223
						247	224	ST7126 20 x 224 x 247
						273	250	ST7126 20 x 250 x 273
24	32	M8	49	27	6.1	127	100	ST7126 24 x 100 x 127
						139	112	ST7126 24 x 112 x 139
						152	125	ST7126 24 x 125 x 152
						167	140	ST7126 24 x 140 x 167
						187	160	ST7126 24 x 160 x 187
						207	180	ST7126 24 x 180 x 207
						227	200	ST7126 24 x 200 x 227
						251	224	ST7126 24 x 224 x 251
						277	250	ST7126 24 x 250 x 277
						307	280	ST7126 24 x 280 x 307
25	32	M8	49	27	6.1	342	315	ST7126 24 x 315 x 342
						127	100	ST7126 25 x 100 x 127
						139	112	ST7126 25 x 112 x 139
						152	125	ST7126 25 x 125 x 152
						167	140	ST7126 25 x 140 x 167
						187	160	ST7126 25 x 160 x 187
						207	180	ST7126 25 x 180 x 207
						227	200	ST7126 25 x 200 x 227
						251	224	ST7126 25 x 224 x 251
30	40	M8	57	37	6.1	277	250	ST7126 25 x 250 x 277
						307	280	ST7126 25 x 280 x 307
						342	315	ST7126 25 x 315 x 342
						149	112	ST7126 30 x 112 x 149
						162	125	ST7126 30 x 125 x 162
						177	140	ST7126 30 x 140 x 177
						197	160	ST7126 30 x 160 x 197
						217	180	ST7126 30 x 180 x 217
						237	200	ST7126 30 x 200 x 237

with shoulder and internal thread, both-sided

d_1^{h3}	d_2	d_5	d_8	$l_2^{-0.5}$	$l_4^{-0.1}$	l	l_3^{-1}	Item number
30	40	M8	57	37	6.1	261	224	ST7126 30 x 224 x 261
						287	250	ST7126 30 x 250 x 287
						317	280	ST7126 30 x 280 x 317
						352	315	ST7126 30 x 315 x 352
						392	355	ST7126 30 x 355 x 392
32	40	M8	57	37	6.1	149	112	ST7126 32 x 112 x 149
						162	125	ST7126 32 x 125 x 162
						177	140	ST7126 32 x 140 x 177
						197	160	ST7126 32 x 160 x 197
						217	180	ST7126 32 x 180 x 217
						237	200	ST7126 32 x 200 x 237
						261	224	ST7126 32 x 224 x 261
						287	250	ST7126 32 x 250 x 287
						317	280	ST7126 32 x 280 x 317
						352	315	ST7126 32 x 315 x 352
38	50	M10	67	37	6.1	162	125	ST7126 38 x 125 x 162
						177	140	ST7126 38 x 140 x 177
						197	160	ST7126 38 x 160 x 197
						217	180	ST7126 38 x 180 x 217
						237	200	ST7126 38 x 200 x 237
						261	224	ST7126 38 x 224 x 261
						287	250	ST7126 38 x 250 x 287
						317	280	ST7126 38 x 280 x 317
						352	315	ST7126 38 x 315 x 352
						392	355	ST7126 38 x 355 x 392
40	50	M10	67	37	6.1	162	125	ST7126 40 x 125 x 162
						177	140	ST7126 40 x 140 x 177
						197	160	ST7126 40 x 160 x 197
						217	180	ST7126 40 x 180 x 217
						237	200	ST7126 40 x 200 x 237
						261	224	ST7126 40 x 224 x 261
						287	250	ST7126 40 x 250 x 287
						317	280	ST7126 40 x 280 x 317
						352	315	ST7126 40 x 315 x 352
						392	355	ST7126 40 x 355 x 392
48	63	M10	80	47	6.1	187	140	ST7126 48 x 140 x 187
						207	160	ST7126 48 x 160 x 207
						227	180	ST7126 48 x 180 x 227
						247	200	ST7126 48 x 200 x 247

d_1^{h3}	d_2	d_5	d_8	$l_2^{-0.5}$	$l_4^{-0.1}$	l	l_3^{-1}	Item number
48	63	M10	80	47	6.1	271	224	ST7126 48 x 224 x 271
						297	250	ST7126 48 x 250 x 297
						327	280	ST7126 48 x 280 x 327
						362	315	ST7126 48 x 315 x 362
						402	355	ST7126 48 x 355 x 402
						447	400	ST7126 48 x 400 x 447
						497	450	ST7126 48 x 450 x 497
50	63	M10	80	47	6.1	187	140	ST7126 50 x 140 x 187
						207	160	ST7126 50 x 160 x 207
						227	180	ST7126 50 x 180 x 227
						247	200	ST7126 50 x 200 x 247
						271	224	ST7126 50 x 224 x 271
						297	250	ST7126 50 x 250 x 297
						327	280	ST7126 50 x 280 x 327
						362	315	ST7126 50 x 315 x 362
						402	355	ST7126 50 x 355 x 402
						447	400	ST7126 50 x 400 x 447
60	80	M12	97	47	6.1	247	200	ST7126 60 x 200 x 247
						271	224	ST7126 60 x 224 x 271
						297	250	ST7126 60 x 250 x 297
						327	280	ST7126 60 x 280 x 327
						362	315	ST7126 60 x 315 x 362
						402	355	ST7126 60 x 355 x 402
						447	400	ST7126 60 x 400 x 447
63	80	M12	97	47	6.1	247	200	ST7126 63 x 200 x 247
						271	224	ST7126 63 x 224 x 271
						297	250	ST7126 63 x 250 x 297
						327	280	ST7126 63 x 280 x 327
						362	315	ST7126 63 x 315 x 362
						402	355	ST7126 63 x 355 x 402
						447	400	ST7126 63 x 400 x 447
80	95	M12	112	60	6.1	310	250	ST7126 80 x 250 x 310
						340	280	ST7126 80 x 280 x 340
						375	315	ST7126 80 x 315 x 375
						415	355	ST7126 80 x 355 x 415
						460	400	ST7126 80 x 400 x 460
						510	450	ST7126 80 x 450 x 510
						560	500	ST7126 80 x 500 x 560

Active
elements

Spring
elements

Nitrogen
systems

Tapping
units

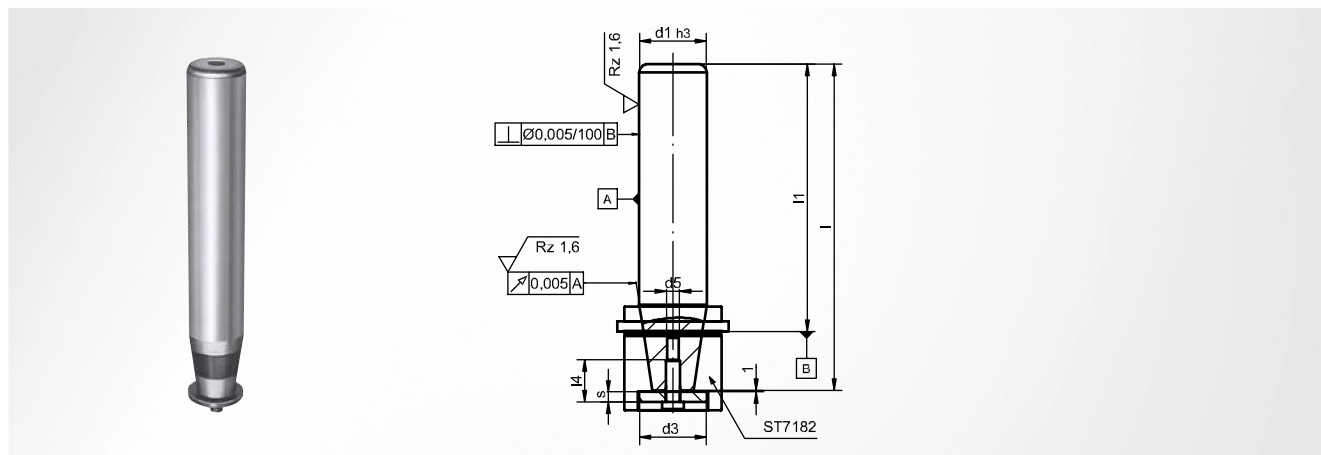
Maschine
elements

Accessories

ST7181 Quick-change guide pillar

STEINEL®

with mounting taper and internal thread



Referring to DIN 9825 / ISO 9182

Hardness

63 ±1 HRC

Material

Steel 1.1221 (C60E); inductively hardened

Scope of supply

SZ8512; SZ7368

d_1^{h3}	d_3	d_5	l_4	s	l	l_1	Item number
19	18	M5	16	4	130.4	112	ST7181 19 x 112 x 130
					143.4	125	ST7181 19 x 125 x 143
					158.4	140	ST7181 19 x 140 x 158
					178.4	160	ST7181 19 x 160 x 178
					198.4	180	ST7181 19 x 180 x 198
20	18	M5	16	4	130.4	112	ST7181 20 x 112 x 130
					143.4	125	ST7181 20 x 125 x 143
					158.4	140	ST7181 20 x 140 x 158
					178.4	160	ST7181 20 x 160 x 178
					198.4	180	ST7181 20 x 180 x 198
24	24	M6	20	5	151.4	125	ST7181 24 x 125 x 151
					166.4	140	ST7181 24 x 140 x 166
					186.4	160	ST7181 24 x 160 x 186
					206.4	180	ST7181 24 x 180 x 206
					226.4	200	ST7181 24 x 200 x 226
					250.4	224	ST7181 24 x 224 x 250
					276.4	250	ST7181 24 x 250 x 276
25	24	M6	20	5	151.4	125	ST7181 25 x 125 x 151
					166.4	140	ST7181 25 x 140 x 166
					186.4	160	ST7181 25 x 160 x 186
					206.4	180	ST7181 25 x 180 x 206
					226.4	200	ST7181 25 x 200 x 226
					250.4	224	ST7181 25 x 224 x 250
					276.4	250	ST7181 25 x 250 x 276
30	30	M6	20	5	151.4	125	ST7181 30 x 125 x 151
					166.4	140	ST7181 30 x 140 x 166
					186.4	160	ST7181 30 x 160 x 186
					206.4	180	ST7181 30 x 180 x 206
					226.4	200	ST7181 30 x 200 x 226
					250.4	224	ST7181 30 x 224 x 250
					276.4	250	ST7181 30 x 250 x 276
32	30	M6	20	5	151.4	125	ST7181 32 x 125 x 151
					166.4	140	ST7181 32 x 140 x 166
					186.4	160	ST7181 32 x 160 x 186
					206.4	180	ST7181 32 x 180 x 206
					226.4	200	ST7181 32 x 200 x 226
					250.4	224	ST7181 32 x 224 x 250
					276.4	250	ST7181 32 x 250 x 276
32	30	M6	20	5	306.4	280	ST7181 32 x 280 x 306
					151.4	125	ST7181 32 x 125 x 151
					166.4	140	ST7181 32 x 140 x 166
					186.4	160	ST7181 32 x 160 x 186
32	30	M6	20	5	206.4	180	ST7181 32 x 180 x 206

ST7181 Quick-change guide pillar

with mounting taper and internal thread

d_1^{H3}	d_3	d_5	l_4	s	l	l_1	Item number
32	30	M6	20	5	226.4	200	ST7181 32 x 200 x 226
					250.4	224	ST7181 32 x 224 x 250
					276.4	250	ST7181 32 x 250 x 276
					306.4	280	ST7181 32 x 280 x 306
38	40	M8	25	6	174.4	140	ST7181 38 x 140 x 174
					194.4	160	ST7181 38 x 160 x 194
					214.4	180	ST7181 38 x 180 x 214
					234.4	200	ST7181 38 x 200 x 234
					258.4	224	ST7181 38 x 224 x 258
					284.4	250	ST7181 38 x 250 x 284
40	40	M8	25	6	314.4	280	ST7181 38 x 280 x 314
					174.4	140	ST7181 40 x 140 x 174
					194.4	160	ST7181 40 x 160 x 194
					214.4	180	ST7181 40 x 180 x 214
					234.4	200	ST7181 40 x 200 x 234
					258.4	224	ST7181 40 x 224 x 258
48	50	M10	30	6	284.4	250	ST7181 40 x 250 x 284
					314.4	280	ST7181 40 x 280 x 314
					192.3	160	ST7181 48 x 160 x 192
					212.3	180	ST7181 48 x 180 x 212
					232.3	200	ST7181 48 x 200 x 232
					256.3	224	ST7181 48 x 224 x 256
50	50	M10	30	6	282.3	250	ST7181 48 x 250 x 282
					312.3	280	ST7181 48 x 280 x 312
					347.3	315	ST7181 48 x 315 x 347
					192.3	160	ST7181 50 x 160 x 192
					212.3	180	ST7181 50 x 180 x 212
					232.3	200	ST7181 50 x 200 x 232
60	56	M12	30	6	256.3	224	ST7181 50 x 224 x 256
					282.3	250	ST7181 50 x 250 x 282
					312.3	280	ST7181 50 x 280 x 312
					347.3	315	ST7181 50 x 315 x 347
					229.8	180	ST7181 60 x 180 x 230
					249.8	200	ST7181 60 x 200 x 250
63	56	M12	30	6	273.8	224	ST7181 60 x 224 x 274
					299.8	250	ST7181 60 x 250 x 300
					329.8	280	ST7181 60 x 280 x 330
					364.8	315	ST7181 60 x 315 x 365
					404.8	355	ST7181 60 x 355 x 405
					229.8	180	ST7181 63 x 180 x 230
					249.8	200	ST7181 63 x 200 x 250
					273.8	224	ST7181 63 x 224 x 274
					299.8	250	ST7181 63 x 250 x 300
					329.8	280	ST7181 63 x 280 x 330
					364.8	315	ST7181 63 x 315 x 365
					404.8	355	ST7181 63 x 355 x 405

Active
elements

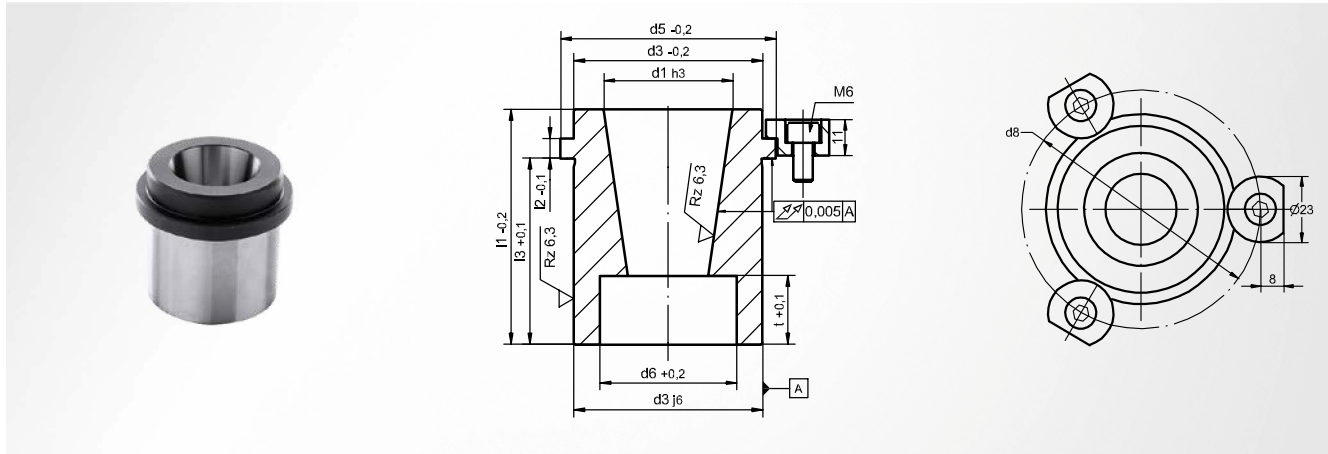
Spring
elements

Nitrogen
systems

Tapping
units

Maschine
elements

Accessories



Referring to DIN 9825 / ISO 9182

Material

Steel 1.7131 (16MnCr5); case-hardened

Hardness

59 ±1 HRC

Installation instruction

Fixing with 3 holding clamps; mounting diameter d3 corresponds with the diameter of the guide bushes with flange (ST742x) and with shoulder (ST741x)

Note

Inside cone ground

Installation in mounting bore

ISO H6

Mounting diameter

ISO j6

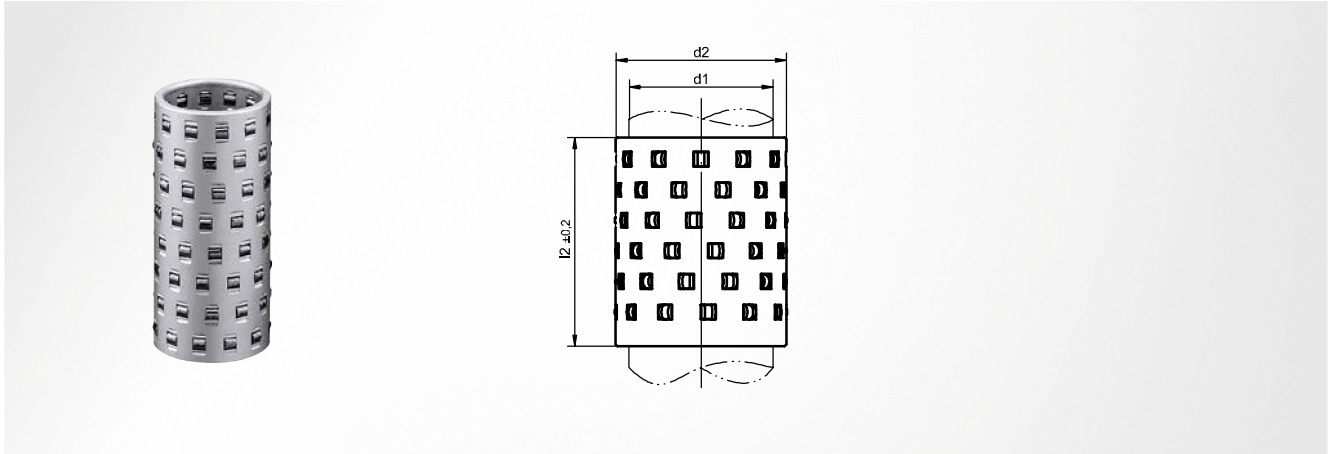
Scope of supply

ST7367

d_1^{h3}	d_3^{j6}	$d_5^{-0.2}$	$d_6^{+0.2}$	d_8	$l_2^{-0.1}$	$l_1^{-0.2}$	$l_3^{+0.1}$	$t^{+0.1}$	Item number
19 and 20	32	40	20	59	6.1	39	27	7.5	ST7182 20 x 27
						49	37	17.5	ST7182 20 x 37
24 and 25	40	48	26	65	6.1	49	37	9.0	ST7182 25 x 37
						59	47	19.0	ST7182 25 x 47
30 and 32	48	56	32	73	6.1	52	37	9.0	ST7182 32 x 37
						62	47	19.0	ST7182 32 x 47
38 and 40	58	66	42	83	6.1	62	47	11.0	ST7182 40 x 47
						72	57	21.0	ST7182 40 x 57
48 and 50	70	80	52	97	6.1	65	47	13.0	ST7182 50 x 47
						75	57	23.0	ST7182 50 x 57
60 and 63	85	95	58	112	6.1	85	67	15.0	ST7182 63 x 67
						95	77	25.0	ST7182 63 x 77

ST7140 Roller cage

Aluminium



Material

Aluminium 3.1645

Characteristic of roller

Steel; hardened; quality class 1; sorted

Note

Roller cages can also be delivered with installation assistance or lock ring (special design)

d ₁	d ₂	Roller Ø	l ₂ ±0.2	Item number
19	25	3	43	ST7140 19 x 043
			54	ST7140 19 x 054
			63	ST7140 19 x 063
			74	ST7140 19 x 074
20	26	3	43	ST7140 20 x 043
			54	ST7140 20 x 054
			63	ST7140 20 x 063
			74	ST7140 20 x 074
24	30	3	43	ST7140 24 x 043
			63	ST7140 24 x 063
			74	ST7140 24 x 074
			90	ST7140 24 x 090
25	31	3	43	ST7140 25 x 043
			63	ST7140 25 x 063
			74	ST7140 25 x 074
			90	ST7140 25 x 090
30	38	4	54	ST7140 30 x 054
			74	ST7140 30 x 074
			83	ST7140 30 x 083
			103	ST7140 30 x 103
32	40	4	54	ST7140 32 x 054
			74	ST7140 32 x 074
			83	ST7140 32 x 083
			103	ST7140 32 x 103

d ₁	d ₂	Roller Ø	l ₂ ±0.2	Item number
38	46	4	58	ST7140 38 x 058
			88	ST7140 38 x 088
			94	ST7140 38 x 094
			128	ST7140 38 x 128
40	48	4	58	ST7140 40 x 058
			88	ST7140 40 x 088
			94	ST7140 40 x 094
			128	ST7140 40 x 128
48	56	4	74	ST7140 48 x 074
			108	ST7140 48 x 108
			128	ST7140 48 x 128
50	58	4	74	ST7140 50 x 074
			108	ST7140 50 x 108
			128	ST7140 50 x 128
60	70	5	113	ST7140 60 x 113
			128	ST7140 60 x 128
			139	ST7140 60 x 139
63	73	5	113	ST7140 63 x 113
			128	ST7140 63 x 128
			139	ST7140 63 x 139
80	92	6	113	ST7140 80 x 113
			138	ST7140 80 x 138
			156	ST7140 80 x 156

Active
elements

Spring
elements

Nitrogen
systems

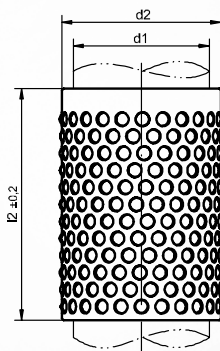
Tapping
units

Maschine
elements

Accessories

ST7130 Ball cage

Aluminium



Material

Aluminium 3.1645

Note

Cage travel = 1/2 stroke length

Ball property

Steel; hardened; quality class 1; sorted

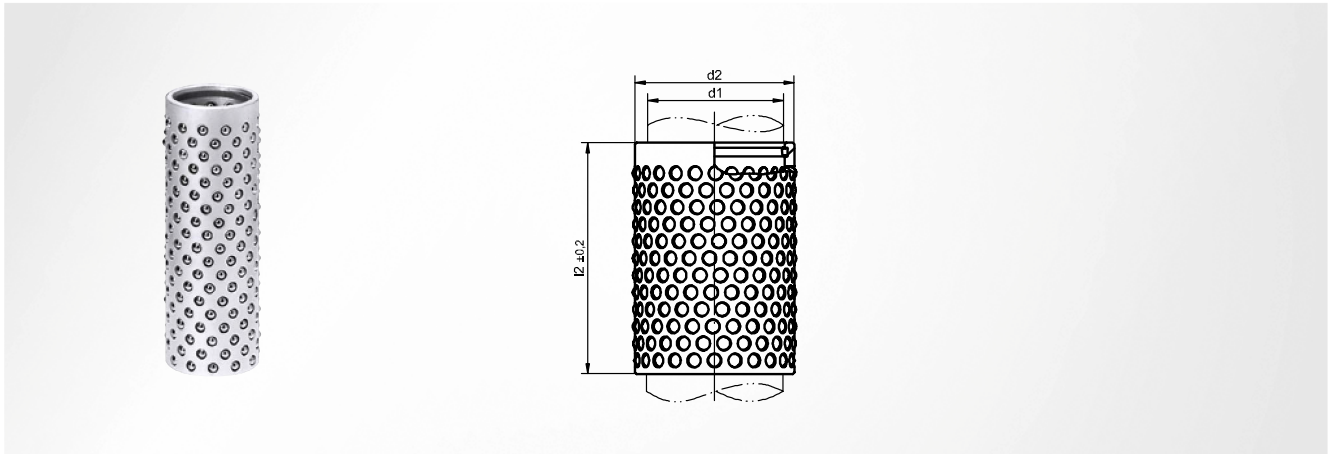
d ₁	d ₂	l ₂ ±0.2	Item number
10	14	30	ST7130 10 x 030
		38	ST7130 10 x 038
		43	ST7130 10 x 043
12	16	30	ST7130 12 x 030
		38	ST7130 12 x 038
		43	ST7130 12 x 043
15	21	30	ST7130 15 x 030
		38	ST7130 15 x 038
		43	ST7130 15 x 043
		54	ST7130 15 x 054
16	22	30	ST7130 16 x 030
		38	ST7130 16 x 038
		43	ST7130 16 x 043
		54	ST7130 16 x 054
19	25	30	ST7130 19 x 030
		38	ST7130 19 x 038
		43	ST7130 19 x 043
		54	ST7130 19 x 054
		63	ST7130 19 x 063
20	26	74	ST7130 19 x 074
		30	ST7130 20 x 030
		38	ST7130 20 x 038
		43	ST7130 20 x 043
		54	ST7130 20 x 054
		63	ST7130 20 x 063
24	30	74	ST7130 20 x 074
		30	ST7130 24 x 030
		38	ST7130 24 x 038
		43	ST7130 24 x 043
		54	ST7130 24 x 054
		63	ST7130 24 x 063
25	31	74	ST7130 24 x 074
		83	ST7130 24 x 083
		90	ST7130 24 x 090
		30	ST7130 25 x 030

d ₁	d ₂	l ₂ ±0.2	Item number
25	31	38	ST7130 25 x 038
		43	ST7130 25 x 043
		54	ST7130 25 x 054
		63	ST7130 25 x 063
		74	ST7130 25 x 074
		83	ST7130 25 x 083
30	38	90	ST7130 25 x 090
		38	ST7130 30 x 038
		43	ST7130 30 x 043
		54	ST7130 30 x 054
		58	ST7130 30 x 058
		68	ST7130 30 x 068
32	40	74	ST7130 30 x 074
		83	ST7130 30 x 083
		88	ST7130 30 x 088
		103	ST7130 30 x 103
		108	ST7130 30 x 108
		38	ST7130 32 x 038
		43	ST7130 32 x 043
		54	ST7130 32 x 054
38	46	58	ST7130 32 x 058
		68	ST7130 32 x 068
		74	ST7130 32 x 074
		83	ST7130 32 x 083
		88	ST7130 32 x 088
		103	ST7130 32 x 103
		108	ST7130 32 x 108
		38	ST7130 38 x 038
40	48	43	ST7130 38 x 043
		58	ST7130 38 x 058
		68	ST7130 38 x 068
		88	ST7130 38 x 088
		94	ST7130 38 x 094
		108	ST7130 38 x 108
40	48	128	ST7130 38 x 128
		38	ST7130 40 x 038
		43	ST7130 40 x 043

d ₁	d ₂	l ₂ ±0.2	Item number
40	48	58	ST7130 40 x 058
		68	ST7130 40 x 068
		88	ST7130 40 x 088
		94	ST7130 40 x 094
		108	ST7130 40 x 108
48	56	128	ST7130 40 x 128
		43	ST7130 48 x 043
		58	ST7130 48 x 058
		68	ST7130 48 x 068
		74	ST7130 48 x 074
		88	ST7130 48 x 088
50	58	108	ST7130 48 x 108
		128	ST7130 48 x 128
		43	ST7130 50 x 043
		58	ST7130 50 x 058
		68	ST7130 50 x 068
60	70	74	ST7130 50 x 074
		88	ST7130 50 x 088
		108	ST7130 50 x 108
		128	ST7130 50 x 128
		75	ST7130 60 x 075
		94	ST7130 60 x 094
63	73	113	ST7130 60 x 113
		128	ST7130 60 x 128
		139	ST7130 60 x 139
		154	ST7130 60 x 154
		75	ST7130 63 x 075
		94	ST7130 63 x 094
80	92	113	ST7130 63 x 113
		128	ST7130 63 x 128
		139	ST7130 63 x 139
		154	ST7130 63 x 154
		113	ST7130 80 x 113
80	92	138	ST7130 80 x 138
		156	ST7130 80 x 156

ST7170 Ball cage

Aluminium, with installation assistance



Material

Aluminium 3.1645

Note

Cage travel = 1/2 stroke length

Ball property

Steel; hardened; quality class 1; sorted

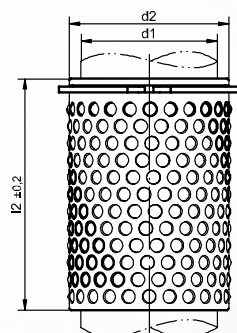
d ₁	d ₂	l ₂ ±0.2	Item number
15	21	30	ST7170 15 x 030
		38	ST7170 15 x 038
		43	ST7170 15 x 043
		54	ST7170 15 x 054
		63	ST7170 15 x 063
16	22	30	ST7170 16 x 030
		38	ST7170 16 x 038
		43	ST7170 16 x 043
		54	ST7170 16 x 054
		63	ST7170 16 x 063
19	25	30	ST7170 19 x 030
		38	ST7170 19 x 038
		43	ST7170 19 x 043
		54	ST7170 19 x 054
		63	ST7170 19 x 063
20	26	30	ST7170 20 x 030
		38	ST7170 20 x 038
		43	ST7170 20 x 043
		54	ST7170 20 x 054
		63	ST7170 20 x 063
24	30	30	ST7170 24 x 030
		38	ST7170 24 x 038
		43	ST7170 24 x 043
		54	ST7170 24 x 054
		63	ST7170 24 x 063
25	31	30	ST7170 25 x 030
		38	ST7170 25 x 038
		43	ST7170 25 x 043
		54	ST7170 25 x 054
		63	ST7170 25 x 063

d ₁	d ₂	l ₂ ±0.2	Item number
25	31	74	ST7170 25 x 074
		83	ST7170 25 x 083
		90	ST7170 25 x 090
30	38	38	ST7170 30 x 038
		43	ST7170 30 x 043
		54	ST7170 30 x 054
		58	ST7170 30 x 058
		68	ST7170 30 x 068
32	40	74	ST7170 30 x 074
		83	ST7170 30 x 083
		88	ST7170 30 x 088
		103	ST7170 30 x 103
		108	ST7170 30 x 108
38	46	38	ST7170 32 x 038
		43	ST7170 32 x 043
		54	ST7170 32 x 054
		58	ST7170 32 x 058
		68	ST7170 32 x 068
40	48	74	ST7170 32 x 074
		83	ST7170 32 x 083
		88	ST7170 32 x 088
		103	ST7170 32 x 103
		108	ST7170 32 x 108
40	48	38	ST7170 38 x 038
		43	ST7170 38 x 043
		58	ST7170 38 x 058
		68	ST7170 38 x 068
		88	ST7170 38 x 088
40	48	94	ST7170 38 x 094
		108	ST7170 38 x 108
		128	ST7170 38 x 128
		38	ST7170 40 x 038
		43	ST7170 40 x 043
40	48	58	ST7170 40 x 058
		68	ST7170 40 x 068

d ₁	d ₂	l ₂ ±0.2	Item number
40	48	88	ST7170 40 x 088
		94	ST7170 40 x 094
		108	ST7170 40 x 108
48	56	128	ST7170 40 x 128
		43	ST7170 48 x 043
		58	ST7170 48 x 058
		68	ST7170 48 x 068
		74	ST7170 48 x 074
50	58	88	ST7170 48 x 088
		108	ST7170 48 x 108
		128	ST7170 48 x 128
		43	ST7170 50 x 043
		58	ST7170 50 x 058
60	70	68	ST7170 50 x 068
		74	ST7170 50 x 074
		88	ST7170 50 x 088
		108	ST7170 50 x 108
		128	ST7170 50 x 128
63	73	75	ST7170 60 x 075
		94	ST7170 60 x 094
		113	ST7170 60 x 113
		128	ST7170 60 x 128
		139	ST7170 60 x 139
80	92	154	ST7170 60 x 154
		75	ST7170 63 x 075
		94	ST7170 63 x 094
		113	ST7170 63 x 113
		128	ST7170 63 x 128
80	92	139	ST7170 63 x 139
		154	ST7170 63 x 154
		113	ST7170 80 x 113
80	92	138	ST7170 80 x 138
		156	ST7170 80 x 156

ST7171 Ball cage

Aluminium, with lock ring



Material

Aluminium 3.1645

Note

Cage travel = 1/2 stroke length

Ball property

Steel; hardened; quality class 1; sorted

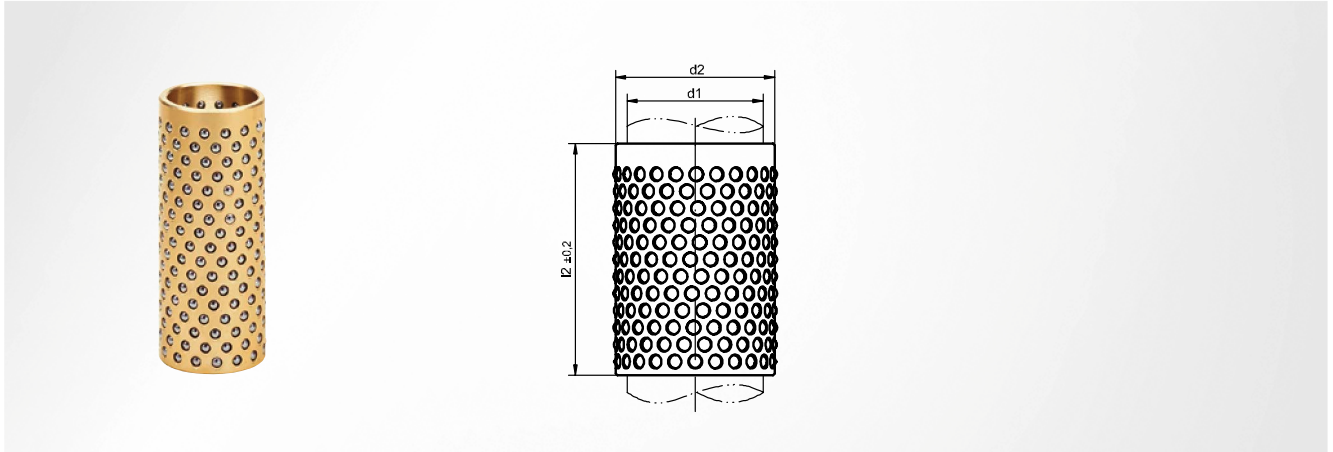
d ₁	d ₂	l ₂ ±0.2	Item number
15	21	30	ST7171 15 x 030
		38	ST7171 15 x 038
		43	ST7171 15 x 043
		54	ST7171 15 x 054
		63	ST7171 15 x 063
16	22	30	ST7171 16 x 030
		38	ST7171 16 x 038
		43	ST7171 16 x 043
		54	ST7171 16 x 054
		63	ST7171 16 x 063
19	25	30	ST7171 19 x 030
		38	ST7171 19 x 038
		43	ST7171 19 x 043
		54	ST7171 19 x 054
		63	ST7171 19 x 063
20	26	30	ST7171 20 x 030
		38	ST7171 20 x 038
		43	ST7171 20 x 043
		54	ST7171 20 x 054
		63	ST7171 20 x 063
24	30	30	ST7171 24 x 030
		38	ST7171 24 x 038
		43	ST7171 24 x 043
		54	ST7171 24 x 054
		63	ST7171 24 x 063
25	31	30	ST7171 25 x 030
		38	ST7171 25 x 038
		43	ST7171 25 x 043
		54	ST7171 25 x 054
		63	ST7171 25 x 063

d ₁	d ₂	l ₂ ±0.2	Item number
25	31	74	ST7171 25 x 074
		83	ST7171 25 x 083
		90	ST7171 25 x 090
30	38	38	ST7171 30 x 038
		43	ST7171 30 x 043
		54	ST7171 30 x 054
		58	ST7171 30 x 058
		68	ST7171 30 x 068
32	40	74	ST7171 30 x 074
		83	ST7171 30 x 083
		88	ST7171 30 x 088
		103	ST7171 30 x 103
		108	ST7171 30 x 108
38	46	38	ST7171 32 x 038
		43	ST7171 32 x 043
		54	ST7171 32 x 054
		58	ST7171 32 x 058
		68	ST7171 32 x 068
40	48	74	ST7171 32 x 074
		83	ST7171 32 x 083
		88	ST7171 32 x 088
		103	ST7171 32 x 103
		108	ST7171 32 x 108
40	48	38	ST7171 38 x 038
		43	ST7171 38 x 043
		58	ST7171 38 x 058
		68	ST7171 38 x 068
		88	ST7171 38 x 088
40	48	94	ST7171 38 x 094
		108	ST7171 38 x 108
		128	ST7171 38 x 128
		38	ST7171 40 x 038
		43	ST7171 40 x 043
40	48	58	ST7171 40 x 058
		68	ST7171 40 x 068
		128	ST7171 40 x 128

d ₁	d ₂	l ₂ ±0.2	Item number
40	48	88	ST7171 40 x 088
		94	ST7171 40 x 094
		108	ST7171 40 x 108
		128	ST7171 40 x 128
48	56	43	ST7171 48 x 043
		58	ST7171 48 x 058
		68	ST7171 48 x 068
		74	ST7171 48 x 074
		88	ST7171 48 x 088
50	58	108	ST7171 48 x 108
		128	ST7171 48 x 128
		43	ST7171 50 x 043
		58	ST7171 50 x 058
		68	ST7171 50 x 068
60	70	74	ST7171 50 x 074
		88	ST7171 50 x 088
		108	ST7171 50 x 108
		128	ST7171 50 x 128
		75	ST7171 60 x 075
63	73	94	ST7171 60 x 094
		113	ST7171 60 x 113
		128	ST7171 60 x 128
		139	ST7171 60 x 139
		154	ST7171 60 x 154
80	92	75	ST7171 63 x 075
		94	ST7171 63 x 094
		113	ST7171 63 x 113
		128	ST7171 63 x 128
		139	ST7171 63 x 139
80	92	154	ST7171 63 x 154
		113	ST7171 80 x 113
		138	ST7171 80 x 138
80	92	156	ST7171 80 x 156

ST7150 Ball cage

Brass



Material

Brass 2.0401

Note

Cage travel = 1/2 stroke length

Ball property

Steel; hardened; quality class 1; sorted

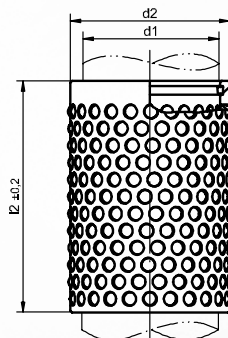
d ₁	d ₂	l ₂ ±0.2	Item number
10	14	30	ST7150 10 x 030
		38	ST7150 10 x 038
		43	ST7150 10 x 043
12	16	30	ST7150 12 x 030
		38	ST7150 12 x 038
		43	ST7150 12 x 043
15	21	30	ST7150 15 x 030
		38	ST7150 15 x 038
		43	ST7150 15 x 043
		54	ST7150 15 x 054
		63	ST7150 15 x 063
16	22	30	ST7150 16 x 030
		38	ST7150 16 x 038
		43	ST7150 16 x 043
		54	ST7150 16 x 054
		63	ST7150 16 x 063
19	25	30	ST7150 19 x 030
		38	ST7150 19 x 038
		43	ST7150 19 x 043
		54	ST7150 19 x 054
		63	ST7150 19 x 063
		74	ST7150 19 x 074
20	26	30	ST7150 20 x 030
		38	ST7150 20 x 038
		43	ST7150 20 x 043
		54	ST7150 20 x 054
		63	ST7150 20 x 063
		74	ST7150 20 x 074
		83	ST7150 20 x 083
24	30	30	ST7150 24 x 030
		38	ST7150 24 x 038
		43	ST7150 24 x 043
		54	ST7150 24 x 054
		63	ST7150 24 x 063
		74	ST7150 24 x 074
		83	ST7150 24 x 083
25	31	30	ST7150 25 x 030
		43	ST7150 25 x 043

d ₁	d ₂	l ₂ ±0.2	Item number
25	31	38	ST7150 25 x 038
		43	ST7150 25 x 043
		54	ST7150 25 x 054
		63	ST7150 25 x 063
		74	ST7150 25 x 074
		83	ST7150 25 x 083
		90	ST7150 25 x 090
30	38	38	ST7150 30 x 038
		43	ST7150 30 x 043
		54	ST7150 30 x 054
		58	ST7150 30 x 058
		68	ST7150 30 x 068
		74	ST7150 30 x 074
		83	ST7150 30 x 083
		88	ST7150 30 x 088
		103	ST7150 30 x 103
		108	ST7150 30 x 108
32	40	38	ST7150 32 x 038
		43	ST7150 32 x 043
		54	ST7150 32 x 054
		58	ST7150 32 x 058
		68	ST7150 32 x 068
		74	ST7150 32 x 074
		83	ST7150 32 x 083
		88	ST7150 32 x 088
		103	ST7150 32 x 103
		108	ST7150 32 x 108
38	46	38	ST7150 38 x 038
		43	ST7150 38 x 043
		58	ST7150 38 x 058
		68	ST7150 38 x 068
		88	ST7150 38 x 088
		94	ST7150 38 x 094
		108	ST7150 38 x 108
		128	ST7150 38 x 128
		139	ST7150 38 x 139
		154	ST7150 38 x 154
40	48	38	ST7150 40 x 038
		43	ST7150 40 x 043

d ₁	d ₂	l ₂ ±0.2	Item number
40	48	58	ST7150 40 x 058
		68	ST7150 40 x 068
		88	ST7150 40 x 088
		94	ST7150 40 x 094
		108	ST7150 40 x 108
48	56	128	ST7150 40 x 128
		43	ST7150 48 x 043
		58	ST7150 48 x 058
		68	ST7150 48 x 068
		74	ST7150 48 x 074
		88	ST7150 48 x 088
		108	ST7150 48 x 108
50	58	128	ST7150 48 x 128
		43	ST7150 50 x 043
		58	ST7150 50 x 058
		68	ST7150 50 x 068
		74	ST7150 50 x 074
60	70	88	ST7150 50 x 088
		108	ST7150 50 x 108
		128	ST7150 50 x 128
		75	ST7150 60 x 075
		94	ST7150 60 x 094
63	73	113	ST7150 60 x 113
		128	ST7150 60 x 128
		139	ST7150 60 x 139
		154	ST7150 60 x 154
		75	ST7150 63 x 075
80	92	94	ST7150 63 x 094
		113	ST7150 63 x 113
		128	ST7150 63 x 128
		139	ST7150 63 x 139
		154	ST7150 63 x 154
		113	ST7150 80 x 113
		138	ST7150 80 x 138
		156	ST7150 80 x 156

ST7151 Ball cage

Brass, with installation assistance



Material

Brass 2.0401

Note

Cage travel = 1/2 stroke length

Ball property

Steel; hardened; quality class 1; sorted

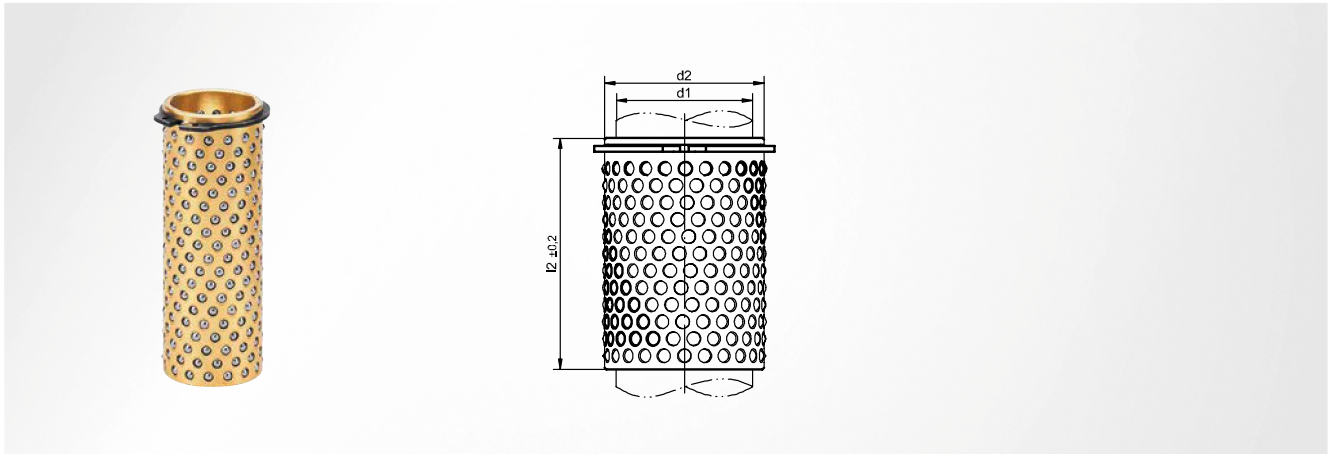
d ₁	d ₂	l ₂ ±0.2	Item number
15	21	30	ST7151 15 x 030
		38	ST7151 15 x 038
		43	ST7151 15 x 043
		54	ST7151 15 x 054
		63	ST7151 15 x 063
16	22	30	ST7151 16 x 030
		38	ST7151 16 x 038
		43	ST7151 16 x 043
		54	ST7151 16 x 054
		63	ST7151 16 x 063
19	25	30	ST7151 19 x 030
		38	ST7151 19 x 038
		43	ST7151 19 x 043
		54	ST7151 19 x 054
		63	ST7151 19 x 063
20	26	30	ST7151 20 x 030
		38	ST7151 20 x 038
		43	ST7151 20 x 043
		54	ST7151 20 x 054
		63	ST7151 20 x 063
24	30	30	ST7151 24 x 030
		38	ST7151 24 x 038
		43	ST7151 24 x 043
		54	ST7151 24 x 054
		63	ST7151 24 x 063
25	31	30	ST7151 25 x 030
		38	ST7151 25 x 038
		43	ST7151 25 x 043
		54	ST7151 25 x 054
		63	ST7151 25 x 063

d ₁	d ₂	l ₂ ±0.2	Item number
25	31	74	ST7151 25 x 074
		83	ST7151 25 x 083
		90	ST7151 25 x 090
30	38	38	ST7151 30 x 038
		43	ST7151 30 x 043
		54	ST7151 30 x 054
		58	ST7151 30 x 058
		68	ST7151 30 x 068
32	40	74	ST7151 30 x 074
		83	ST7151 30 x 083
		88	ST7151 30 x 088
		103	ST7151 30 x 103
		108	ST7151 30 x 108
38	46	38	ST7151 32 x 038
		43	ST7151 32 x 043
		54	ST7151 32 x 054
		58	ST7151 32 x 058
		68	ST7151 32 x 068
40	48	74	ST7151 32 x 074
		83	ST7151 32 x 083
		88	ST7151 32 x 088
		103	ST7151 32 x 103
		108	ST7151 32 x 108
38	46	38	ST7151 38 x 038
		43	ST7151 38 x 043
		58	ST7151 38 x 058
		68	ST7151 38 x 068
		88	ST7151 38 x 088
40	48	94	ST7151 38 x 094
		108	ST7151 38 x 108
		128	ST7151 38 x 128
		38	ST7151 40 x 038
		43	ST7151 40 x 043
40	48	58	ST7151 40 x 058
		68	ST7151 40 x 068

d ₁	d ₂	l ₂ ±0.2	Item number
40	48	88	ST7151 40 x 088
		94	ST7151 40 x 094
		108	ST7151 40 x 108
		128	ST7151 40 x 128
48	56	43	ST7151 48 x 043
		58	ST7151 48 x 058
		68	ST7151 48 x 068
		74	ST7151 48 x 074
		88	ST7151 48 x 088
50	58	108	ST7151 48 x 108
		128	ST7151 48 x 128
		43	ST7151 50 x 043
		58	ST7151 50 x 058
		68	ST7151 50 x 068
60	70	74	ST7151 50 x 074
		88	ST7151 50 x 088
		108	ST7151 50 x 108
		128	ST7151 50 x 128
		75	ST7151 60 x 075
63	73	94	ST7151 60 x 094
		113	ST7151 60 x 113
		128	ST7151 60 x 128
		139	ST7151 60 x 139
		154	ST7151 60 x 154
80	92	75	ST7151 63 x 075
		94	ST7151 63 x 094
		113	ST7151 63 x 113
		128	ST7151 63 x 128
		139	ST7151 63 x 139
80	92	154	ST7151 63 x 154
		113	ST7151 80 x 113
		138	ST7151 80 x 138
80	92	156	ST7151 80 x 156

ST7152 Ball cage

Brass, with lock ring



Material

Brass 2.0401

Note

Cage travel = 1/2 stroke length

Ball property

Steel; hardened; quality class 1; sorted

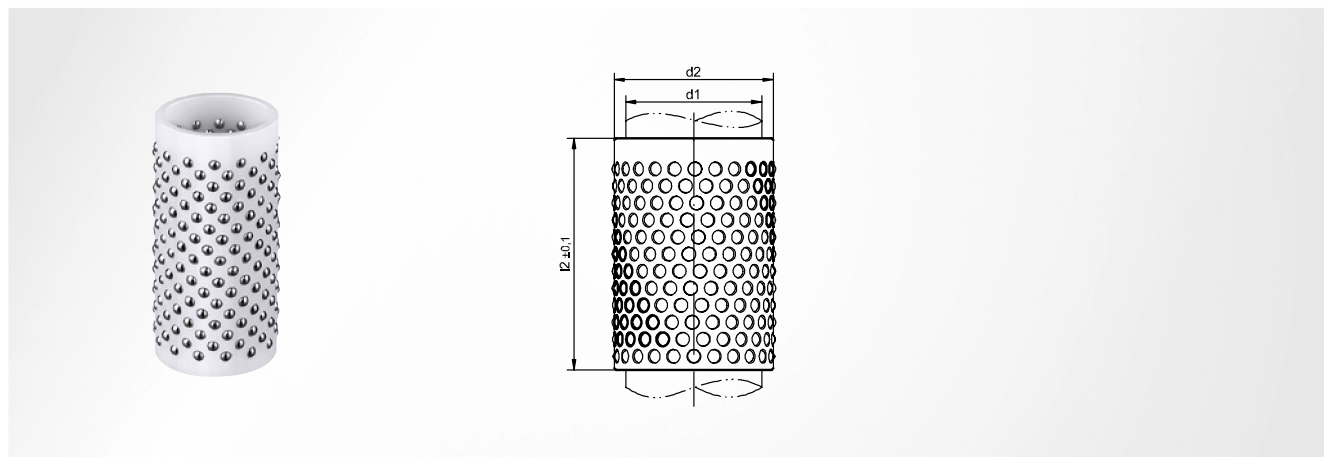
d ₁	d ₂	l ₂ ±0.2	Item number
15	21	30	ST7152 15 x 030
		38	ST7152 15 x 038
		43	ST7152 15 x 043
		54	ST7152 15 x 054
		63	ST7152 15 x 063
16	22	30	ST7152 16 x 030
		38	ST7152 16 x 038
		43	ST7152 16 x 043
		54	ST7152 16 x 054
		63	ST7152 16 x 063
19	25	30	ST7152 19 x 030
		38	ST7152 19 x 038
		43	ST7152 19 x 043
		54	ST7152 19 x 054
		63	ST7152 19 x 063
20	26	30	ST7152 20 x 030
		38	ST7152 20 x 038
		43	ST7152 20 x 043
		54	ST7152 20 x 054
		63	ST7152 20 x 063
24	30	30	ST7152 24 x 030
		38	ST7152 24 x 038
		43	ST7152 24 x 043
		54	ST7152 24 x 054
		63	ST7152 24 x 063
25	31	30	ST7152 25 x 030
		38	ST7152 25 x 038
		43	ST7152 25 x 043
		54	ST7152 25 x 054
		63	ST7152 25 x 063

d ₁	d ₂	l ₂ ±0.2	Item number
25	31	74	ST7152 25 x 074
		83	ST7152 25 x 083
		90	ST7152 25 x 090
30	38	38	ST7152 30 x 038
		43	ST7152 30 x 043
		54	ST7152 30 x 054
		58	ST7152 30 x 058
		68	ST7152 30 x 068
32	40	74	ST7152 30 x 074
		83	ST7152 30 x 083
		88	ST7152 30 x 088
		103	ST7152 30 x 103
		108	ST7152 30 x 108
38	46	38	ST7152 32 x 038
		43	ST7152 32 x 043
		54	ST7152 32 x 054
		58	ST7152 32 x 058
		68	ST7152 32 x 068
40	48	74	ST7152 32 x 074
		83	ST7152 32 x 083
		88	ST7152 32 x 088
		103	ST7152 32 x 103
		108	ST7152 32 x 108
38	46	38	ST7152 38 x 038
		43	ST7152 38 x 043
		58	ST7152 38 x 058
		68	ST7152 38 x 068
		88	ST7152 38 x 088
40	48	94	ST7152 38 x 094
		108	ST7152 38 x 108
		128	ST7152 38 x 128
		38	ST7152 40 x 038
		43	ST7152 40 x 043
40	48	58	ST7152 40 x 058
		68	ST7152 40 x 068

d ₁	d ₂	l ₂ ±0.2	Item number
40	48	88	ST7152 40 x 088
		94	ST7152 40 x 094
		108	ST7152 40 x 108
48	56	128	ST7152 40 x 128
		43	ST7152 48 x 043
		58	ST7152 48 x 058
		68	ST7152 48 x 068
		74	ST7152 48 x 074
50	58	88	ST7152 48 x 088
		108	ST7152 48 x 108
		128	ST7152 48 x 128
		43	ST7152 50 x 043
		58	ST7152 50 x 058
60	70	68	ST7152 50 x 068
		74	ST7152 50 x 074
		88	ST7152 50 x 088
		108	ST7152 50 x 108
		128	ST7152 50 x 128
63	73	75	ST7152 60 x 075
		94	ST7152 60 x 094
		113	ST7152 60 x 113
		128	ST7152 60 x 128
		139	ST7152 60 x 139
80	92	154	ST7152 60 x 154
		75	ST7152 63 x 075
		94	ST7152 63 x 094
		113	ST7152 63 x 113
		128	ST7152 63 x 128
80	92	139	ST7152 63 x 139
		154	ST7152 63 x 154
		113	ST7152 80 x 113
80	92	138	ST7152 80 x 138
		156	ST7152 80 x 156

ST7133 Ball cage

Polyurethane



Material

POM M25

Note

Cage travel = 1/2 stroke length

Ball property

Steel; hardened; quality class 1; sorted

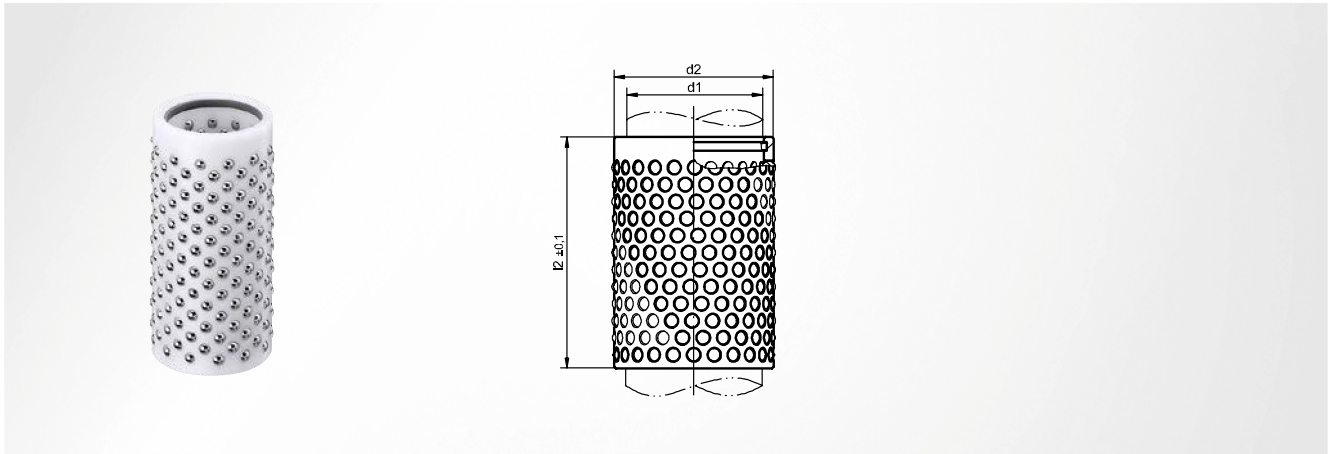
d ₁	d ₂	l ₂ ±0.1	Item number
10	14	30	ST7133 10 x 030
		38	ST7133 10 x 038
		43	ST7133 10 x 043
12	16	30	ST7133 12 x 030
		38	ST7133 12 x 038
		43	ST7133 12 x 043
15	21	30	ST7133 15 x 030
		38	ST7133 15 x 038
		43	ST7133 15 x 043
		54	ST7133 15 x 054
		63	ST7133 15 x 063
16	22	30	ST7133 16 x 030
		38	ST7133 16 x 038
		43	ST7133 16 x 043
		54	ST7133 16 x 054
		63	ST7133 16 x 063
19	25	30	ST7133 19 x 030
		38	ST7133 19 x 038
		43	ST7133 19 x 043
		54	ST7133 19 x 054
		63	ST7133 19 x 063
		74	ST7133 19 x 074
20	26	30	ST7133 20 x 030
		38	ST7133 20 x 038
		43	ST7133 20 x 043
		54	ST7133 20 x 054
		63	ST7133 20 x 063
		74	ST7133 20 x 074
24	30	30	ST7133 24 x 030
		38	ST7133 24 x 038
		43	ST7133 24 x 043
		54	ST7133 24 x 054

d ₁	d ₂	l ₂ ±0.1	Item number
24	30	63	ST7133 24 x 063
		74	ST7133 24 x 074
		83	ST7133 24 x 083
		90	ST7133 24 x 090
25	31	30	ST7133 25 x 030
		38	ST7133 25 x 038
		43	ST7133 25 x 043
		54	ST7133 25 x 054
		63	ST7133 25 x 063
30	38	74	ST7133 25 x 074
		83	ST7133 25 x 083
		90	ST7133 25 x 090
		38	ST7133 30 x 038
		43	ST7133 30 x 043
		54	ST7133 30 x 054
32	40	58	ST7133 30 x 058
		68	ST7133 30 x 068
		74	ST7133 30 x 074
		83	ST7133 30 x 083
		88	ST7133 30 x 088
		103	ST7133 30 x 103
		108	ST7133 30 x 108
		38	ST7133 32 x 038
32	40	43	ST7133 32 x 043
		54	ST7133 32 x 054
		58	ST7133 32 x 058
		68	ST7133 32 x 068
		74	ST7133 32 x 074
		83	ST7133 32 x 083
		88	ST7133 32 x 088
		103	ST7133 32 x 103
		108	ST7133 32 x 108
		38	ST7133 32 x 038

d ₁	d ₂	l ₂ ±0.1	Item number
38	46	38	ST7133 38 x 038
		43	ST7133 38 x 043
		58	ST7133 38 x 058
		68	ST7133 38 x 068
		88	ST7133 38 x 088
40	48	94	ST7133 38 x 094
		108	ST7133 38 x 108
		128	ST7133 38 x 128
		38	ST7133 40 x 038
		43	ST7133 40 x 043
		58	ST7133 40 x 058
48	56	68	ST7133 40 x 068
		88	ST7133 40 x 088
		94	ST7133 40 x 094
		108	ST7133 40 x 108
		128	ST7133 40 x 128
		43	ST7133 48 x 043
		58	ST7133 48 x 058
		68	ST7133 48 x 068
50	58	74	ST7133 48 x 074
		88	ST7133 48 x 088
		108	ST7133 48 x 108
		128	ST7133 48 x 128
		43	ST7133 50 x 043
		58	ST7133 50 x 058
		68	ST7133 50 x 068
		74	ST7133 50 x 074
		88	ST7133 50 x 088
		108	ST7133 50 x 108

ST7173 Ball cage

Polyurethane, with installation assistance



Material

POM M25

Note

Cage travel = 1/2 stroke length

Ball property

Steel; hardened; quality class 1; sorted

d ₁	d ₂	l ₂ ±0.1	Item number
15	21	30	ST7173 15 x 030
		38	ST7173 15 x 038
		43	ST7173 15 x 043
		54	ST7173 15 x 054
		63	ST7173 15 x 063
16	22	30	ST7173 16 x 030
		38	ST7173 16 x 038
		43	ST7173 16 x 043
		54	ST7173 16 x 054
19	25	30	ST7173 19 x 030
		38	ST7173 19 x 038
		43	ST7173 19 x 043
		54	ST7173 19 x 054
		63	ST7173 19 x 063
20	26	30	ST7173 20 x 030
		38	ST7173 20 x 038
		43	ST7173 20 x 043
		54	ST7173 20 x 054
		63	ST7173 20 x 063
24	30	30	ST7173 24 x 030
		38	ST7173 24 x 038
		43	ST7173 24 x 043
		54	ST7173 24 x 054
		63	ST7173 24 x 063
		74	ST7173 24 x 074
		83	ST7173 24 x 083
		90	ST7173 24 x 090

d ₁	d ₂	l ₂ ±0.1	Item number
25	31	30	ST7173 25 x 030
		38	ST7173 25 x 038
		43	ST7173 25 x 043
		54	ST7173 25 x 054
		63	ST7173 25 x 063
		74	ST7173 25 x 074
		83	ST7173 25 x 083
30	38	90	ST7173 25 x 090
		38	ST7173 30 x 038
		43	ST7173 30 x 043
		54	ST7173 30 x 054
		58	ST7173 30 x 058
		68	ST7173 30 x 068
		74	ST7173 30 x 074
		83	ST7173 30 x 083
		88	ST7173 30 x 088
		103	ST7173 30 x 103
		108	ST7173 30 x 108
32	40	38	ST7173 32 x 038
		43	ST7173 32 x 043
		54	ST7173 32 x 054
		58	ST7173 32 x 058
		68	ST7173 32 x 068
		74	ST7173 32 x 074
		83	ST7173 32 x 083
		88	ST7173 32 x 088
		103	ST7173 32 x 103
		108	ST7173 32 x 108
38	46	38	ST7173 38 x 038
		43	ST7173 38 x 043

d ₁	d ₂	l ₂ ±0.1	Item number
38	46	58	ST7173 38 x 058
		68	ST7173 38 x 068
		88	ST7173 38 x 088
		94	ST7173 38 x 094
		108	ST7173 38 x 108
		128	ST7173 38 x 128
40	48	38	ST7173 40 x 038
		43	ST7173 40 x 043
		58	ST7173 40 x 058
		68	ST7173 40 x 068
		88	ST7173 40 x 088
		94	ST7173 40 x 094
		108	ST7173 40 x 108
		128	ST7173 40 x 128
48	56	43	ST7173 48 x 043
		58	ST7173 48 x 058
		68	ST7173 48 x 068
		74	ST7173 48 x 074
		88	ST7173 48 x 088
		108	ST7173 48 x 108
		128	ST7173 48 x 128
50	58	43	ST7173 50 x 043
		58	ST7173 50 x 058
		68	ST7173 50 x 068
		74	ST7173 50 x 074
		88	ST7173 50 x 088
		108	ST7173 50 x 108
		128	ST7173 50 x 128

Active elements

Spring elements

Nitrogen systems

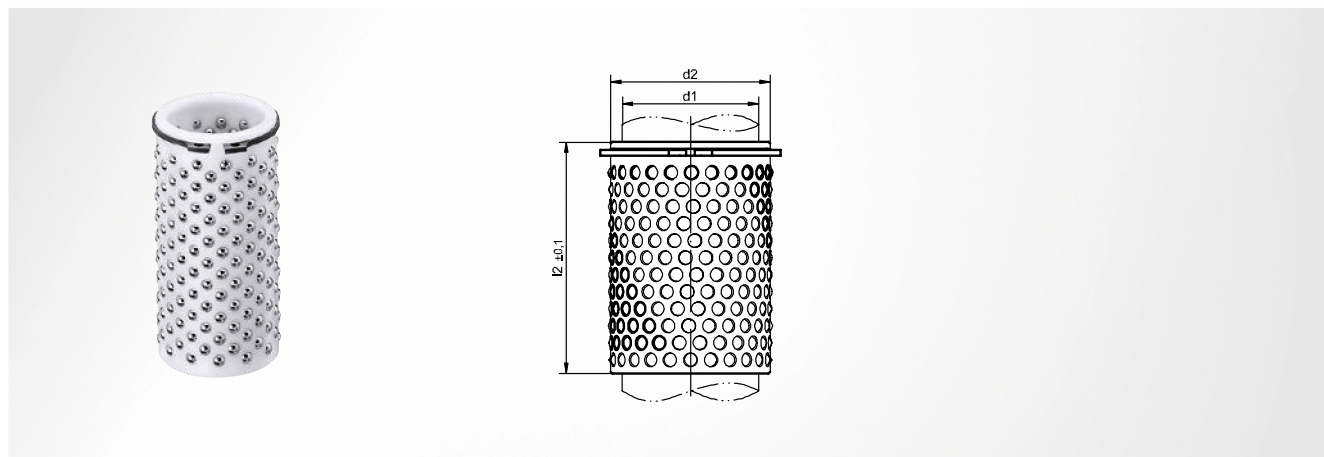
Tapping units

Machining elements

Accessories

ST7174 Ball cage

Polyurethane, with lock ring



Material

POM M25

Note

Cage travel = 1/2 stroke length

ball property

Steel; hardened; quality class 1; sorted

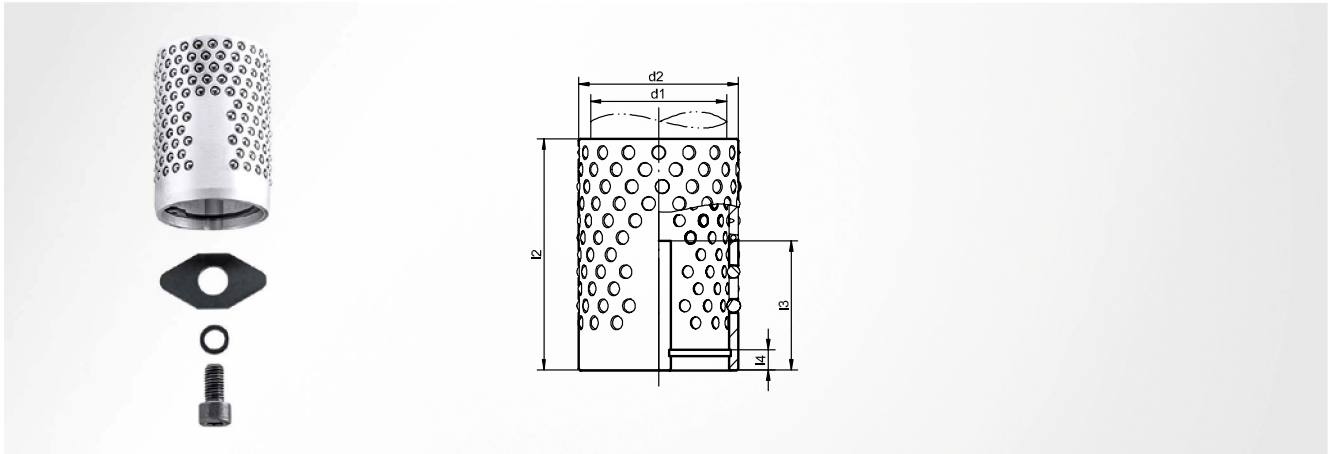
d ₁	d ₂	l ₂ ±0.1	Item number
15	21	30	ST7174 15 x 030
		38	ST7174 15 x 038
		43	ST7174 15 x 043
		54	ST7174 15 x 054
		63	ST7174 15 x 063
16	22	30	ST7174 16 x 030
		38	ST7174 16 x 038
		43	ST7174 16 x 043
		54	ST7174 16 x 054
19	25	30	ST7174 19 x 030
		38	ST7174 19 x 038
		43	ST7174 19 x 043
		54	ST7174 19 x 054
		63	ST7174 19 x 063
20	26	30	ST7174 20 x 030
		38	ST7174 20 x 038
		43	ST7174 20 x 043
		54	ST7174 20 x 054
		63	ST7174 20 x 063
24	30	30	ST7174 24 x 030
		38	ST7174 24 x 038
		43	ST7174 24 x 043
		54	ST7174 24 x 054
		63	ST7174 24 x 063
		74	ST7174 24 x 074
		83	ST7174 24 x 083
		90	ST7174 24 x 090

d ₁	d ₂	l ₂ ±0.1	Item number
25	31	30	ST7174 25 x 030
		38	ST7174 25 x 038
		43	ST7174 25 x 043
		54	ST7174 25 x 054
		63	ST7174 25 x 063
		74	ST7174 25 x 074
		83	ST7174 25 x 083
		90	ST7174 25 x 090
30	38	38	ST7174 30 x 038
		43	ST7174 30 x 043
		54	ST7174 30 x 054
		58	ST7174 30 x 058
		68	ST7174 30 x 068
		74	ST7174 30 x 074
		83	ST7174 30 x 083
		88	ST7174 30 x 088
		103	ST7174 30 x 103
		108	ST7174 30 x 108
32	40	38	ST7174 32 x 038
		43	ST7174 32 x 043
		54	ST7174 32 x 054
		58	ST7174 32 x 058
		68	ST7174 32 x 068
		74	ST7174 32 x 074
		83	ST7174 32 x 083
		88	ST7174 32 x 088
		103	ST7174 32 x 103
		108	ST7174 32 x 108
38	46	38	ST7174 38 x 038
		43	ST7174 38 x 043

d ₁	d ₂	l ₂ ±0.1	Item number
38	46	58	ST7174 38 x 058
		68	ST7174 38 x 068
		88	ST7174 38 x 088
		94	ST7174 38 x 094
		108	ST7174 38 x 108
		128	ST7174 38 x 128
40	48	38	ST7174 40 x 038
		43	ST7174 40 x 043
		58	ST7174 40 x 058
		68	ST7174 40 x 068
		88	ST7174 40 x 088
		94	ST7174 40 x 094
		108	ST7174 40 x 108
		128	ST7174 40 x 128
48	56	43	ST7174 48 x 043
		58	ST7174 48 x 058
		68	ST7174 48 x 068
		74	ST7174 48 x 074
		88	ST7174 48 x 088
		108	ST7174 48 x 108
		128	ST7174 48 x 128
50	58	43	ST7174 50 x 043
		58	ST7174 50 x 058
		68	ST7174 50 x 068
		74	ST7174 50 x 074
		88	ST7174 50 x 088
		108	ST7174 50 x 108
		128	ST7174 50 x 128

ST7134 Ball cage

Aluminium, with locking device and fixing screw



Material

Aluminium 3.1645

Note

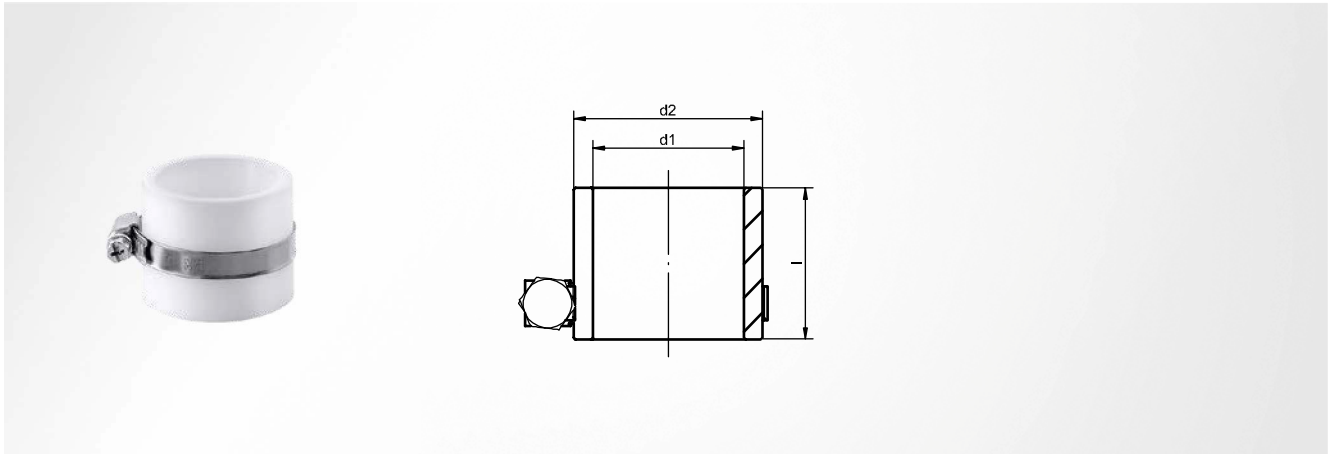
Cage travel = 1/2 stroke length

Ball property

Steel; hardened; quality class 1; sorted

d ₁	d ₂	l ₄	l ₂	l ₃	Item number
24	30	4.5	63	34	ST7134 24 x 063
			74	44	ST7134 24 x 074
			83	46	ST7134 24 x 083
25	31	4.5	63	34	ST7134 25 x 063
			74	44	ST7134 25 x 074
			83	46	ST7134 25 x 083
30	38	4.5	68	38	ST7134 30 x 068
			74	44	ST7134 30 x 074
			83	46	ST7134 30 x 083
			88	47	ST7134 30 x 088
			98	53	ST7134 30 x 098
			108	58	ST7134 30 x 108
32	40	4.5	68	38	ST7134 32 x 068
			74	44	ST7134 32 x 074
			83	46	ST7134 32 x 083
			88	47	ST7134 32 x 088
			98	53	ST7134 32 x 098
			108	58	ST7134 32 x 108
38	46	6.0	68	38	ST7134 38 x 068

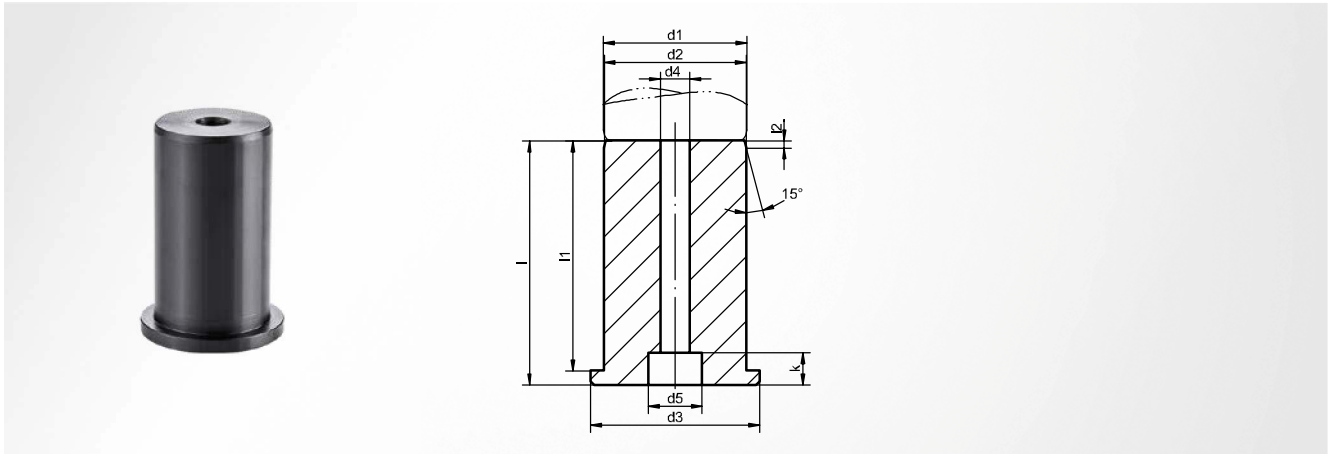
d ₁	d ₂	l ₄	l ₂	l ₃	Item number
38	46	6.0	88	47	ST7134 38 x 088
			108	58	ST7134 38 x 108
			128	78	ST7134 38 x 128
40	48	6.0	68	38	ST7134 40 x 068
			88	47	ST7134 40 x 088
			108	58	ST7134 40 x 108
			128	78	ST7134 40 x 128
48	56	7.0	88	47	ST7134 48 x 088
			108	58	ST7134 48 x 108
			128	78	ST7134 48 x 128
50	58	7.0	88	47	ST7134 50 x 088
			108	58	ST7134 50 x 108
			128	78	ST7134 50 x 128
60	70	7.0	113	65	ST7134 60 x 113
			128	78	ST7134 60 x 128
			139	86	ST7134 60 x 139
63	73	7.0	113	65	ST7134 63 x 113
			128	78	ST7134 63 x 128
			139	86	ST7134 63 x 139



Material

Polyurethane

d_2	l	d_1	Item number
20	20	15	ST7135 15
		16	ST7135 16
25	20	19	ST7135 19
		20	ST7135 20
30	30	24	ST7135 24
		25	ST7135 25
40	30	30	ST7135 30
		32	ST7135 32
50	40	38	ST7135 38
		40	ST7135 40
60	40	48	ST7135 48
		50	ST7135 50
70	40	60	ST7135 60
		63	ST7135 63
90	45	80	ST7135 80



Material

Steel 1.0503 (C45)

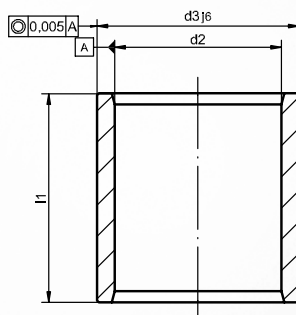
Note

the length of the cage holder should be half of that of the cage used

d_1	d_2	d_3	d_4	d_5	l	l_1	l_2	k	Item number
15	14.5	20.5	8.1	13.5	34	31	3	9	ST7132 15
16	15.5	21.5	8.1	13.5	34	31	3	9	ST7132 16
19	18.5	24.5	8.1	15.0	40	37	3	9	ST7132 19
20	19.5	25.5	8.1	15.0	40	37	3	9	ST7132 20
24	23.5	29.5	8.1	15.0	48	45	3	9	ST7132 24
25	24.5	30.5	8.1	15.0	48	45	3	9	ST7132 25
30	29.5	37.0	8.1	15.0	58	54	4	9	ST7132 30
32	31.5	39.0	8.1	15.0	58	54	4	9	ST7132 32
38	37.5	45.0	8.1	15.0	68	64	4	9	ST7132 38
40	39.5	47.0	8.1	15.0	68	64	4	9	ST7132 40
48	47.5	55.0	8.1	15.0	68	64	4	9	ST7132 48
50	49.5	57.0	8.1	15.0	68	64	4	9	ST7132 50
60	59.5	69.0	8.1	15.0	80	75	5	9	ST7132 60
63	62.5	72.0	8.1	15.0	80	75	5	9	ST7132 63
80	79.0	91.0	8.1	15.0	80	75	5	9	ST7132 80

ST7406 Guide bush

smooth



Referring to DIN 9831 / ISO 9448

Material

Steel 1.3505 (100 Cr6); hardened

Hardness

64 ±1 HRC

Installation instruction

Secure with adhesive; do not press in; one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO G6

Optional accessories

SZ9742

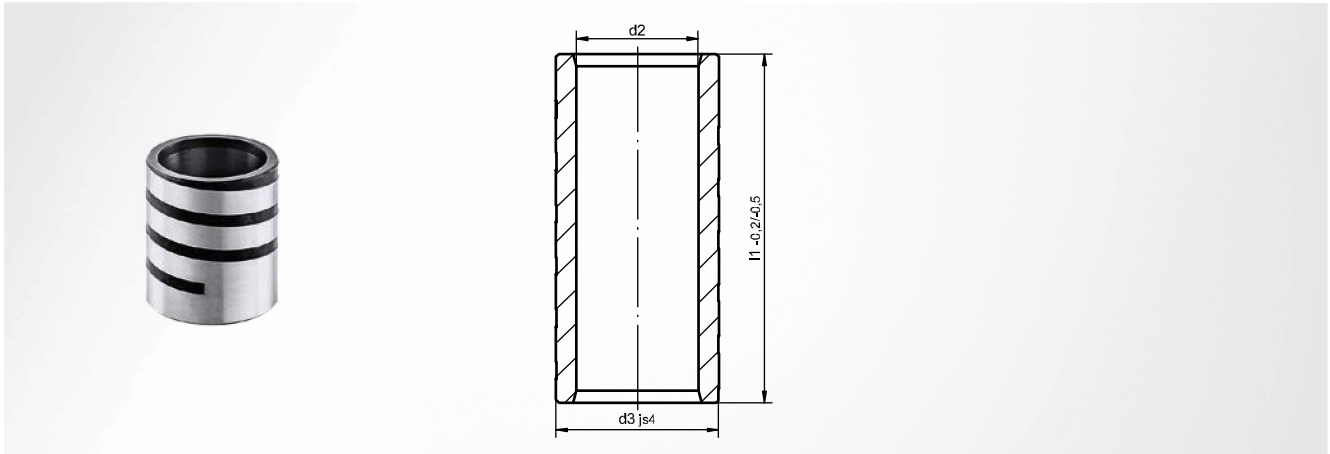
d_1^{h3}	d_2	d_3^{j6}	l_1	Item number
10	14	22	23	ST7406 10 x 023
			30	ST7406 10 x 030
			37	ST7406 10 x 037
12	16	22	23	ST7406 12 x 023
			30	ST7406 12 x 030
			37	ST7406 12 x 037
15	21	28	23	ST7406 15 x 023
			30	ST7406 15 x 030
			37	ST7406 15 x 037
			47	ST7406 15 x 047
			60	ST7406 15 x 060
16	22	28	23	ST7406 16 x 023
			30	ST7406 16 x 030
			37	ST7406 16 x 037
			47	ST7406 16 x 047
			60	ST7406 16 x 060
19	25	32	23	ST7406 19 x 023
			30	ST7406 19 x 030
			37	ST7406 19 x 037
			47	ST7406 19 x 047
			60	ST7406 19 x 060
20	26	32	23	ST7406 20 x 023
			30	ST7406 20 x 030
			37	ST7406 20 x 037
			47	ST7406 20 x 047
			60	ST7406 20 x 060
24	30	40	23	ST7406 24 x 023
			30	ST7406 24 x 030

d_1^{h3}	d_2	d_3^{j6}	l_1	Item number
24	30	40	37	ST7406 24 x 037
			47	ST7406 24 x 047
			60	ST7406 24 x 060
25	31	40	23	ST7406 25 x 023
			30	ST7406 25 x 030
			37	ST7406 25 x 037
			47	ST7406 25 x 047
30	38	48	60	ST7406 25 x 060
			77	ST7406 25 x 077
			30	ST7406 30 x 030
			37	ST7406 30 x 037
32	40	48	47	ST7406 30 x 047
			60	ST7406 30 x 060
			77	ST7406 30 x 077
			95	ST7406 30 x 095
38	46	58	30	ST7406 32 x 030
			37	ST7406 32 x 037
			47	ST7406 32 x 047
			60	ST7406 32 x 060
			77	ST7406 32 x 077
40	48	58	95	ST7406 32 x 095
			30	ST7406 38 x 030
			37	ST7406 38 x 037
			47	ST7406 38 x 047
40	48	58	60	ST7406 38 x 060
			77	ST7406 38 x 077
			95	ST7406 38 x 095
			120	ST7406 38 x 120
40	48	58	30	ST7406 40 x 030

d_1^{h3}	d_2	d_3^{j6}	l_1	Item number
40	48	58	37	ST7406 40 x 037
			47	ST7406 40 x 047
			60	ST7406 40 x 060
			77	ST7406 40 x 077
			95	ST7406 40 x 095
48	56	70	120	ST7406 40 x 120
			37	ST7406 48 x 037
			47	ST7406 48 x 047
			60	ST7406 48 x 060
			77	ST7406 48 x 077
50	58	70	95	ST7406 48 x 095
			120	ST7406 48 x 120
			37	ST7406 50 x 037
			47	ST7406 50 x 047
			60	ST7406 50 x 060
60	70	85	77	ST7406 50 x 077
			95	ST7406 50 x 095
			120	ST7406 50 x 120
			60	ST7406 60 x 060
			77	ST7406 60 x 077
63	73	85	95	ST7406 60 x 095
			120	ST7406 60 x 120
			60	ST7406 63 x 060
			77	ST7406 63 x 077
80	92	105	95	ST7406 63 x 095
			120	ST7406 63 x 120
			60	ST7406 80 x 060
			77	ST7406 80 x 077
80	92	105	95	ST7406 80 x 095
			120	ST7406 80 x 120
80	92	105	135	ST7406 80 x 135

ST7407 Guide bush

smooth with adhesive grooves



Referring to DIN 9831 / ISO 9448

Material

Steel 1.3505 (100 Cr6); hardened

Hardness

64 ±1 HRC

Installation instruction

Secure with adhesive; do not press in; one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO H5

Optional accessories

SZ9742

d_1^{h3}	d_2	d_3^{js4}	$l_1^{-0.2 - 0.5}$	Item number
10	14	22	23	ST7407 10 x 023
			30	ST7407 10 x 030
			37	ST7407 10 x 037
12	16	22	23	ST7407 12 x 023
			30	ST7407 12 x 030
			37	ST7407 12 x 037
15	21	28	23	ST7407 15 x 023
			30	ST7407 15 x 030
			37	ST7407 15 x 037
			47	ST7407 15 x 047
			60	ST7407 15 x 060
16	22	28	23	ST7407 16 x 023
			30	ST7407 16 x 030
			37	ST7407 16 x 037
			47	ST7407 16 x 047
			60	ST7407 16 x 060
19	25	32	23	ST7407 19 x 023
			30	ST7407 19 x 030
			37	ST7407 19 x 037
			43	ST7407 19 x 043
			47	ST7407 19 x 047
			60	ST7407 19 x 060
20	26	32	23	ST7407 20 x 023
			30	ST7407 20 x 030
			37	ST7407 20 x 037
			47	ST7407 20 x 047
			60	ST7407 20 x 060
24	30	40	23	ST7407 24 x 023
			30	ST7407 24 x 030
			37	ST7407 24 x 037
			47	ST7407 24 x 047
			60	ST7407 24 x 060

ST7407 Guide bush

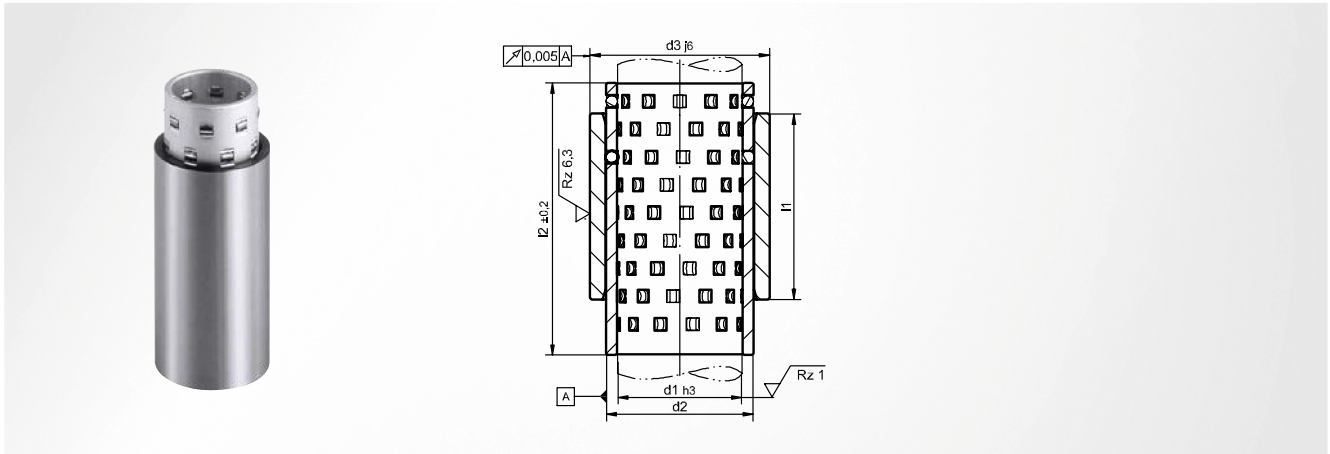
smooth with adhesive grooves

d_1^{h3}	d_2	d_3^{js4}	$l_1^{-0.2 - 0.5}$	Item number
24	30	40	77	ST7407 24 x 077
25	31	40	23	ST7407 25 x 023
			30	ST7407 25 x 030
			37	ST7407 25 x 037
			47	ST7407 25 x 047
			60	ST7407 25 x 060
			77	ST7407 25 x 077
30	38	48	30	ST7407 30 x 030
			37	ST7407 30 x 037
			47	ST7407 30 x 047
			60	ST7407 30 x 060
			77	ST7407 30 x 077
			95	ST7407 30 x 095
32	40	48	30	ST7407 32 x 030
			37	ST7407 32 x 037
			47	ST7407 32 x 047
			60	ST7407 32 x 060
			77	ST7407 32 x 077
			95	ST7407 32 x 095

ST7403 Guide unit

STEINEL®

smooth, Roller guide aluminium



Referring to DIN 9831 / ISO 9448

Scope of supply

ST7406; ST7140

Installation instruction

Secure with adhesive; do not press in; one-sided entry chamfer or centring attachment

Optional accessories

SZ9742

Installation in mounting bore

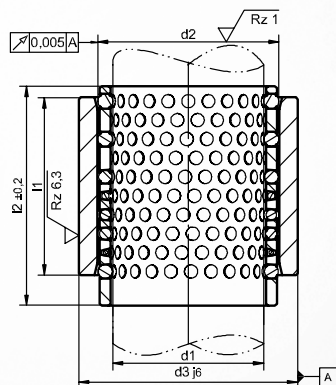
ISO G6

d_1^{h3}	d_2	d_3^{j6}	l_1	$l_2^{\pm 0.2}$	Item number
19	25	32	37	43	ST7403 19 x 037 x 043
			47	54	ST7403 19 x 047 x 054
			60	63	ST7403 19 x 060 x 063
20	26	32	37	43	ST7403 20 x 037 x 043
			47	54	ST7403 20 x 047 x 054
			60	63	ST7403 20 x 060 x 063
24	30	40	37	43	ST7403 24 x 037 x 043
			47	63	ST7403 24 x 047 x 063
			60	74	ST7403 24 x 060 x 074
			77	90	ST7403 24 x 077 x 090
25	31	40	37	43	ST7403 25 x 037 x 043
			47	63	ST7403 25 x 047 x 063
			60	74	ST7403 25 x 060 x 074
			77	90	ST7403 25 x 077 x 090
30	38	48	47	54	ST7403 30 x 047 x 054
			60	74	ST7403 30 x 060 x 074
			77	83	ST7403 30 x 077 x 083
			95	103	ST7403 30 x 095 x 103
32	40	48	47	54	ST7403 32 x 047 x 054
			60	74	ST7403 32 x 060 x 074
			77	83	ST7403 32 x 077 x 083
			95	103	ST7403 32 x 095 x 103

d_1^{h3}	d_2	d_3^{j6}	l_1	$l_2^{\pm 0.2}$	Item number
38	46	58	60	58	ST7403 38 x 060 x 058
			77	88	ST7403 38 x 077 x 088
			95	94	ST7403 38 x 095 x 094
			120	128	ST7403 38 x 120 x 128
40	48	58	60	58	ST7403 40 x 060 x 058
			77	88	ST7403 40 x 077 x 088
			95	94	ST7403 40 x 095 x 094
			120	128	ST7403 40 x 120 x 128
48	56	70	77	74	ST7403 48 x 077 x 074
			95	108	ST7403 48 x 095 x 108
			120	128	ST7403 48 x 120 x 128
50	58	70	77	74	ST7403 50 x 077 x 074
			95	108	ST7403 50 x 095 x 108
			120	128	ST7403 50 x 120 x 128
60	70	85	77	113	ST7403 60 x 077 x 113
			95	128	ST7403 60 x 095 x 128
			120	139	ST7403 60 x 120 x 139
63	73	85	77	113	ST7403 63 x 077 x 113
			95	128	ST7403 63 x 095 x 128
			120	139	ST7403 63 x 120 x 139
80	92	105	120	138	ST7403 80 x 120 x 138
			135	156	ST7403 80 x 135 x 156

ST7402 Guide unit

smooth, Ball guide aluminium



Referring to DIN 9831 / ISO 9448

Scope of supply

ST7406; ST7130

Installation instruction

Secure with adhesive; do not press in; one-sided entry chamfer or centring attachment

Optional accessories

SZ9742

Installation in mounting bore

ISO G6

d_1^{h3}	d_2	d_3^{j6}	l_1	$l_2^{\pm 0.2}$	Item number
10	14	22	23	30	ST7402 10 x 023 x 030
			30	38	ST7402 10 x 030 x 038
			37	43	ST7402 10 x 037 x 043
12	16	22	23	30	ST7402 12 x 023 x 030
			30	38	ST7402 12 x 030 x 038
			37	43	ST7402 12 x 037 x 043
15	21	28	23	30	ST7402 15 x 023 x 030
			30	38	ST7402 15 x 030 x 038
			37	43	ST7402 15 x 037 x 043
			47	54	ST7402 15 x 047 x 054
			60	63	ST7402 15 x 060 x 063
16	22	28	23	30	ST7402 16 x 023 x 030
			30	38	ST7402 16 x 030 x 038
			37	43	ST7402 16 x 037 x 043
			47	54	ST7402 16 x 047 x 054
			60	63	ST7402 16 x 060 x 063
19	25	32	23	30	ST7402 19 x 023 x 030
			30	38	ST7402 19 x 030 x 038
			37	43	ST7402 19 x 037 x 043
			47	54	ST7402 19 x 047 x 054
			60	63	ST7402 19 x 060 x 063
20	26	32	23	30	ST7402 20 x 023 x 030
			30	38	ST7402 20 x 030 x 038
			37	43	ST7402 20 x 037 x 043
			47	54	ST7402 20 x 047 x 054
			60	63	ST7402 20 x 060 x 063
24	30	40	23	30	ST7402 24 x 023 x 030
			30	38	ST7402 24 x 030 x 038
			37	43	ST7402 24 x 037 x 043
			47	54	ST7402 24 x 047 x 054
			60	63	ST7402 24 x 060 x 063
			77	83	ST7402 24 x 077 x 083
25	31	40	23	30	ST7402 25 x 023 x 030

smooth, Ball guide aluminium

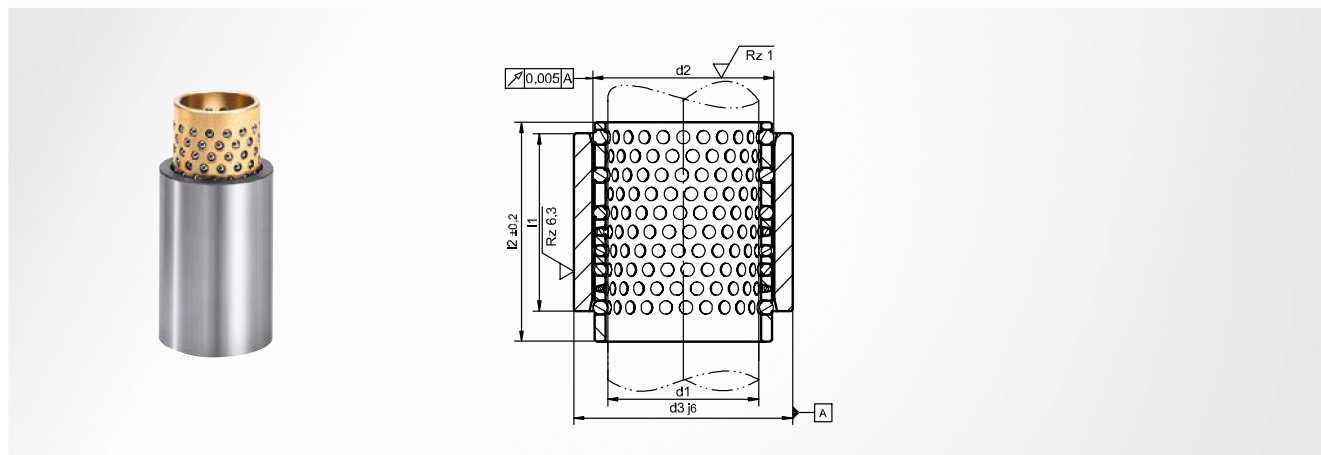
d_1^{h3}	d_2	d_3^{j6}	l_1	$l_2^{\pm 0.2}$	Item number
25	31	40	30	38	ST7402 25 x 030 x 038
			37	43	ST7402 25 x 037 x 043
			47	54	ST7402 25 x 047 x 054
			60	63	ST7402 25 x 060 x 063
			77	83	ST7402 25 x 077 x 083
30	38	48	30	38	ST7402 30 x 030 x 038
			37	43	ST7402 30 x 037 x 043
			47	58	ST7402 30 x 047 x 058
			60	68	ST7402 30 x 060 x 068
			77	88	ST7402 30 x 077 x 088
32	40	48	95	108	ST7402 30 x 095 x 108
			30	38	ST7402 32 x 030 x 038
			37	43	ST7402 32 x 037 x 043
			47	58	ST7402 32 x 047 x 058
			60	68	ST7402 32 x 060 x 068
38	46	58	77	88	ST7402 32 x 077 x 088
			95	108	ST7402 32 x 095 x 108
			30	38	ST7402 38 x 030 x 038
			37	43	ST7402 38 x 037 x 043
			47	58	ST7402 38 x 047 x 058
40	48	58	60	68	ST7402 38 x 060 x 068
			77	88	ST7402 38 x 077 x 088
			95	108	ST7402 38 x 095 x 108
			120	128	ST7402 38 x 120 x 128
			30	38	ST7402 40 x 030 x 038
48	56	70	37	43	ST7402 40 x 037 x 043
			47	58	ST7402 40 x 047 x 058
			60	68	ST7402 40 x 060 x 068
			77	88	ST7402 40 x 077 x 088
			95	108	ST7402 40 x 095 x 108
50	58	70	120	128	ST7402 40 x 120 x 128
			37	43	ST7402 48 x 037 x 043
			47	58	ST7402 48 x 047 x 058
			60	68	ST7402 48 x 060 x 068
			77	88	ST7402 48 x 077 x 088
60	70	85	95	108	ST7402 48 x 095 x 108
			120	128	ST7402 48 x 120 x 128
			37	43	ST7402 50 x 037 x 043
			47	58	ST7402 50 x 047 x 058
			60	68	ST7402 50 x 060 x 068
63	73	85	77	88	ST7402 50 x 077 x 088
			95	108	ST7402 50 x 095 x 108
			120	128	ST7402 50 x 120 x 128
			60	75	ST7402 60 x 060 x 075
			77	94	ST7402 60 x 077 x 094
80	92	105	95	113	ST7402 60 x 095 x 113
			120	139	ST7402 60 x 120 x 139
			60	75	ST7402 63 x 060 x 075
			77	94	ST7402 63 x 077 x 094
			95	113	ST7402 63 x 095 x 113
			120	139	ST7402 63 x 120 x 139
			120	138	ST7402 80 x 120 x 138
			135	156	ST7402 80 x 135 x 156

Active
elementsSpring
elementsNitrogen
systemsTapping
unitsMachine
elements

Accessories

ST7404 Guide unit

smooth, Ball guide brass



Referring to DIN 9831 / ISO 9448

Scope of supply

ST7406; ST7150

Installation instruction

Secure with adhesive; do not press in; one-sided entry
chamfer or centring attachment

Optional accessories

SZ9742

Installation in mounting bore

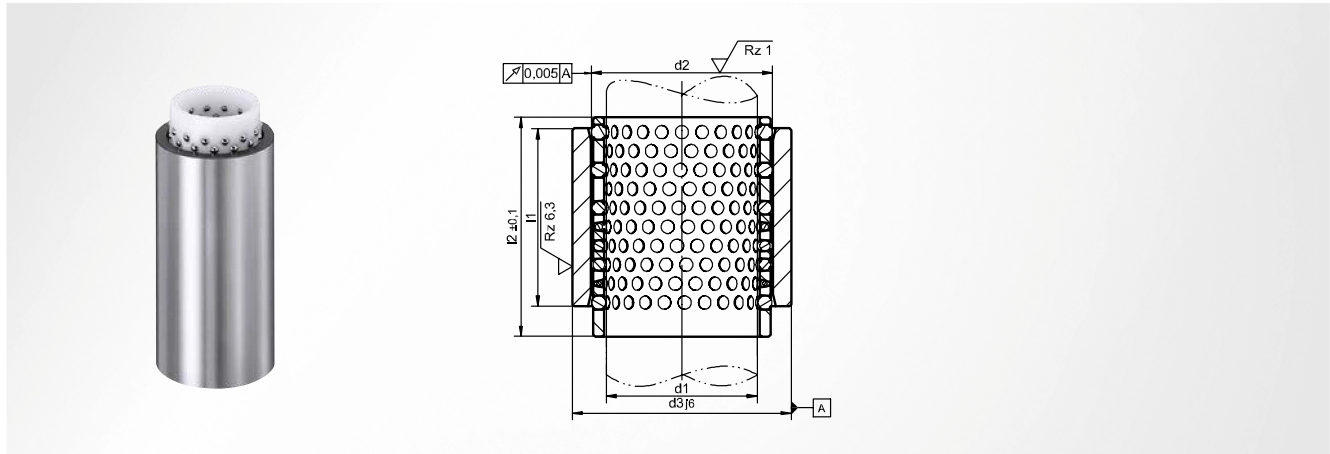
ISO G6

d_1^{h3}	d_2	d_3^{j6}	l_1	$l_2^{\pm 0.2}$	Item number
10	14	22	23	30	ST7404 10 x 023 x 030
			30	38	ST7404 10 x 030 x 038
			37	43	ST7404 10 x 037 x 043
12	16	22	23	30	ST7404 12 x 023 x 030
			30	38	ST7404 12 x 030 x 038
			37	43	ST7404 12 x 037 x 043
15	21	28	23	30	ST7404 15 x 023 x 030
			30	38	ST7404 15 x 030 x 038
			37	43	ST7404 15 x 037 x 043
			47	54	ST7404 15 x 047 x 054
			60	63	ST7404 15 x 060 x 063
16	22	28	23	30	ST7404 16 x 023 x 030
			30	38	ST7404 16 x 030 x 038
			37	43	ST7404 16 x 037 x 043
			47	54	ST7404 16 x 047 x 054
			60	63	ST7404 16 x 060 x 063
19	25	32	23	30	ST7404 19 x 023 x 030
			30	38	ST7404 19 x 030 x 038
			37	43	ST7404 19 x 037 x 043
			47	54	ST7404 19 x 047 x 054
			60	63	ST7404 19 x 060 x 063
20	26	32	23	30	ST7404 20 x 023 x 030
			30	38	ST7404 20 x 030 x 038
			37	43	ST7404 20 x 037 x 043
			47	54	ST7404 20 x 047 x 054
			60	63	ST7404 20 x 060 x 063
24	30	40	23	30	ST7404 24 x 023 x 030
			30	38	ST7404 24 x 030 x 038
			37	43	ST7404 24 x 037 x 043
			47	54	ST7404 24 x 047 x 054
			60	63	ST7404 24 x 060 x 063
			77	83	ST7404 24 x 077 x 083
25	31	40	23	30	ST7404 25 x 023 x 030

d_1^{h3}	d_2	d_3^{j6}	l_1	$l_2^{\pm 0.2}$	Item number
25	31	40	30	38	ST7404 25 x 030 x 038
			37	43	ST7404 25 x 037 x 043
			47	54	ST7404 25 x 047 x 054
			60	63	ST7404 25 x 060 x 063
			77	83	ST7404 25 x 077 x 083
30	38	48	30	38	ST7404 30 x 030 x 038
			37	43	ST7404 30 x 037 x 043
			47	58	ST7404 30 x 047 x 058
			60	68	ST7404 30 x 060 x 068
			77	88	ST7404 30 x 077 x 088
32	40	48	95	108	ST7404 30 x 095 x 108
			30	38	ST7404 32 x 030 x 038
			37	43	ST7404 32 x 037 x 043
			47	58	ST7404 32 x 047 x 058
			60	68	ST7404 32 x 060 x 068
38	46	58	77	88	ST7404 32 x 077 x 088
			95	108	ST7404 32 x 095 x 108
			30	38	ST7404 38 x 030 x 038
			37	43	ST7404 38 x 037 x 043
			47	58	ST7404 38 x 047 x 058
40	48	58	60	68	ST7404 38 x 060 x 068
			77	88	ST7404 38 x 077 x 088
			95	108	ST7404 38 x 095 x 108
			120	128	ST7404 38 x 120 x 128
			30	38	ST7404 40 x 030 x 038
48	56	70	37	43	ST7404 40 x 037 x 043
			47	58	ST7404 40 x 047 x 058
			60	68	ST7404 40 x 060 x 068
			77	88	ST7404 40 x 077 x 088
			95	108	ST7404 40 x 095 x 108
50	58	70	120	128	ST7404 40 x 120 x 128
			37	43	ST7404 48 x 037 x 043
			47	58	ST7404 48 x 047 x 058
			60	68	ST7404 48 x 060 x 068
			77	88	ST7404 48 x 077 x 088
60	70	85	95	108	ST7404 48 x 095 x 108
			120	128	ST7404 48 x 120 x 128
			37	43	ST7404 50 x 037 x 043
			47	58	ST7404 50 x 047 x 058
			60	68	ST7404 50 x 060 x 068
63	73	85	77	88	ST7404 50 x 077 x 088
			95	108	ST7404 50 x 095 x 108
			120	128	ST7404 50 x 120 x 128
			60	75	ST7404 60 x 060 x 075
			77	94	ST7404 60 x 077 x 094
80	92	105	95	113	ST7404 60 x 095 x 113
			120	139	ST7404 60 x 120 x 139
			60	75	ST7404 63 x 060 x 075
			77	94	ST7404 63 x 077 x 094
			95	113	ST7404 63 x 095 x 113
			120	139	ST7404 63 x 120 x 139
			120	138	ST7404 80 x 120 x 138
			135	156	ST7404 80 x 135 x 156

ST7405 Guide unit

smooth, Ball guide polyurethan



Referring to DIN 9831 / ISO 9448

Scope of supply

ST7406; ST7133

Installation instruction

Secure with adhesive; do not press in; one-sided entry chamfer or centring attachment

Optional accessories

SZ9742

Installation in mounting bore

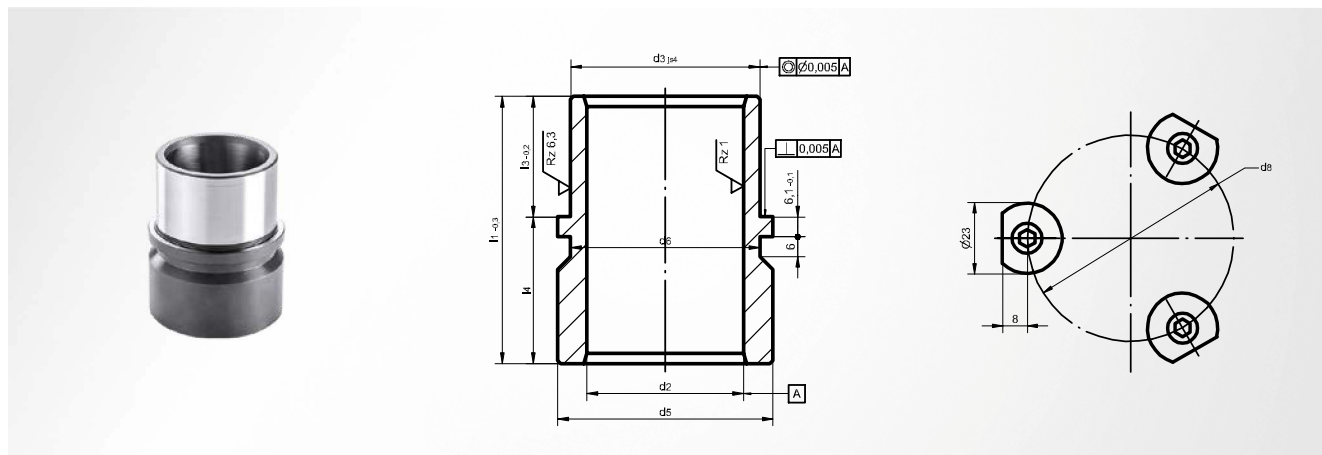
ISO G6

d_1^{h3}	d_2	d_3^{j6}	l_1	$l_2^{±0.1}$	Item number
10	14	22	23	30	ST7405 10 x 023 x 030
			30	38	ST7405 10 x 030 x 038
			37	43	ST7405 10 x 037 x 043
12	16	22	23	30	ST7405 12 x 023 x 030
			30	38	ST7405 12 x 030 x 038
			37	43	ST7405 12 x 037 x 043
15	21	28	23	30	ST7405 15 x 023 x 030
			30	38	ST7405 15 x 030 x 038
			37	43	ST7405 15 x 037 x 043
			47	54	ST7405 15 x 047 x 054
			60	63	ST7405 15 x 060 x 063
16	22	28	23	30	ST7405 16 x 023 x 030
			30	38	ST7405 16 x 030 x 038
			37	43	ST7405 16 x 037 x 043
			47	54	ST7405 16 x 047 x 054
			60	63	ST7405 16 x 060 x 063
19	25	32	23	30	ST7405 19 x 023 x 030
			30	38	ST7405 19 x 030 x 038
			37	43	ST7405 19 x 037 x 043
			47	54	ST7405 19 x 047 x 054
			60	63	ST7405 19 x 060 x 063
20	26	32	23	30	ST7405 20 x 023 x 030
			30	38	ST7405 20 x 030 x 038
			37	43	ST7405 20 x 037 x 043
			47	54	ST7405 20 x 047 x 054
			60	63	ST7405 20 x 060 x 063
24	30	40	23	30	ST7405 24 x 023 x 030
			30	38	ST7405 24 x 030 x 038
			37	43	ST7405 24 x 037 x 043
			47	54	ST7405 24 x 047 x 054
			60	63	ST7405 24 x 060 x 063
			77	83	ST7405 24 x 077 x 083
25	31	40	23	30	ST7405 25 x 023 x 030

d_1^{h3}	d_2	d_3^{j6}	l_1	$l_2^{\pm 0.1}$	Item number
25	31	40	30	38	ST7405 25 x 030 x 038
			37	43	ST7405 25 x 037 x 043
			47	54	ST7405 25 x 047 x 054
			60	63	ST7405 25 x 060 x 063
			77	83	ST7405 25 x 077 x 083
30	38	48	30	38	ST7405 30 x 030 x 038
			37	43	ST7405 30 x 037 x 043
			47	58	ST7405 30 x 047 x 058
			60	68	ST7405 30 x 060 x 068
			77	88	ST7405 30 x 077 x 088
32	40	48	95	108	ST7405 30 x 095 x 108
			30	38	ST7405 32 x 030 x 038
			37	43	ST7405 32 x 037 x 043
			47	58	ST7405 32 x 047 x 058
			60	68	ST7405 32 x 060 x 068
38	46	58	77	88	ST7405 32 x 077 x 088
			95	108	ST7405 32 x 095 x 108
			30	38	ST7405 38 x 030 x 038
			37	43	ST7405 38 x 037 x 043
			47	58	ST7405 38 x 047 x 058
40	48	58	60	68	ST7405 38 x 060 x 068
			77	88	ST7405 38 x 077 x 088
			95	108	ST7405 38 x 095 x 108
			120	128	ST7405 38 x 120 x 128
			30	38	ST7405 40 x 030 x 038
48	56	70	37	43	ST7405 40 x 037 x 043
			47	58	ST7405 40 x 047 x 058
			60	68	ST7405 40 x 060 x 068
			77	88	ST7405 40 x 077 x 088
			95	108	ST7405 40 x 095 x 108
50	58	70	120	128	ST7405 40 x 120 x 128
			37	43	ST7405 48 x 037 x 043
			47	58	ST7405 48 x 047 x 058
			60	68	ST7405 48 x 060 x 068
			77	88	ST7405 48 x 077 x 088
			95	108	ST7405 48 x 095 x 108
			120	128	ST7405 48 x 120 x 128
			37	43	ST7405 50 x 037 x 043
			47	58	ST7405 50 x 047 x 058
			60	68	ST7405 50 x 060 x 068
			77	88	ST7405 50 x 077 x 088
			95	108	ST7405 50 x 095 x 108
			120	128	ST7405 50 x 120 x 128

ST7416 Guide bush

with shoulder



Referring to DIN 9831 / ISO 9448

Material

Steel 1.7131 (16MnCr5); case-hardened

Hardness

64 ±1 HRC

Installation instruction

Fixing with 3 holding clamps; one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO H6

Scope of supply

ST7367

d ₁	d ₂	d ₃ ^{js4}	d ₅	d ₆	d ₈	l ₃ ^{-0.2}	l ₁ ^{-0.3}	l ₄	Item number
19	25	32	40	32	59	23	35	12	ST7416 19 x 035
							43	20	ST7416 19 x 043
							59	36	ST7416 19 x 059
20	26	32	40	32	59	23	35	12	ST7416 20 x 035
							43	20	ST7416 20 x 043
							59	36	ST7416 20 x 059
24	30	40	48	40	65	23	35	12	ST7416 24 x 035
							60	37	ST7416 24 x 060
							80	57	ST7416 24 x 080
25	31	40	48	40	65	23	35	12	ST7416 25 x 035
							60	37	ST7416 25 x 060
							80	57	ST7416 25 x 080
30	38	48	56	48	73	30	42	12	ST7416 30 x 042
							75	45	ST7416 30 x 075
							93	63	ST7416 30 x 093
32	40	48	56	48	73	30	42	12	ST7416 32 x 042
							75	45	ST7416 32 x 075
							93	63	ST7416 32 x 093
38	46	58	66	58	83	37	52	15	ST7416 38 x 052
							82	45	ST7416 38 x 082
							107	70	ST7416 38 x 107
40	48	58	66	58	83	37	52	15	ST7416 40 x 052
							82	45	ST7416 40 x 082
							107	70	ST7416 40 x 107
48	56	70	80	70	97	47	65	18	ST7416 48 x 065
							97	50	ST7416 48 x 097
							127	80	ST7416 48 x 127
50	58	70	80	70	97	47	65	18	ST7416 50 x 065
							97	50	ST7416 50 x 097
							127	80	ST7416 50 x 127
60	70	85	95	85	112	60	80	20	ST7416 60 x 080
							115	55	ST7416 60 x 115

ST7416 Guide bush

with shoulder

d_1	d_2	d_3^{js4}	d_5	d_6	d_8	$l_3^{-0.2}$	$l_1^{-0.3}$	l_4	Item number
60	70	85	95	85	112	60	150	90	ST7416 60 x 150
63	73	85	95	85	112	60	80	20	ST7416 63 x 080
							115	55	ST7416 63 x 115
							150	90	ST7416 63 x 150
80	92	105	118	105	135	60	80	20	ST7416 80 x 080
							120	60	ST7416 80 x 120
							150	90	ST7416 80 x 150

Active
elements

Spring
elements

Nitrogen
systems

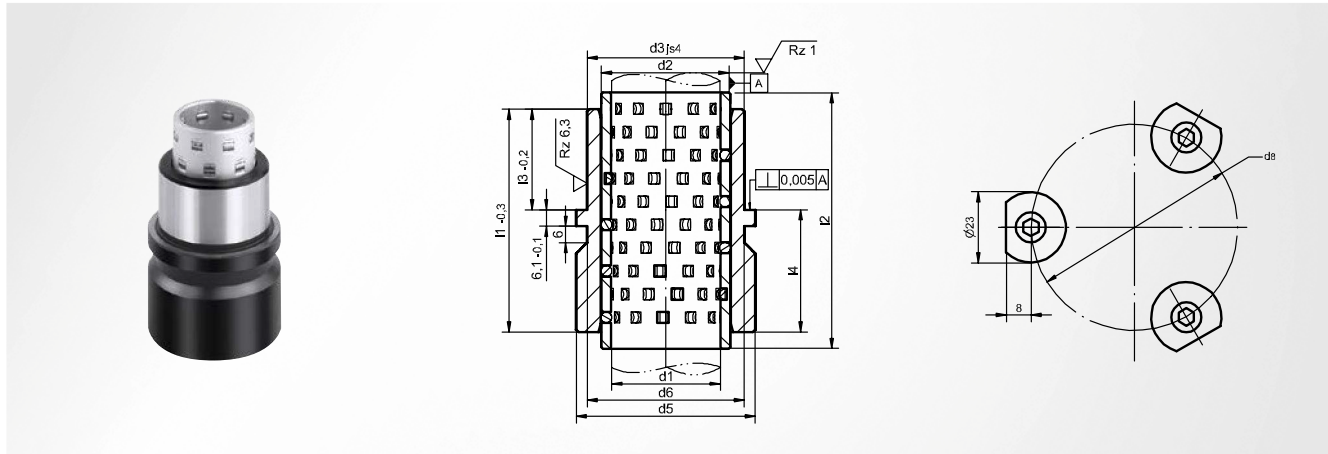
Tapping
units

Maschine
elements

Accessories

ST7413 Guide unit

with shoulder, Roller guide aluminium



Referring to DIN 9831 / ISO 9448

Installation in mounting bore

ISO H6

Installation instruction

Fixing with 3 holding clamps; one-sided entry chamfer or centring attachment

Scope of supply

ST7367; ST7140; ST7416

d_1^{h3}	d_2	d_3^{js4}	d_5	d_6	d_8	$l_3^{-0.2}$	$l_1^{-0.3}$	$l_2^{\pm 0.2}$	l_4	Item number
19	25	32	40	32	59	23	35	43	12	ST7413 19 x 035 x 043
							43	54	20	ST7413 19 x 043 x 054
							59	74	36	ST7413 19 x 059 x 074
20	26	32	40	32	59	23	35	43	12	ST7413 20 x 035 x 043
							43	54	20	ST7413 20 x 043 x 054
							59	74	36	ST7413 20 x 059 x 074
24	30	40	48	40	65	23	35	43	12	ST7413 24 x 035 x 043
							60	74	37	ST7413 24 x 060 x 074
							80	90	57	ST7413 24 x 080 x 090
25	31	40	48	40	65	23	35	43	12	ST7413 25 x 035 x 043
							60	74	37	ST7413 25 x 060 x 074
							80	90	57	ST7413 25 x 080 x 090
30	38	48	56	48	73	30	42	54	12	ST7413 30 x 042 x 054
							75	83	45	ST7413 30 x 075 x 083
							93	103	63	ST7413 30 x 093 x 103
32	40	48	56	48	73	30	42	54	12	ST7413 32 x 042 x 054
							75	83	45	ST7413 32 x 075 x 083
							93	103	63	ST7413 32 x 093 x 103
38	46	58	66	58	83	37	52	58	15	ST7413 38 x 052 x 058
							82	94	45	ST7413 38 x 082 x 094
							107	128	70	ST7413 38 x 107 x 128
40	48	58	66	58	83	37	52	58	15	ST7413 40 x 052 x 058
							82	94	45	ST7413 40 x 082 x 094
							107	128	70	ST7413 40 x 107 x 128
48	56	70	80	70	97	47	65	74	18	ST7413 48 x 065 x 074
							97	108	50	ST7413 48 x 097 x 108
							127	128	80	ST7413 48 x 127 x 128
50	58	70	80	70	97	47	65	74	18	ST7413 50 x 065 x 074
							97	108	50	ST7413 50 x 097 x 108
							127	128	80	ST7413 50 x 127 x 128
60	70	85	95	85	112	60	80	113	20	ST7413 60 x 080 x 113
							115	128	55	ST7413 60 x 115 x 128
							150	139	90	ST7413 60 x 150 x 139
63	73	85	95	85	112	60	80	113	20	ST7413 63 x 080 x 113
							115	128	55	ST7413 63 x 115 x 128
							150	139	90	ST7413 63 x 150 x 139

ST7413 Guide unit

with shoulder, Roller guide aluminium

d_1^{h3}	d_2	d_3^{js4}	d_5	d_6	d_8	$l_3^{-0.2}$	$l_1^{-0.3}$	$l_2^{\pm 0.2}$	l_4	Item number
80	92	105	118	105	135	60	80	113	20	ST7413 80 x 080 x 113
							120	138	60	ST7413 80 x 120 x 138
							150	156	90	ST7413 80 x 150 x 156

Active
elements

Spring
elements

Nitrogen
systems

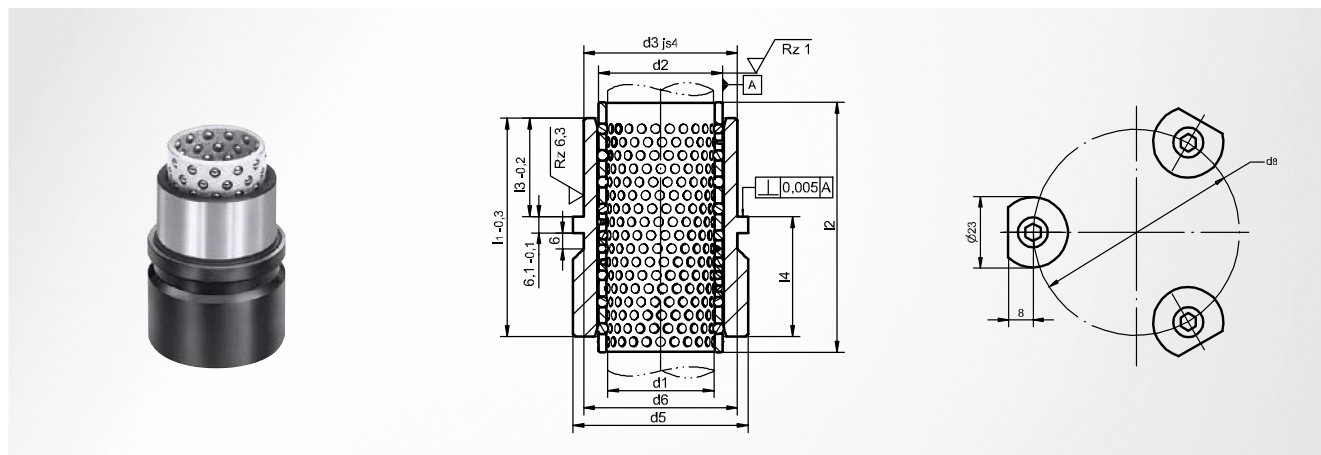
Tapping
units

Maschine
elements

Accessories

ST7412 Guide unit

Ball guide aluminium, with shoulder



Referring to DIN 9831 / ISO 9448

Installation in mounting bore

ISO H6

Installation instruction

Fixing with 3 holding clamps; one-sided entry chamfer or centring attachment

Scope of supply

ST7367; ST7130; ST7416

d_1^{h3}	d_2	d_3^{js4}	d_4	d_5	d_6	d_8	$l_3^{-0.2}$	$l_1^{-0.3}$	$l_2^{\pm 0.2}$	l_4	Item number
19	25	32	40	32	59	23	23	35	43	12	ST7412 19 x 035 x 043
								43	54	20	ST7412 19 x 043 x 054
								59	74	36	ST7412 19 x 059 x 074
20	26	32	40	32	59	23	23	35	43	12	ST7412 20 x 035 x 043
								43	54	20	ST7412 20 x 043 x 054
								59	74	36	ST7412 20 x 059 x 074
24	30	40	48	40	65	23	23	35	43	12	ST7412 24 x 035 x 043
								60	74	37	ST7412 24 x 060 x 074
								80	90	57	ST7412 24 x 080 x 090
25	31	40	48	40	65	23	23	35	43	12	ST7412 25 x 035 x 043
								60	74	37	ST7412 25 x 060 x 074
								80	90	57	ST7412 25 x 080 x 090
30	38	48	56	48	73	30	30	42	54	12	ST7412 30 x 042 x 054
								75	83	45	ST7412 30 x 075 x 083
								93	103	63	ST7412 30 x 093 x 103
32	40	48	56	48	73	30	30	42	54	12	ST7412 32 x 042 x 054
								75	83	45	ST7412 32 x 075 x 083
								93	103	63	ST7412 32 x 093 x 103
38	46	58	66	58	83	37	37	52	58	15	ST7412 38 x 052 x 058
								82	94	45	ST7412 38 x 082 x 094
								107	128	70	ST7412 38 x 107 x 128
40	48	58	66	58	83	37	37	52	58	15	ST7412 40 x 052 x 058
								82	94	45	ST7412 40 x 082 x 094
								107	128	70	ST7412 40 x 107 x 128
48	56	70	80	70	97	47	47	65	74	18	ST7412 48 x 065 x 074
								97	108	50	ST7412 48 x 097 x 108
								127	128	80	ST7412 48 x 127 x 128
50	58	70	80	70	97	47	47	65	74	18	ST7412 50 x 065 x 074
								97	108	50	ST7412 50 x 097 x 108
								127	128	80	ST7412 50 x 127 x 128
60	70	85	95	85	112	60	60	80	113	20	ST7412 60 x 080 x 113
								115	128	55	ST7412 60 x 115 x 128
								150	154	90	ST7412 60 x 150 x 154
63	73	85	95	85	112	60	60	80	113	20	ST7412 63 x 080 x 113
								115	128	55	ST7412 63 x 115 x 128
								150	154	90	ST7412 63 x 150 x 154

Ball guide aluminium, with shoulder

d_1^{h3}	d_2	d_3^{js4}	d_5	d_6	d_8	$l_3^{-0.2}$	$l_1^{-0.3}$	$l_2^{\pm 0.2}$	l_4	Item number
80	92	105	118	105	135	60	80	113	20	ST7412 80 x 080 x 113
							120	138	60	ST7412 80 x 120 x 138
							150	156	90	ST7412 80 x 150 x 156

Active
elements

Spring
elements

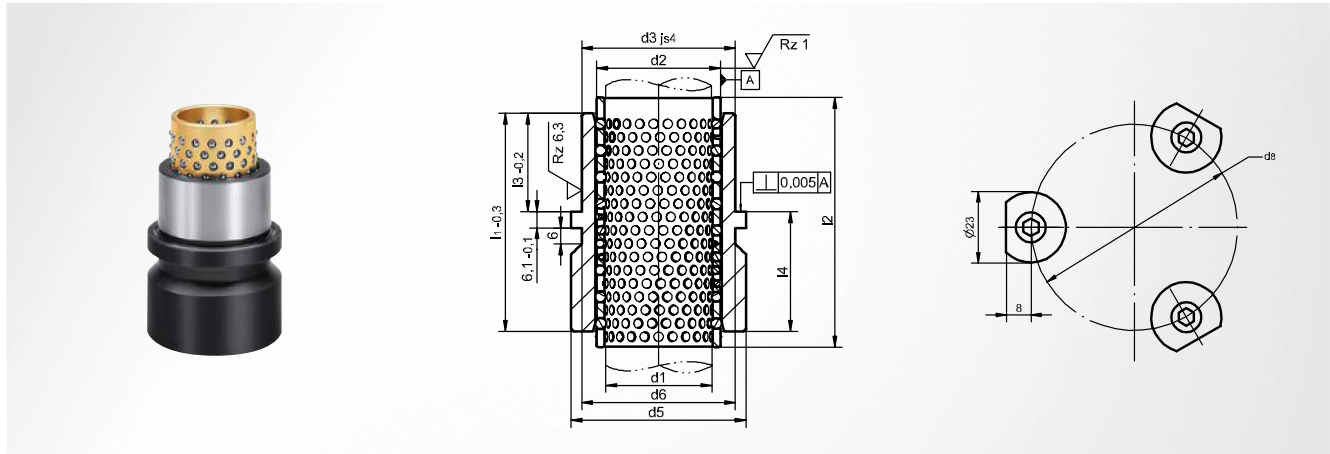
Nitrogen
systems

Tapping
units

Machine
elements

Accessories

Ball guide brass, with shoulder



Referring to DIN 9831 / ISO 9448

Installation in mounting bore

ISO H6

Installation instruction

Fixing with 3 holding clamps; one-sided entry chamfer or centring attachment

Scope of supply

ST7367; ST7150; ST7416

d_1^{h3}	d_2	d_3^{js4}	d_5	d_6	d_8	$l_3^{-0.2}$	$l_1^{-0.3}$	$l_2^{\pm 0.2}$	l_4	Item number
19	25	32	40	32	59	23	35	43	12	ST7414 19 x 035 x 043
							43	54	20	ST7414 19 x 043 x 054
							59	74	36	ST7414 19 x 059 x 074
20	26	32	40	32	59	23	35	43	12	ST7414 20 x 035 x 043
							43	54	20	ST7414 20 x 043 x 054
							59	74	36	ST7414 20 x 059 x 074
24	30	40	48	40	65	23	35	43	12	ST7414 24 x 035 x 043
							60	74	37	ST7414 24 x 060 x 074
							80	90	57	ST7414 24 x 080 x 090
25	31	40	48	40	65	23	35	43	12	ST7414 25 x 035 x 043
							60	74	37	ST7414 25 x 060 x 074
							80	90	57	ST7414 25 x 080 x 090
30	38	48	56	48	73	30	42	54	12	ST7414 30 x 042 x 054
							75	83	45	ST7414 30 x 075 x 083
							93	103	63	ST7414 30 x 093 x 103
32	40	48	56	48	73	30	42	54	12	ST7414 32 x 042 x 054
							75	83	45	ST7414 32 x 075 x 083
							93	103	63	ST7414 32 x 093 x 103
38	46	58	66	58	83	37	52	58	15	ST7414 38 x 052 x 058
							82	94	45	ST7414 38 x 082 x 094
							107	128	70	ST7414 38 x 107 x 128
40	48	58	66	58	83	37	52	58	15	ST7414 40 x 052 x 058
							82	94	45	ST7414 40 x 082 x 094
							107	128	70	ST7414 40 x 107 x 128
48	56	70	80	70	97	47	65	74	18	ST7414 48 x 065 x 074
							97	108	50	ST7414 48 x 097 x 108
							127	128	80	ST7414 48 x 127 x 128
50	58	70	80	70	97	47	65	74	18	ST7414 50 x 065 x 074
							97	108	50	ST7414 50 x 097 x 108
							127	128	80	ST7414 50 x 127 x 128
60	70	85	95	85	112	60	80	113	20	ST7414 60 x 080 x 113
							115	128	55	ST7414 60 x 115 x 128
							150	154	90	ST7414 60 x 150 x 154
63	73	85	95	85	112	60	80	113	20	ST7414 63 x 080 x 113
							115	128	55	ST7414 63 x 115 x 128
							150	154	90	ST7414 63 x 150 x 154

Ball guide brass, with shoulder

d_1^{h3}	d_2	d_3^{js4}	d_5	d_6	d_8	$l_3^{-0.2}$	$l_1^{-0.3}$	$l_2^{\pm 0.2}$	l_4	Item number
80	92	105	118	105	135	60	80	113	20	ST7414 80 x 080 x 113
							120	138	60	ST7414 80 x 120 x 138
							150	156	90	ST7414 80 x 150 x 156

Active
elements

Spring
elements

Nitrogen
systems

Tapping
units

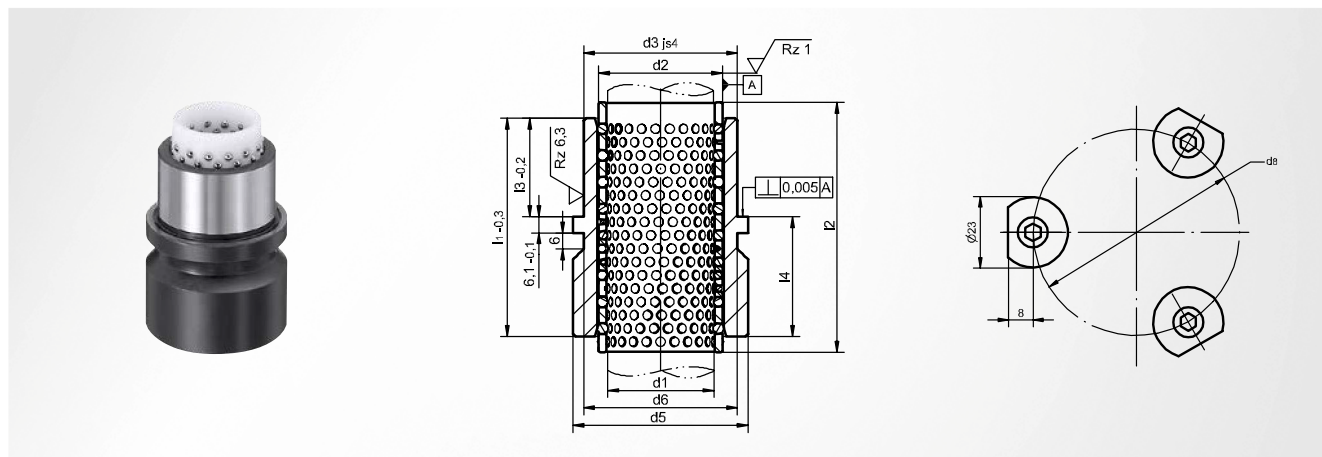
Maschine
elements

Accessories

ST7415 Guide unit



Ball guide polyurethan, with shoulder



Referring to DIN 9831 / ISO 9448

Installation in mounting bore

ISO H6

Installation instruction

Fixing with 3 holding clamps; one-sided entry chamfer or centring attachment

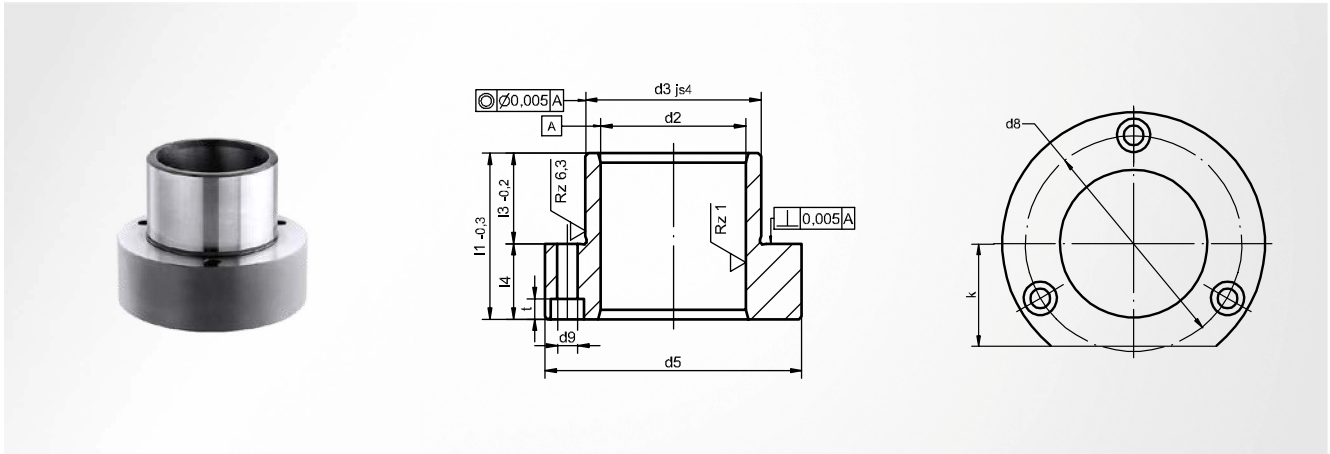
Scope of supply

ST7367; ST7133; ST7416

d_1^{h3}	d_2	d_3^{js4}	d_5	d_6	d_8	$l_3^{-0.2}$	$l_1^{-0.3}$	$l_2^{\pm 0.1}$	l_4	Item number
19	25	32	40	32	59	23	35	43	12	ST7415 19 x 035 x 043
							43	54	20	ST7415 19 x 043 x 054
							59	74	36	ST7415 19 x 059 x 074
20	26	32	40	32	59	23	35	43	12	ST7415 20 x 035 x 043
							43	54	20	ST7415 20 x 043 x 054
							59	74	36	ST7415 20 x 059 x 074
24	30	40	48	40	65	23	35	43	12	ST7415 24 x 035 x 043
							60	74	37	ST7415 24 x 060 x 074
							80	90	57	ST7415 24 x 080 x 090
25	31	40	48	40	65	23	35	43	12	ST7415 25 x 035 x 043
							60	74	37	ST7415 25 x 060 x 074
							80	90	57	ST7415 25 x 080 x 090
30	38	48	56	48	73	30	42	54	12	ST7415 30 x 042 x 054
							75	83	45	ST7415 30 x 075 x 083
							93	103	63	ST7415 30 x 093 x 103
32	40	48	56	48	73	30	42	54	12	ST7415 32 x 042 x 054
							75	83	45	ST7415 32 x 075 x 083
							93	103	63	ST7415 32 x 093 x 103
38	46	58	66	58	83	37	52	58	15	ST7415 38 x 052 x 058
							82	94	45	ST7415 38 x 082 x 094
							107	128	70	ST7415 38 x 107 x 128
40	48	58	66	58	83	37	52	58	15	ST7415 40 x 052 x 058
							82	94	45	ST7415 40 x 082 x 094
							107	128	70	ST7415 40 x 107 x 128
48	56	70	80	70	97	47	65	74	18	ST7415 48 x 065 x 074
							97	108	50	ST7415 48 x 097 x 108
							127	128	80	ST7415 48 x 127 x 128
50	58	70	80	70	97	47	65	74	18	ST7415 50 x 065 x 074
							97	108	50	ST7415 50 x 097 x 108
							127	128	80	ST7415 50 x 127 x 128

ST7426 Guide bush

with flange



Referring to DIN 9831 / ISO 9448

Material

Steel 1.7131 (16MnCr5); case-hardened

Hardness

64 ±1 HRC

Installation instruction

Fixing with 3 socket-head screws (not included in the scope of delivery); one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO H6

Optional accessories

SZ8510

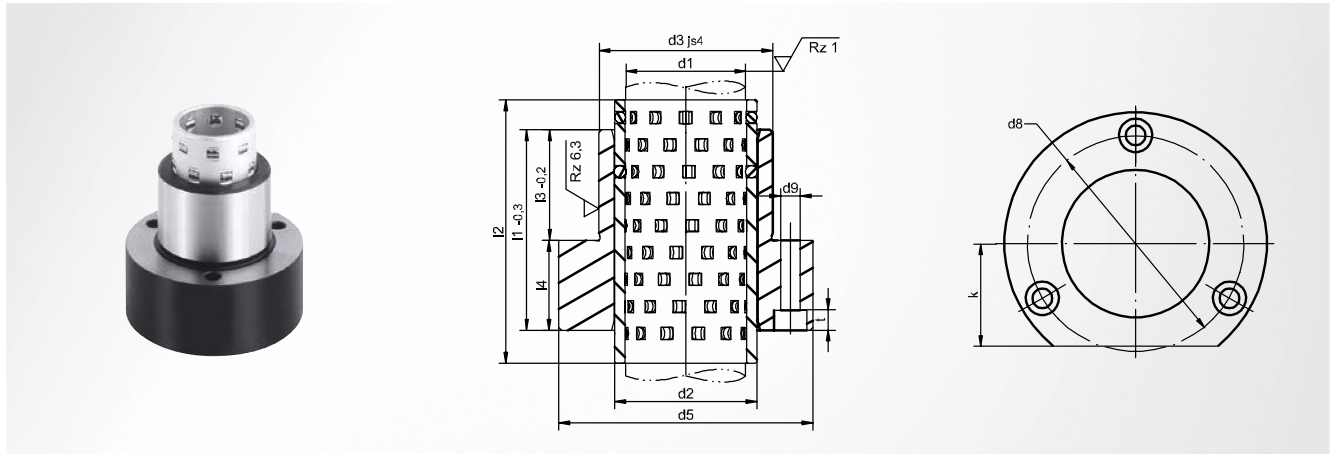
d_1^{H3}	d_2	d_3^{js4}	d_5	d_8	d_9	t	k	$l_1^{-0.3}$	$l_3^{-0.2}$	l_4	Item number
15	21	28	45	35	4.5	3.5	15	29	23	6	ST7426 15 x 029
								36	30	6	ST7426 15 x 036
16	22	28	45	35	4.5	3.5	15	29	23	6	ST7426 16 x 029
								36	30	6	ST7426 16 x 036
19	25	32	50	40	4.5	4.6	18	38	23	15	ST7426 19 x 038
								45	30	15	ST7426 19 x 045
								51	36	15	ST7426 19 x 051
20	26	32	50	40	4.5	4.6	18	38	23	15	ST7426 20 x 038
								45	30	15	ST7426 20 x 045
								51	36	15	ST7426 20 x 051
24	30	40	63	50	5.5	5.7	23	38	23	15	ST7426 24 x 038
								55	30	25	ST7426 24 x 055
								62	37	25	ST7426 24 x 062
25	31	40	63	50	5.5	5.7	23	38	23	15	ST7426 25 x 038
								55	30	25	ST7426 25 x 055
								62	37	25	ST7426 25 x 062
30	38	48	72	58	5.5	5.7	28	45	30	15	ST7426 30 x 045
								62	37	25	ST7426 30 x 062
								72	47	25	ST7426 30 x 072
32	40	48	72	58	5.5	5.7	28	45	30	15	ST7426 32 x 045
								62	37	25	ST7426 32 x 062
								72	47	25	ST7426 32 x 072
38	46	58	85	70	6.6	6.8	33	55	30	25	ST7426 38 x 055
								67	37	30	ST7426 38 x 067
								77	47	30	ST7426 38 x 077
40	48	58	85	70	6.6	6.8	33	55	30	25	ST7426 40 x 055
								67	37	30	ST7426 40 x 067
								77	47	30	ST7426 40 x 077
48	56	70	104	86	9.0	9.0	38	62	37	25	ST7426 48 x 062
								89	47	42	ST7426 48 x 089
								102	60	42	ST7426 48 x 102

ST7426 Guide bush

with flange

d_1^{h3}	d_2	d_3^{js4}	d_5	d_8	d_9	t	k	$l_1^{-0.3}$	$l_3^{-0.2}$	l_4	Item number
50	58	70	104	86	9.0	9.0	38	62	37	25	ST7426 50 x 062
								89	47	42	ST7426 50 x 089
								102	60	42	ST7426 50 x 102
60	70	85	120	100	9.0	9.0	46	89	47	42	ST7426 60 x 089
								102	60	42	ST7426 60 x 102
63	73	85	120	100	9.0	9.0	46	89	47	42	ST7426 63 x 089
								102	60	42	ST7426 63 x 102
80	92	105	148	125	11.0	11.0	56	125	75	50	ST7426 80 x 125

with flange, Roller guide aluminium



Referring to DIN 9831 / ISO 9448

Installation in mounting bore

ISO H6

Installation instruction

Fixing with 3 socket-head screws (not included in the scope of delivery); one-sided entry chamfer or centring attachment

Scope of supply

ST7426; ST7140

Optional accessories

SZ8510

d_1^{h3}	d_2	d_3^{js4}	d_5	d_8	d_9	t	k	$l_1^{-0.3}$	$l_2^{\pm 0.2}$	$l_3^{-0.2}$	l_4	Item number
19	25	32	50	40	4.5	4.6	18	38	43	23	15	ST7423 19 x 038 x 043
								45	54	30	15	ST7423 19 x 045 x 054
								51	63	36	15	ST7423 19 x 051 x 063
20	26	32	50	40	4.5	4.6	18	38	43	23	15	ST7423 20 x 038 x 043
								45	54	30	15	ST7423 20 x 045 x 054
								51	63	36	15	ST7423 20 x 051 x 063
24	30	40	63	50	5.5	5.7	23	38	43	23	15	ST7423 24 x 038 x 043
								55	63	30	25	ST7423 24 x 055 x 063
								62	74	37	25	ST7423 24 x 062 x 074
25	31	40	63	50	5.5	5.7	23	38	43	23	15	ST7423 25 x 038 x 043
								55	63	30	25	ST7423 25 x 055 x 063
								62	74	37	25	ST7423 25 x 062 x 074
30	38	48	72	58	5.5	5.7	28	45	54	30	15	ST7423 30 x 045 x 054
								62	74	37	25	ST7423 30 x 062 x 074
								72	83	47	25	ST7423 30 x 072 x 083
32	40	48	72	58	5.5	5.7	28	45	54	30	15	ST7423 32 x 045 x 054
								62	74	37	25	ST7423 32 x 062 x 074
								72	83	47	25	ST7423 32 x 072 x 083
38	46	58	85	70	6.6	6.8	33	55	58	30	25	ST7423 38 x 055 x 058
								67	88	37	30	ST7423 38 x 067 x 088
								77	94	47	30	ST7423 38 x 077 x 094
40	48	58	85	70	6.6	6.8	33	55	58	30	25	ST7423 40 x 055 x 058
								67	88	37	30	ST7423 40 x 067 x 088
								77	94	47	30	ST7423 40 x 077 x 094
48	56	70	104	86	9.0	9.0	38	62	74	37	25	ST7423 48 x 062 x 074
								89	108	47	42	ST7423 48 x 089 x 108
								102	128	60	42	ST7423 48 x 102 x 128
50	58	70	104	86	9.0	9.0	38	62	74	37	25	ST7423 50 x 062 x 074
								89	108	47	42	ST7423 50 x 089 x 108
								102	128	60	42	ST7423 50 x 102 x 128
60	70	85	120	100	9.0	9.0	46	89	113	47	42	ST7423 60 x 089 x 113
								102	128	60	42	ST7423 60 x 102 x 128
63	73	85	120	100	9.0	9.0	46	89	113	47	42	ST7423 63 x 089 x 113

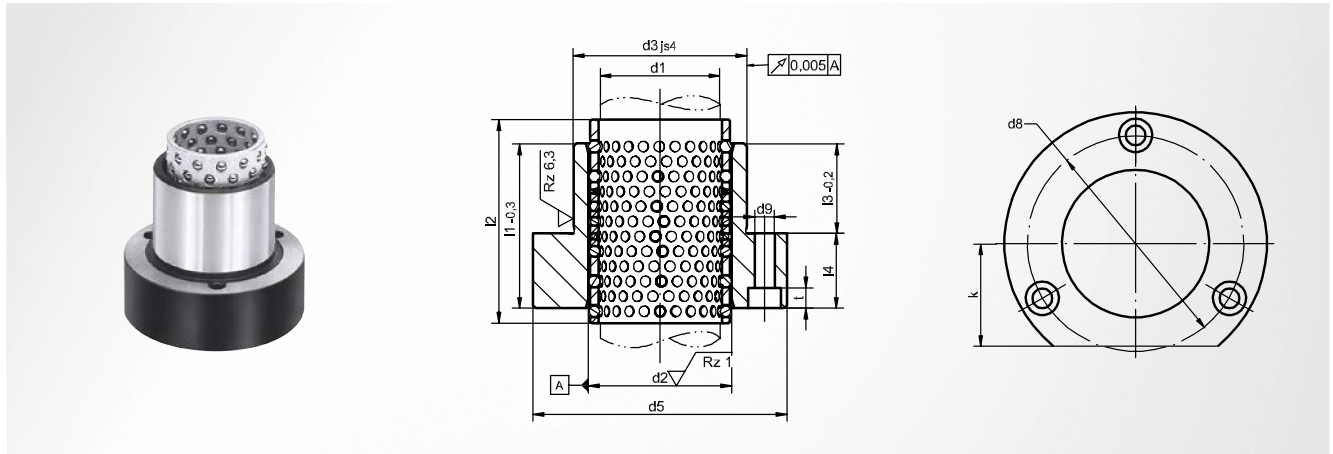
ST7423 Guide unit



with flange, Roller guide aluminium

d_1^{h3}	d_2	d_3^{js4}	d_5	d_8	d_9	t	k	$l_1^{-0.3}$	$l_2^{\pm 0.2}$	$l_3^{-0.2}$	l_4	Item number
63	73	85	120	100	9.0	9.0	46	102	128	60	42	ST7423 63 x 102 x 128
80	92	105	148	125	11.0	11.0	56	125	138	75	50	ST7423 80 x 125 x 138

Ball guide aluminium, with flange



Referring to DIN 9831 / ISO 9448

Installation in mounting bore

ISO H6

Installation instruction

Fixing with 3 socket-head screws (not included in the scope of delivery); one-sided entry chamfer or centring attachment

Scope of supply

ST7130; ST7426

Optional accessories

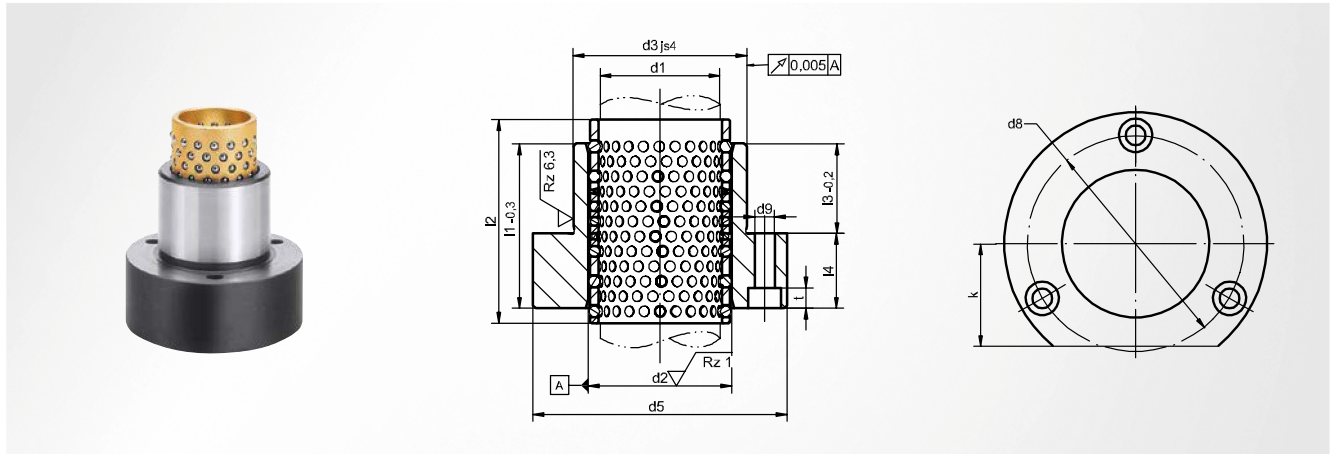
SZ8510

d_1^{H3}	d_2	d_3^{H4}	d_5	d_8	d_9	t	k	$I_1^{-0.3}$	$I_2^{\pm 0.2}$	$I_3^{-0.2}$	I_4	Item number
15	21	28	45	35	4.5	3.5	15	29	43	23	6	ST7422 15 x 029 x 043
								36	43	30	6	ST7422 15 x 036 x 043
16	22	28	45	35	4.5	3.5	15	29	43	23	6	ST7422 16 x 029 x 043
								36	43	30	6	ST7422 16 x 036 x 043
19	25	32	50	40	4.5	4.6	18	38	43	23	15	ST7422 19 x 038 x 043
								45	54	30	15	ST7422 19 x 045 x 054
								51	63	36	15	ST7422 19 x 051 x 063
20	26	32	50	40	4.5	4.6	18	38	43	23	15	ST7422 20 x 038 x 043
								45	54	30	15	ST7422 20 x 045 x 054
								51	63	36	15	ST7422 20 x 051 x 063
24	30	40	63	50	5.5	5.7	23	38	43	23	15	ST7422 24 x 038 x 043
								55	63	30	25	ST7422 24 x 055 x 063
								62	74	37	25	ST7422 24 x 062 x 074
25	31	40	63	50	5.5	5.7	23	38	43	23	15	ST7422 25 x 038 x 043
								55	63	30	25	ST7422 25 x 055 x 063
								62	74	37	25	ST7422 25 x 062 x 074
30	38	48	72	58	5.5	5.7	28	45	54	30	15	ST7422 30 x 045 x 054
								62	74	37	25	ST7422 30 x 062 x 074
								72	83	47	25	ST7422 30 x 072 x 083
32	40	48	72	58	5.5	5.7	28	45	54	30	15	ST7422 32 x 045 x 054
								62	74	37	25	ST7422 32 x 062 x 074
								72	83	47	25	ST7422 32 x 072 x 083
38	46	58	85	70	6.6	6.8	33	55	58	30	25	ST7422 38 x 055 x 058
								67	88	37	30	ST7422 38 x 067 x 088
								77	94	47	30	ST7422 38 x 077 x 094
40	48	58	85	70	6.6	6.8	33	55	58	30	25	ST7422 40 x 055 x 058
								67	88	37	30	ST7422 40 x 067 x 088
								77	94	47	30	ST7422 40 x 077 x 094
48	56	70	104	86	9.0	9.0	38	62	74	37	25	ST7422 48 x 062 x 074
								89	108	47	42	ST7422 48 x 089 x 108
								102	128	60	42	ST7422 48 x 102 x 128
50	58	70	104	86	9.0	9.0	38	62	74	37	25	ST7422 50 x 062 x 074
								89	108	47	42	ST7422 50 x 089 x 108

Ball guide aluminium, with flange

d_1^{h3}	d_2	d_3^{js4}	d_5	d_8	d_9	t	k	$l_1^{-0.3}$	$l_2^{\pm 0.2}$	$l_3^{-0.2}$	l_4	Item number
50	58	70	104	86	9.0	9.0	38	102	128	60	42	ST7422 50 x 102 x 128
60	70	85	120	100	9.0	9.0	46	89	113	47	42	ST7422 60 x 089 x 113
								102	128	60	42	ST7422 60 x 102 x 128
63	73	85	120	100	9.0	9.0	46	89	113	47	42	ST7422 63 x 089 x 113
								102	128	60	42	ST7422 63 x 102 x 128
80	92	105	148	125	11.0	11.0	56	125	138	75	50	ST7422 80 x 125 x 138

Ball guide brass, with flange



Referring to DIN 9831 / ISO 9448

Installation in mounting bore

ISO H6

Installation instruction

Fixing with 3 socket-head screws (not included in the scope of delivery); one-sided entry chamfer or centring attachment

Scope of supply

ST7150; ST7426

Optional accessories

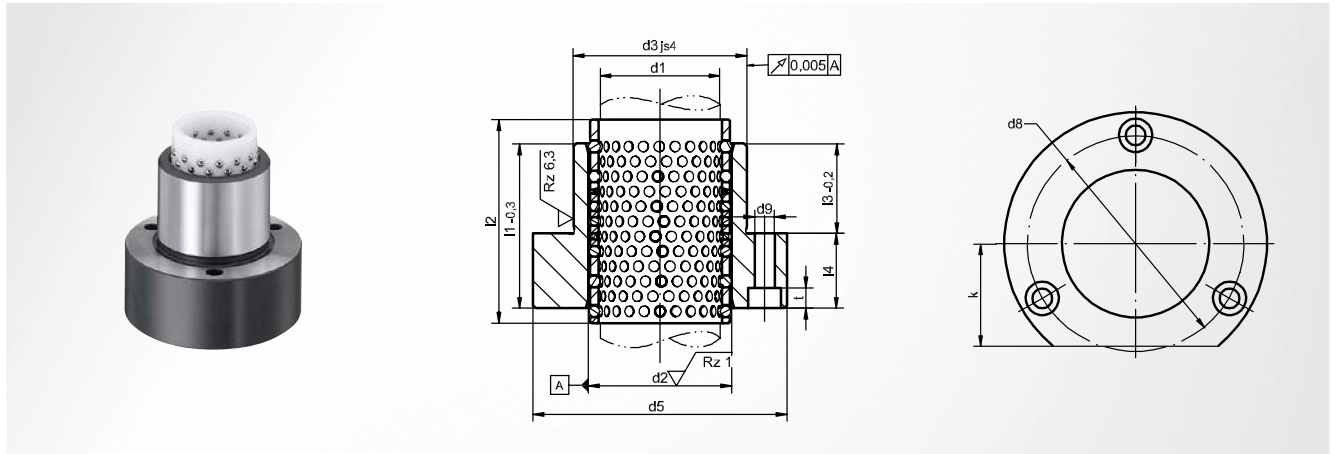
SZ8510

d_1^{H3}	d_2	d_3^{H4}	d_5	d_8	d_9	t	k	$l_1^{-0.3}$	$l_2^{\pm 0.2}$	$l_3^{-0.2}$	l_4	Item number
15	21	28	45	35	4.5	3.5	15	29	43	23	6	ST7424 15 x 029 x 043
								36	43	30	6	ST7424 15 x 036 x 043
16	22	28	45	35	4.5	3.5	15	29	43	23	6	ST7424 16 x 029 x 043
								36	43	30	6	ST7424 16 x 036 x 043
19	25	32	50	40	4.5	4.6	18	38	43	23	15	ST7424 19 x 038 x 043
								45	54	30	15	ST7424 19 x 045 x 054
								51	63	36	15	ST7424 19 x 051 x 063
20	26	32	50	40	4.5	4.6	18	38	43	23	15	ST7424 20 x 038 x 043
								45	54	30	15	ST7424 20 x 045 x 054
								51	63	36	15	ST7424 20 x 051 x 063
24	30	40	63	50	5.5	5.7	23	38	43	23	15	ST7424 24 x 038 x 043
								55	63	30	25	ST7424 24 x 055 x 063
								62	74	37	25	ST7424 24 x 062 x 074
25	31	40	63	50	5.5	5.7	23	38	43	23	15	ST7424 25 x 038 x 043
								55	63	30	25	ST7424 25 x 055 x 063
								62	74	37	25	ST7424 25 x 062 x 074
30	38	48	72	58	5.5	5.7	28	45	54	30	15	ST7424 30 x 045 x 054
								62	74	37	25	ST7424 30 x 062 x 074
								72	83	47	25	ST7424 30 x 072 x 083
32	40	48	72	58	5.5	5.7	28	45	54	30	15	ST7424 32 x 045 x 054
								62	74	37	25	ST7424 32 x 062 x 074
								72	83	47	25	ST7424 32 x 072 x 083
38	46	58	85	70	6.6	6.8	33	55	58	30	25	ST7424 38 x 055 x 058
								67	88	37	30	ST7424 38 x 067 x 088
								77	94	47	30	ST7424 38 x 077 x 094
40	48	58	85	70	6.6	6.8	33	55	58	30	25	ST7424 40 x 055 x 058
								67	88	37	30	ST7424 40 x 067 x 088
								77	94	47	30	ST7424 40 x 077 x 094
48	56	70	104	86	9.0	9.0	38	62	74	37	25	ST7424 48 x 062 x 074
								89	108	47	42	ST7424 48 x 089 x 108
								102	128	60	42	ST7424 48 x 102 x 128
50	58	70	104	86	9.0	9.0	38	62	74	37	25	ST7424 50 x 062 x 074
								89	108	47	42	ST7424 50 x 089 x 108

Ball guide brass, with flange

d_1^{h3}	d_2	d_3^{js4}	d_5	d_8	d_9	t	k	$l_1^{-0.3}$	$l_2^{\pm 0.2}$	$l_3^{-0.2}$	l_4	Item number
50	58	70	104	86	9.0	9.0	38	102	128	60	42	ST7424 50 x 102 x 128
60	70	85	120	100	9.0	9.0	46	89	113	47	42	ST7424 60 x 089 x 113
								102	128	60	42	ST7424 60 x 102 x 128
63	73	85	120	100	9.0	9.0	46	89	113	47	42	ST7424 63 x 089 x 113
								102	128	60	42	ST7424 63 x 102 x 128
80	92	105	148	125	11.0	11.0	56	125	138	75	50	ST7424 80 x 125 x 138

Ball guide polyurethan, with flange



Referring to DIN 9831 / ISO 9448

Installation in mounting bore

ISO H6

Installation instruction

Fixing with 3 socket-head screws (not included in the scope of delivery); one-sided entry chamfer or centring attachment

Scope of supply

ST7133; ST7426

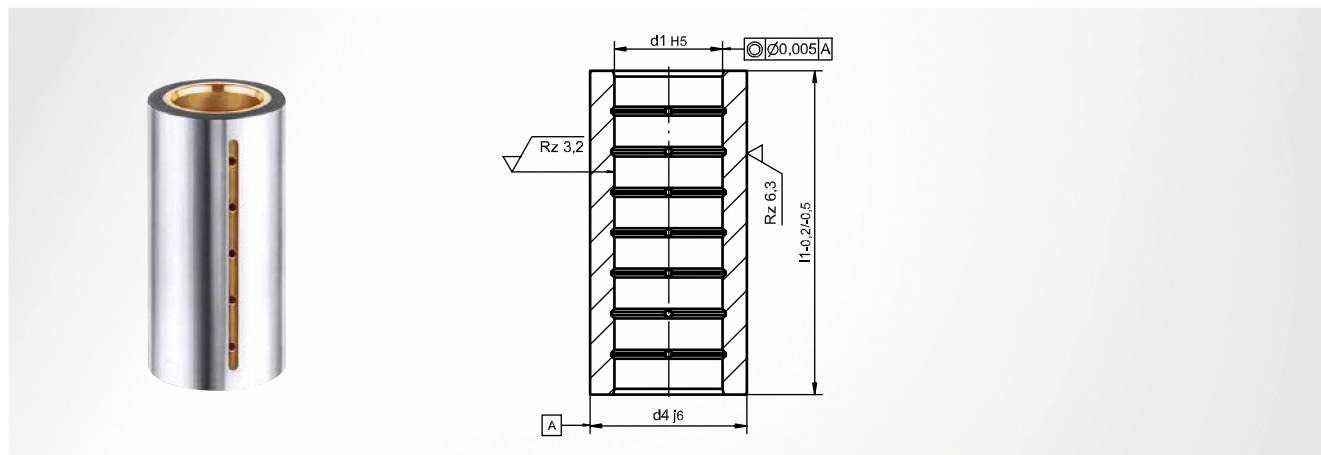
Optional accessories

SZ8510

d_1^{H3}	d_2	d_3^{H4}	d_5	d_8	d_9	t	k	$l_1^{-0.3}$	$l_2^{\pm 0.1}$	$l_3^{-0.2}$	l_4	Item number
15	21	28	45	35	4.5	3.5	15	29	43	23	6	ST7425 15 x 029 x 043
								36	43	30	6	ST7425 15 x 036 x 043
16	22	28	45	35	4.5	3.5	15	29	43	23	6	ST7425 16 x 029 x 043
								36	43	30	6	ST7425 16 x 036 x 043
19	25	32	50	40	4.5	4.6	18	38	43	23	15	ST7425 19 x 038 x 043
								45	54	30	15	ST7425 19 x 045 x 054
								51	63	36	15	ST7425 19 x 051 x 063
20	26	32	50	40	4.5	4.6	18	38	43	23	15	ST7425 20 x 038 x 043
								45	54	30	15	ST7425 20 x 045 x 054
								51	63	36	15	ST7425 20 x 051 x 063
24	30	40	63	50	5.5	5.7	23	38	43	23	15	ST7425 24 x 038 x 043
								55	63	30	25	ST7425 24 x 055 x 063
								62	74	37	25	ST7425 24 x 062 x 074
25	31	40	63	50	5.5	5.7	23	38	43	23	15	ST7425 25 x 038 x 043
								55	63	30	25	ST7425 25 x 055 x 063
								62	74	37	25	ST7425 25 x 062 x 074
30	38	48	72	58	5.5	5.7	28	45	54	30	15	ST7425 30 x 045 x 054
								62	74	37	25	ST7425 30 x 062 x 074
								72	83	47	25	ST7425 30 x 072 x 083
32	40	48	72	58	5.5	5.7	28	45	54	30	15	ST7425 32 x 045 x 054
								62	74	37	25	ST7425 32 x 062 x 074
								72	83	47	25	ST7425 32 x 072 x 083
38	46	58	85	70	6.6	6.8	33	55	58	30	25	ST7425 38 x 055 x 058
								67	88	37	30	ST7425 38 x 067 x 088
								77	94	47	30	ST7425 38 x 077 x 094
40	48	58	85	70	6.6	6.8	33	55	58	30	25	ST7425 40 x 055 x 058
								67	88	37	30	ST7425 40 x 067 x 088
								77	94	47	30	ST7425 40 x 077 x 094
48	56	70	104	86	9.0	9.0	38	62	74	37	25	ST7425 48 x 062 x 074
								89	108	47	42	ST7425 48 x 089 x 108
								102	128	60	42	ST7425 48 x 102 x 128
50	58	70	104	86	9.0	9.0	38	62	74	37	25	ST7425 50 x 062 x 074
								89	108	47	42	ST7425 50 x 089 x 108
								102	128	60	42	ST7425 50 x 102 x 128

ST7409 Guide bush

smooth, Sliding guide steel bronze plated



Referring to DIN 9831 / ISO 9448

Material

Steel 1.3505 (100 Cr6); hardened

Hardness

64 ±1 HRC

Installation instruction

Secure with adhesive; when sticking in, ensure that the oil distribution groove on the mounting diameter remains free; do not press in; do not pour in; one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO G6

Optional accessories

SZ9742

d_1^{H5}	d_4^{j6}	$l_1^{-0.2/-0.5}$	Item number
10	22	23	ST7409 10 x 023
		30	ST7409 10 x 030
		37	ST7409 10 x 037
12	22	23	ST7409 12 x 023
		30	ST7409 12 x 030
		37	ST7409 12 x 037
15	28	23	ST7409 15 x 023
		30	ST7409 15 x 030
		37	ST7409 15 x 037
		47	ST7409 15 x 047
		60	ST7409 15 x 060
16	28	23	ST7409 16 x 023
		30	ST7409 16 x 030
		37	ST7409 16 x 037
		47	ST7409 16 x 047
		60	ST7409 16 x 060
19	32	23	ST7409 19 x 023
		30	ST7409 19 x 030
		37	ST7409 19 x 037
		47	ST7409 19 x 047
		60	ST7409 19 x 060
		77	ST7409 19 x 077
20	32	23	ST7409 20 x 023
		30	ST7409 20 x 030
		37	ST7409 20 x 037
		47	ST7409 20 x 047
		60	ST7409 20 x 060
		77	ST7409 20 x 077
24	40	23	ST7409 24 x 023
		30	ST7409 24 x 030

d_1^{H5}	d_4^{j6}	$l_1^{-0.2/-0.5}$	Item number
24	40	37	ST7409 24 x 037
		47	ST7409 24 x 047
		60	ST7409 24 x 060
		77	ST7409 24 x 077
25	40	23	ST7409 25 x 023
		30	ST7409 25 x 030
		37	ST7409 25 x 037
		47	ST7409 25 x 047
		60	ST7409 25 x 060
		77	ST7409 25 x 077
30	48	30	ST7409 30 x 030
		37	ST7409 30 x 037
		47	ST7409 30 x 047
		60	ST7409 30 x 060
		77	ST7409 30 x 077
		95	ST7409 30 x 095
32	48	30	ST7409 32 x 030
		37	ST7409 32 x 037
		47	ST7409 32 x 047
		60	ST7409 32 x 060
		77	ST7409 32 x 077
		95	ST7409 32 x 095
38	58	30	ST7409 38 x 030
		37	ST7409 38 x 037
		47	ST7409 38 x 047
		60	ST7409 38 x 060
		77	ST7409 38 x 077
		95	ST7409 38 x 095
		120	ST7409 38 x 120
40	58	30	ST7409 40 x 030

ST7409 Guide bush

smooth, Sliding guide steel bronze plated

d_1^{H5}	d_4^{j6}	$l_1^{-0.2 - -0.5}$	Item number
40	58	37	ST7409 40 x 037
		47	ST7409 40 x 047
		60	ST7409 40 x 060
		77	ST7409 40 x 077
		95	ST7409 40 x 095
		120	ST7409 40 x 120
48	70	37	ST7409 48 x 037
		47	ST7409 48 x 047
		60	ST7409 48 x 060
		77	ST7409 48 x 077
		95	ST7409 48 x 095
		120	ST7409 48 x 120
50	70	37	ST7409 50 x 037
		47	ST7409 50 x 047

d_1^{H5}	d_4^{j6}	$l_1^{-0.2 - -0.5}$	Item number
50	70	60	ST7409 50 x 060
		77	ST7409 50 x 077
		95	ST7409 50 x 095
		120	ST7409 50 x 120
60	85	60	ST7409 60 x 060
		77	ST7409 60 x 077
		95	ST7409 60 x 095
		120	ST7409 60 x 120
63	85	60	ST7409 63 x 060
		77	ST7409 63 x 077
		95	ST7409 63 x 095
		120	ST7409 63 x 120
80	105	120	ST7409 80 x 120
		135	ST7409 80 x 135

Active
elements

Spring
elements

Nitrogen
systems

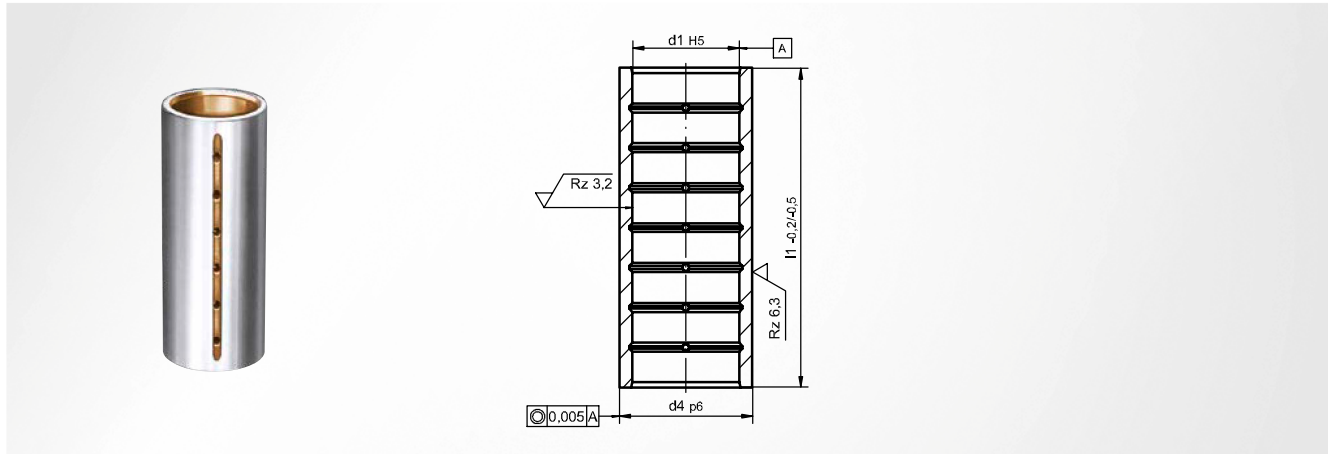
Tapping
units

Maschine
elements

Accessories

ST7319 Guide bush

smooth, Sliding guide steel bronze plated



Material

Steel 1.3505 (100 Cr6); hardened

Hardness

64 ±1 HRC

Installation instruction

Secure with adhesive; when sticking in, ensure that the oil distribution groove on the mounting diameter remains free; do not pour in; do not press in; one-sided entry chamfer or centring attachment

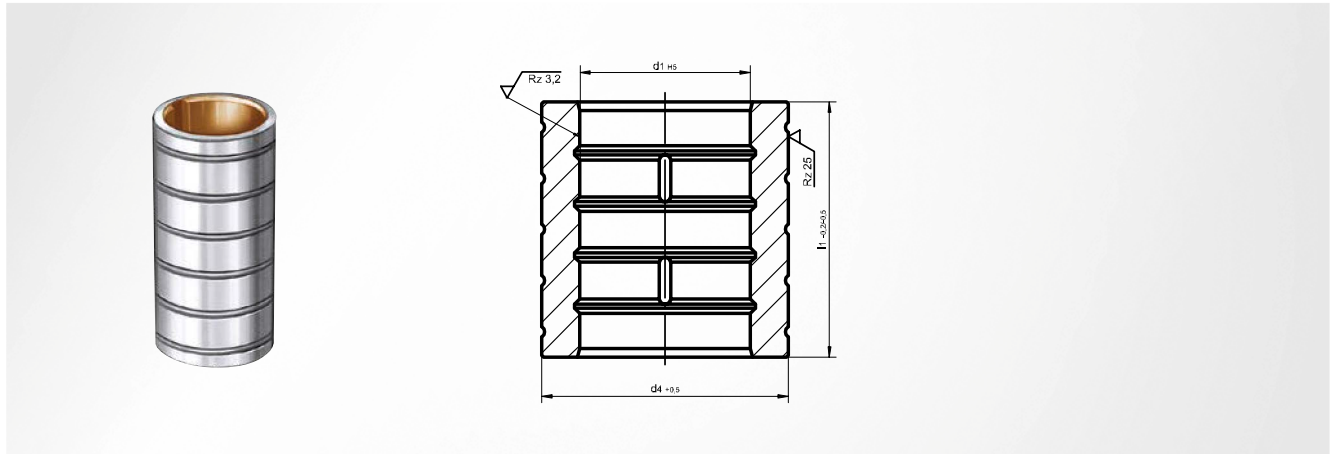
Installation in mounting bore

ISO E6

d_1^{H5}	d_4^{p6}	$l_1^{-0.2/-0.5}$	Item number
10	16	23	ST7319 10 x 023
		30	ST7319 10 x 030
		37	ST7319 10 x 037
12	18	23	ST7319 12 x 023
		30	ST7319 12 x 030
		37	ST7319 12 x 037
15	21	23	ST7319 15 x 023
		30	ST7319 15 x 030
		37	ST7319 15 x 037
		47	ST7319 15 x 047
16	22	23	ST7319 16 x 023
		30	ST7319 16 x 030
		37	ST7319 16 x 037
		47	ST7319 16 x 047
19	26	30	ST7319 19 x 030
		37	ST7319 19 x 037
		47	ST7319 19 x 047
		60	ST7319 19 x 060
20	28	30	ST7319 20 x 030
		37	ST7319 20 x 037
		47	ST7319 20 x 047
		60	ST7319 20 x 060
24	32	30	ST7319 24 x 030
		37	ST7319 24 x 037
		47	ST7319 24 x 047
		60	ST7319 24 x 060

d_1^{H5}	d_4^{p6}	$l_1^{-0.2/-0.5}$	Item number
24	32	77	ST7319 24 x 077
		30	ST7319 25 x 030
		37	ST7319 25 x 037
25	33	47	ST7319 25 x 047
		60	ST7319 25 x 060
		77	ST7319 25 x 077
		95	ST7319 25 x 095
30	38	37	ST7319 30 x 037
		47	ST7319 30 x 047
		60	ST7319 30 x 060
		77	ST7319 30 x 077
32	40	95	ST7319 30 x 095
		37	ST7319 32 x 037
		47	ST7319 32 x 047
		60	ST7319 32 x 060
38	48	77	ST7319 32 x 077
		95	ST7319 32 x 095
		47	ST7319 38 x 047
		60	ST7319 38 x 060
40	50	77	ST7319 38 x 077
		95	ST7319 38 x 095
		120	ST7319 38 x 120
		47	ST7319 40 x 047
		60	ST7319 40 x 060
		77	ST7319 40 x 077
		95	ST7319 40 x 095
		120	ST7319 40 x 120

smooth, Sliding guide steel bronze plated, for pouring



Referring to DIN 9831 / ISO 9448

Material

Steel 1.3505 (100 Cr6); hardened

Hardness

64 ±1 HRC

Installation instruction

pour in; only install vertically with the air groove upward;
for casting gap, set $d_4 +1$ to $+4$ mm

Mounting diameter

machined, with recesses for casting resin

d_1^{H5}	$d_4^{+0.5}$	$l_1^{-0.2 -0.5}$	Item number
10	22	23	ST7411 10 x 023
		30	ST7411 10 x 030
		37	ST7411 10 x 037
12	22	23	ST7411 12 x 023
		30	ST7411 12 x 030
		37	ST7411 12 x 037
15	28	23	ST7411 15 x 023
		30	ST7411 15 x 030
		37	ST7411 15 x 037
		47	ST7411 15 x 047
		60	ST7411 15 x 060
16	28	23	ST7411 16 x 023
		30	ST7411 16 x 030
		37	ST7411 16 x 037
		47	ST7411 16 x 047
19	32	23	ST7411 19 x 023
		30	ST7411 19 x 030
		37	ST7411 19 x 037
		47	ST7411 19 x 047
		60	ST7411 19 x 060
		77	ST7411 19 x 077
20	32	23	ST7411 20 x 023
		30	ST7411 20 x 030
		37	ST7411 20 x 037
		47	ST7411 20 x 047
		60	ST7411 20 x 060
24	40	23	ST7411 24 x 023
		30	ST7411 24 x 030
		37	ST7411 24 x 037
		47	ST7411 24 x 047
		60	ST7411 24 x 060

d_1^{H5}	$d_4^{+0.5}$	$l_1^{-0.2 -0.5}$	Item number
25	40	23	ST7411 25 x 023
		30	ST7411 25 x 030
		37	ST7411 25 x 037
		47	ST7411 25 x 047
		60	ST7411 25 x 060
30	48	77	ST7411 25 x 077
		30	ST7411 30 x 030
		37	ST7411 30 x 037
		47	ST7411 30 x 047
		60	ST7411 30 x 060
		77	ST7411 30 x 077
32	48	95	ST7411 30 x 095
		30	ST7411 32 x 030
		37	ST7411 32 x 037
		47	ST7411 32 x 047
		60	ST7411 32 x 060
		77	ST7411 32 x 077
38	58	95	ST7411 32 x 095
		30	ST7411 38 x 030
		37	ST7411 38 x 037
		47	ST7411 38 x 047
		60	ST7411 38 x 060
		77	ST7411 38 x 077
40	58	95	ST7411 38 x 095
		120	ST7411 38 x 120
		30	ST7411 40 x 030
		37	ST7411 40 x 037
		47	ST7411 40 x 047
		60	ST7411 40 x 060
48	70	77	ST7411 40 x 077
		95	ST7411 40 x 095
		120	ST7411 40 x 120
		37	ST7411 48 x 037
		47	ST7411 48 x 047

ST7411 Guide bush



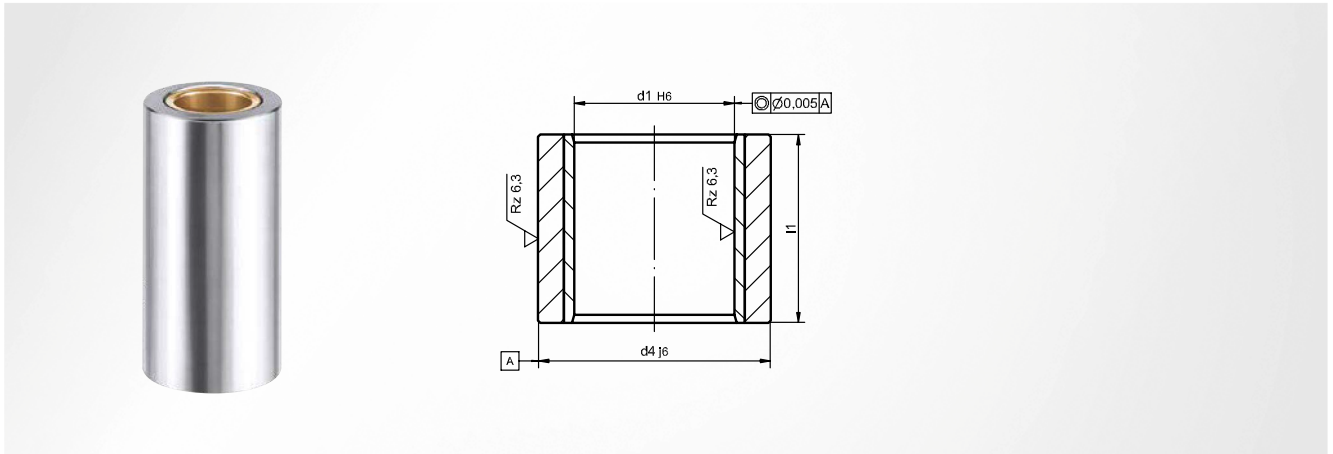
smooth, Sliding guide steel bronze plated, for pouring

d_1^{H5}	$d_4^{+0.5}$	$l_1^{-0.2 - -0.5}$	Item number
48	70	60	ST7411 48 x 060
		77	ST7411 48 x 077
		95	ST7411 48 x 095
		120	ST7411 48 x 120
50	70	37	ST7411 50 x 037
		47	ST7411 50 x 047
		60	ST7411 50 x 060
		77	ST7411 50 x 077
		95	ST7411 50 x 095
		120	ST7411 50 x 120

d_1^{H5}	$d_4^{+0.5}$	$l_1^{-0.2 - -0.5}$	Item number
60	85	60	ST7411 60 x 060
		77	ST7411 60 x 077
		95	ST7411 60 x 095
		120	ST7411 60 x 120
		120	ST7411 60 x 120
63	85	60	ST7411 63 x 060
		77	ST7411 63 x 077
		95	ST7411 63 x 095
		120	ST7411 63 x 120
		120	ST7411 63 x 120
80	105	120	ST7411 80 x 120
		135	ST7411 80 x 135

ST7491 Guide bush

smooth, Sliding guide with solid lubricant



Referring to DIN 9831 / ISO 9448

Material

Steel 1.3505 (100 Cr6); hardened; with solid lubricant insert

Hardness

64 ±1 HRC

Installation instruction

Secure with adhesive; do not press in; one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO G6

Optional accessories

SZ9742

d_1^{H6}	d_4^{j6}	l_1	Item number
15	28	23	ST7491 15 x 023
		30	ST7491 15 x 030
		37	ST7491 15 x 037
		47	ST7491 15 x 047
		60	ST7491 15 x 060
16	28	23	ST7491 16 x 023
		30	ST7491 16 x 030
		37	ST7491 16 x 037
		47	ST7491 16 x 047
		60	ST7491 16 x 060
19	32	23	ST7491 19 x 023
		30	ST7491 19 x 030
		37	ST7491 19 x 037
		47	ST7491 19 x 047
		60	ST7491 19 x 060
		77	ST7491 19 x 077
20	32	23	ST7491 20 x 023
		30	ST7491 20 x 030
		37	ST7491 20 x 037
		47	ST7491 20 x 047
		60	ST7491 20 x 060
		77	ST7491 20 x 077
24	40	23	ST7491 24 x 023
		30	ST7491 24 x 030
		37	ST7491 24 x 037
		47	ST7491 24 x 047
		60	ST7491 24 x 060
		77	ST7491 24 x 077
		120	ST7491 24 x 120
25	40	23	ST7491 25 x 023
		30	ST7491 25 x 030
		37	ST7491 25 x 037
		47	ST7491 25 x 047

d_1^{H6}	d_4^{j6}	l_1	Item number
25	40	60	ST7491 25 x 060
		77	ST7491 25 x 077
30	48	30	ST7491 30 x 030
		37	ST7491 30 x 037
		47	ST7491 30 x 047
		60	ST7491 30 x 060
		77	ST7491 30 x 077
32	48	95	ST7491 30 x 095
		30	ST7491 32 x 030
		37	ST7491 32 x 037
		47	ST7491 32 x 047
		60	ST7491 32 x 060
38	58	77	ST7491 32 x 077
		95	ST7491 32 x 095
		30	ST7491 38 x 030
		37	ST7491 38 x 037
		47	ST7491 38 x 047
40	58	60	ST7491 38 x 060
		77	ST7491 38 x 077
		95	ST7491 38 x 095
		120	ST7491 38 x 120
		30	ST7491 40 x 030
		37	ST7491 40 x 037
48	70	47	ST7491 40 x 047
		60	ST7491 40 x 060
		77	ST7491 40 x 077
		95	ST7491 40 x 095
		120	ST7491 40 x 120
		37	ST7491 48 x 037
		47	ST7491 48 x 047
		60	ST7491 48 x 060
		77	ST7491 48 x 077
		120	ST7491 48 x 120

ST7491 Guide bush



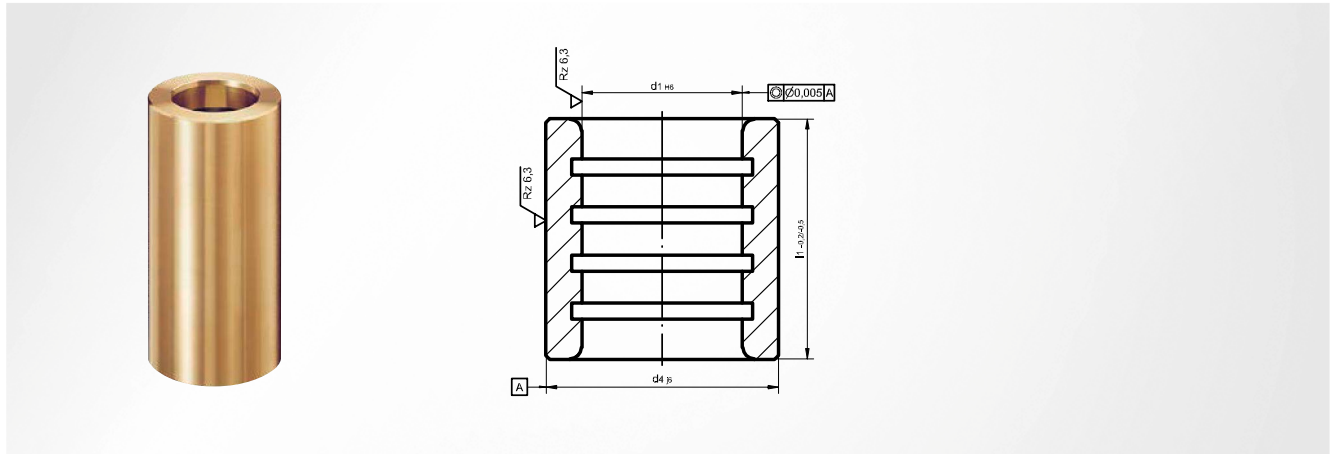
smooth, Sliding guide with solid lubricant

d_1^{H6}	d_4^{j6}	l_1	Item number
48	70	95	ST7491 48 x 095
		120	ST7491 48 x 120
50	70	37	ST7491 50 x 037
		47	ST7491 50 x 047
		60	ST7491 50 x 060
		77	ST7491 50 x 077
		95	ST7491 50 x 095
		120	ST7491 50 x 120
60	85	60	ST7491 60 x 060

d_1^{H6}	d_4^{j6}	l_1	Item number
60	85	77	ST7491 60 x 077
		95	ST7491 60 x 095
		120	ST7491 60 x 120
63	85	60	ST7491 63 x 060
		77	ST7491 63 x 077
		95	ST7491 63 x 095
		120	ST7491 63 x 120
		135	ST7491 63 x 135
80	105	120	ST7491 80 x 120
		135	ST7491 80 x 135

ST7451 Guide bush

smooth, Sliding guide with solid lubricant



Material

Bronze (CuSn8/CuZn25Al5); with solid lubricant rings

Installation in mounting bore

ISO G6

Installation instruction

Secure with adhesive; do not press in; one-sided entry chamfer or centring attachment

Optional accessories

SZ9742

d_1^{H6}	d_4^{j6}	$l_1^{-0.2 -0.5}$	Item number
15	28	23	ST7451 15 x 023
		30	ST7451 15 x 030
		37	ST7451 15 x 037
		47	ST7451 15 x 047
		60	ST7451 15 x 060
16	28	23	ST7451 16 x 023
		30	ST7451 16 x 030
		37	ST7451 16 x 037
		47	ST7451 16 x 047
		60	ST7451 16 x 060
19	32	23	ST7451 19 x 023
		30	ST7451 19 x 030
		37	ST7451 19 x 037
		47	ST7451 19 x 047
		60	ST7451 19 x 060
20	32	77	ST7451 19 x 077
		23	ST7451 20 x 023
		30	ST7451 20 x 030
		37	ST7451 20 x 037
		47	ST7451 20 x 047
24	40	60	ST7451 20 x 060
		77	ST7451 20 x 077
		23	ST7451 24 x 023
		30	ST7451 24 x 030
		37	ST7451 24 x 037
25	40	47	ST7451 24 x 047
		60	ST7451 24 x 060
		77	ST7451 24 x 077
		23	ST7451 25 x 023
		30	ST7451 25 x 030
30	48	37	ST7451 25 x 037
		47	ST7451 25 x 047
		60	ST7451 25 x 060
		77	ST7451 25 x 077
		30	ST7451 30 x 030

ST7451 Guide bush

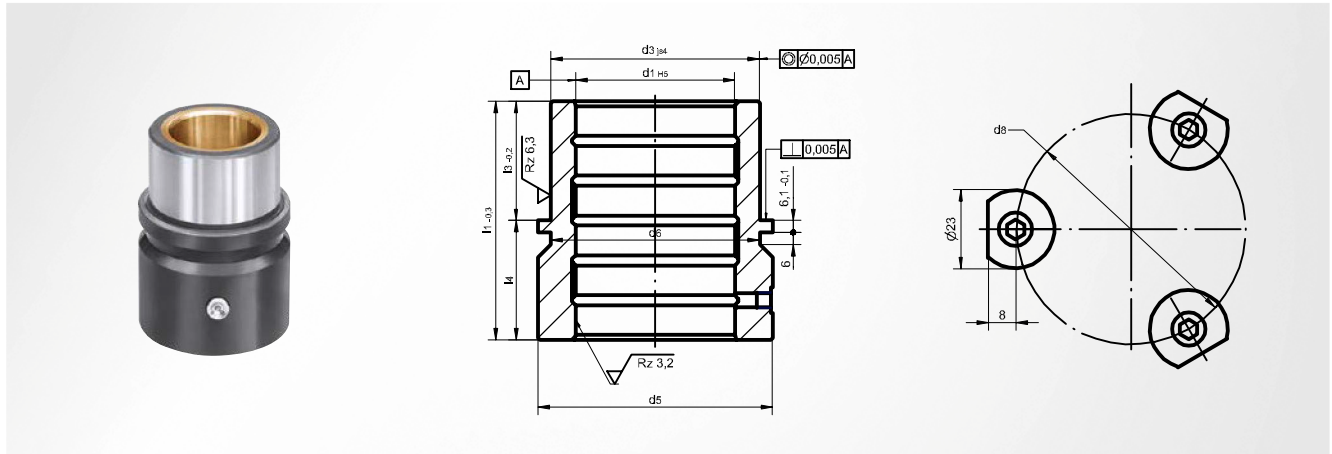


smooth, Sliding guide with solid lubricant

d_1^{H6}	d_4^{j6}	$l_1^{-0.2 - -0.5}$	Item number
30	48	37	ST7451 30 x 037
		47	ST7451 30 x 047
		60	ST7451 30 x 060
		77	ST7451 30 x 077
		95	ST7451 30 x 095
32	48	30	ST7451 32 x 030
		37	ST7451 32 x 037
		47	ST7451 32 x 047
		60	ST7451 32 x 060
		77	ST7451 32 x 077
38	58	95	ST7451 32 x 095
		30	ST7451 38 x 030
		37	ST7451 38 x 037
		47	ST7451 38 x 047
		60	ST7451 38 x 060
40	58	77	ST7451 38 x 077
		95	ST7451 38 x 095
		120	ST7451 38 x 120
		30	ST7451 40 x 030
		37	ST7451 40 x 037
48	70	47	ST7451 40 x 047
		60	ST7451 40 x 060
		77	ST7451 40 x 077
		95	ST7451 40 x 095
		120	ST7451 40 x 120
50	70	37	ST7451 48 x 037
		47	ST7451 48 x 047
		60	ST7451 48 x 060
		77	ST7451 48 x 077
		95	ST7451 48 x 095
60	85	120	ST7451 48 x 120
		60	ST7451 50 x 037
		47	ST7451 50 x 047
		60	ST7451 50 x 060
		77	ST7451 50 x 077
63	85	95	ST7451 50 x 095
		120	ST7451 50 x 120
		60	ST7451 60 x 060
		77	ST7451 60 x 077
		95	ST7451 60 x 095
80	105	120	ST7451 60 x 120
		60	ST7451 63 x 060
		77	ST7451 63 x 077
		95	ST7451 63 x 095
		120	ST7451 63 x 120
		120	ST7451 80 x 120
		135	ST7451 80 x 135

ST7419 Guide bush

bronze coating, Steel sliding guide, hardened, with shoulder



Referring to DIN 9831 / ISO 9448

Material

Steel 1.7131 (16MnCr5); case-hardened

Hardness

64 ±1 HRC

Installation instruction

Fixing with 3 holding clamps; central lubrication intended via funnel-type lubricating nipple with connection M8 x 1; one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO H6

Scope of supply

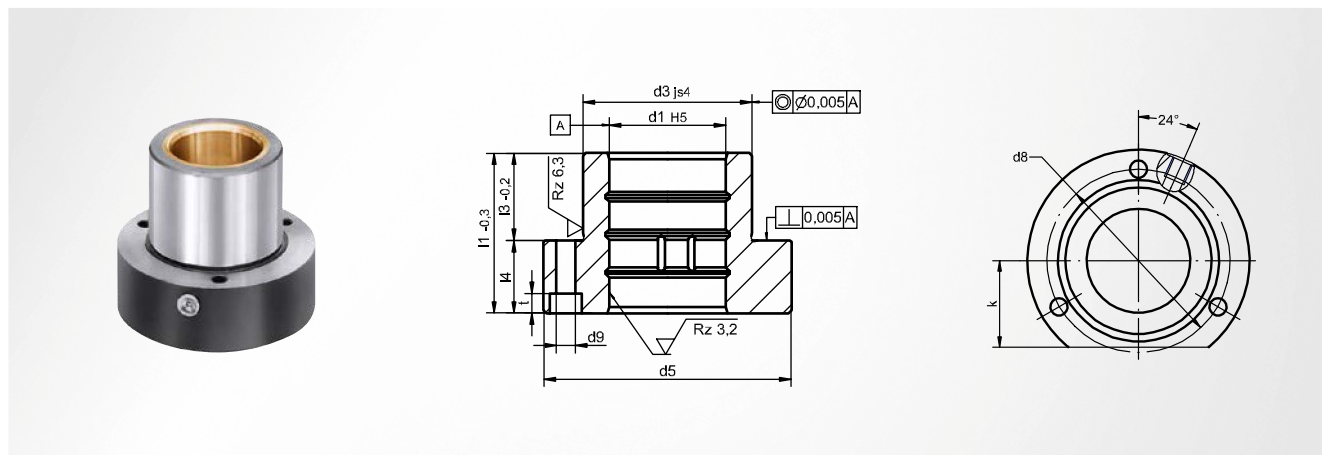
ST7367

d_1^{H5}	d_3^{js4}	d_5	d_6	d_8	$l_3^{-0.2}$	$l_1^{-0.3}$	l_4	Item number
19	32	40	32	59	23	35	12	ST7419 19 x 035
						43	20	ST7419 19 x 043
						59	36	ST7419 19 x 059
20	32	40	32	59	23	35	12	ST7419 20 x 035
						43	20	ST7419 20 x 043
						59	36	ST7419 20 x 059
24	40	48	40	65	23	35	12	ST7419 24 x 035
						60	37	ST7419 24 x 060
						80	57	ST7419 24 x 080
25	40	48	40	65	23	35	12	ST7419 25 x 035
						60	37	ST7419 25 x 060
						80	57	ST7419 25 x 080
30	48	56	48	73	30	42	12	ST7419 30 x 042
						75	45	ST7419 30 x 075
						93	63	ST7419 30 x 093
32	48	56	48	73	30	42	12	ST7419 32 x 042
						75	45	ST7419 32 x 075
						93	63	ST7419 32 x 093
38	58	66	58	83	37	52	15	ST7419 38 x 052
						82	45	ST7419 38 x 082

d_1^{H5}	d_3^{js4}	d_5	d_6	d_8	$l_3^{-0.2}$	$l_1^{-0.3}$	l_4	Item number
38	58	66	58	83	37	107	70	ST7419 38 x 107
40	58	66	58	83	37	52	15	ST7419 40 x 052
						82	45	ST7419 40 x 082
						107	70	ST7419 40 x 107
48	70	80	70	97	47	65	18	ST7419 48 x 065
						97	50	ST7419 48 x 097
						127	80	ST7419 48 x 127
50	70	80	70	97	47	65	18	ST7419 50 x 065
						97	50	ST7419 50 x 097
						127	80	ST7419 50 x 127
60	85	95	85	112	60	80	20	ST7419 60 x 080
						115	55	ST7419 60 x 115
						150	90	ST7419 60 x 150
63	85	95	85	112	60	80	20	ST7419 63 x 080
						115	55	ST7419 63 x 115
						150	90	ST7419 63 x 150
80	105	118	105	135	60	80	20	ST7419 80 x 080
						120	60	ST7419 80 x 120
						150	90	ST7419 80 x 150

ST7429 Guide bush

Sliding guide with bronze coating, with flange



Referring to DIN 9831 / ISO 9448

Material

Steel 1.7131 (16MnCr5); case-hardened

Hardness

64 ±1 HRC

Installation instruction

Fixing with 3 socket-head screws (not included in the scope of delivery); central lubrication intended via funnel-type lubricating nipple with connection M8 x 1; one-sided entry chamfer or centring attachment

Optional accessories

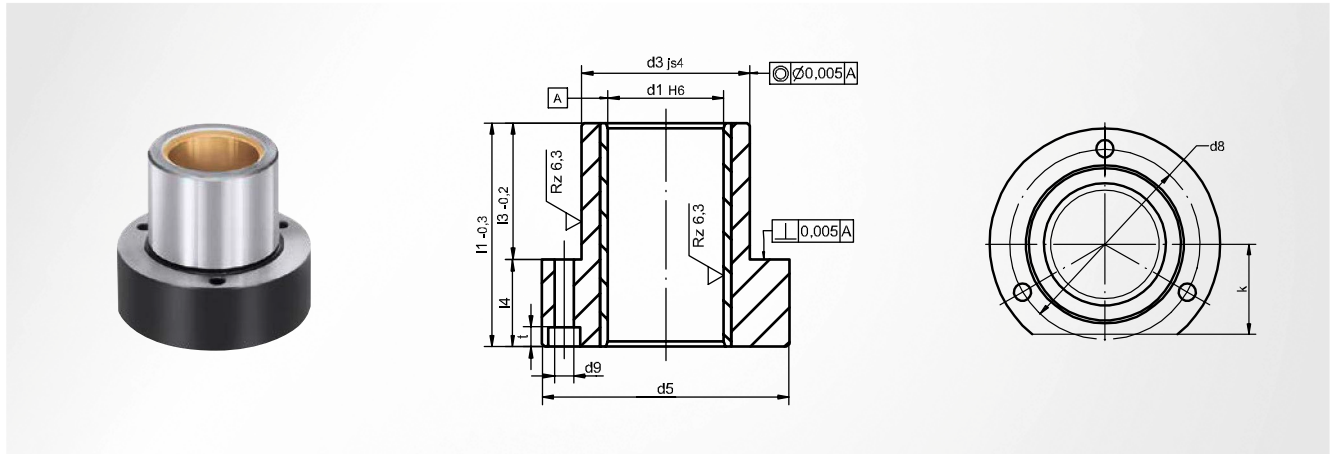
SZ8510

d_1^{H5}	d_3^{js4}	d_5	d_8	d_9	t	k	$l_1^{-0.3}$	$l_3^{-0.2}$	l_4	Item number
15	28	45	35	4.5	3.5	15	29	23	6	ST7429 15 x 029
							36	30	6	ST7429 15 x 036
16	28	45	35	4.5	3.5	15	29	23	6	ST7429 16 x 029
							36	30	6	ST7429 16 x 036
19	32	50	40	4.5	4.6	18	38	23	15	ST7429 19 x 038
							45	30	15	ST7429 19 x 045
							51	37	15	ST7429 19 x 051
20	32	50	40	4.5	4.6	18	38	23	15	ST7429 20 x 038
							45	30	15	ST7429 20 x 045
							51	37	15	ST7429 20 x 051
24	40	63	50	5.5	5.7	23	38	23	15	ST7429 24 x 038
							55	30	25	ST7429 24 x 055
							62	37	25	ST7429 24 x 062
25	40	63	50	5.5	5.7	23	38	23	15	ST7429 25 x 038
							55	30	25	ST7429 25 x 055
							62	37	25	ST7429 25 x 062
30	48	72	58	5.5	5.7	28	45	30	15	ST7429 30 x 045
							62	37	25	ST7429 30 x 062
							72	47	25	ST7429 30 x 072
32	48	72	58	5.5	5.7	28	45	30	15	ST7429 32 x 045

d_1^{H5}	d_3^{js4}	d_5	d_8	d_9	t	k	$l_1^{-0.3}$	$l_3^{-0.2}$	l_4	Item number
32	48	72	58	5.5	5.7	28	62	37	25	ST7429 32 x 062
							72	47	25	ST7429 32 x 072
38	58	85	70	6.6	6.8	33	55	30	25	ST7429 38 x 055
							67	37	30	ST7429 38 x 067
							77	47	30	ST7429 38 x 077
40	58	85	70	6.6	6.8	33	55	30	25	ST7429 40 x 055
							67	37	30	ST7429 40 x 067
							77	47	30	ST7429 40 x 077
48	70	104	86	9.0	9.0	38	62	37	25	ST7429 48 x 062
							89	47	42	ST7429 48 x 089
							102	60	42	ST7429 48 x 102
50	70	104	86	9.0	9.0	38	62	37	25	ST7429 50 x 062
							89	47	42	ST7429 50 x 089
							102	60	42	ST7429 50 x 102
60	85	120	100	9.0	9.0	46	89	47	42	ST7429 60 x 089
							102	60	42	ST7429 60 x 102
63	85	120	100	9.0	9.0	46	89	47	42	ST7429 63 x 089
							102	60	42	ST7429 63 x 102
80	105	148	125	11.0	11.0	56	125	75	50	ST7429 80 x 125

ST7481 Guide bush

Sliding guide with solid lubricant, with flange



Referring to DIN 9831 / ISO 9448

Material

Steel 1.7139; hardened; with solid lubricant insert

Hardness

64 ±1 HRC

Installation instruction

Fixing with 3 socket-head screws (not included in the scope of delivery); one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO H6

Optional accessories

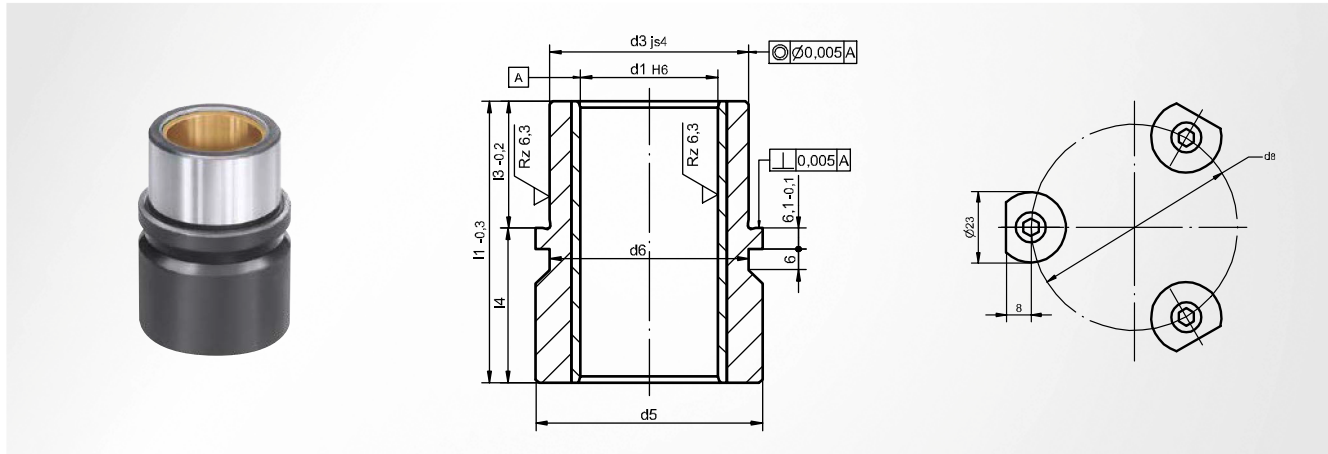
SZ8510

d ₁ H6	d ₃ js4	d ₅	d ₈	d ₉	t	k	l ₁ -0.3	l ₃ -0.2	l ₄	Item number
15	28	45	35	4.5	3.5	15	29	23	6	ST7481 15 x 029
							36	30	6	ST7481 15 x 036
16	28	45	35	4.5	3.5	15	29	23	6	ST7481 16 x 029
							36	30	6	ST7481 16 x 036
19	32	50	40	4.5	4.6	18	38	23	15	ST7481 19 x 038
							45	30	15	ST7481 19 x 045
							51	36	15	ST7481 19 x 051
20	32	50	40	4.5	4.6	18	38	23	15	ST7481 20 x 038
							45	30	15	ST7481 20 x 045
							51	36	15	ST7481 20 x 051
24	40	63	50	5.5	5.7	23	38	23	15	ST7481 24 x 038
							55	30	25	ST7481 24 x 055
							62	37	25	ST7481 24 x 062
25	40	63	50	5.5	5.7	23	38	23	15	ST7481 25 x 038
							55	30	25	ST7481 25 x 055
							62	37	25	ST7481 25 x 062
30	48	72	58	5.5	5.7	28	45	30	15	ST7481 30 x 045
							62	37	25	ST7481 30 x 062
							72	47	25	ST7481 30 x 072
32	48	72	58	5.5	5.7	28	45	30	15	ST7481 32 x 045

d ₁ H6	d ₃ js4	d ₅	d ₈	d ₉	t	k	l ₁ -0.3	l ₃ -0.2	l ₄	Item number
32	48	72	58	5.5	5.7	28	62	37	25	ST7481 32 x 062
							72	47	25	ST7481 32 x 072
38	58	85	70	6.6	6.8	33	55	30	25	ST7481 38 x 055
							67	37	30	ST7481 38 x 067
							77	47	30	ST7481 38 x 077
40	58	85	70	6.6	6.8	33	55	30	25	ST7481 40 x 055
							67	37	30	ST7481 40 x 067
							77	47	30	ST7481 40 x 077
48	70	104	86	9.0	9.0	38	62	37	25	ST7481 48 x 062
							89	47	42	ST7481 48 x 089
							102	60	42	ST7481 48 x 102
50	70	104	86	9.0	9.0	38	62	37	25	ST7481 50 x 062
							89	47	42	ST7481 50 x 089
							102	60	42	ST7481 50 x 102
60	85	120	100	9.0	9.0	46	89	47	42	ST7481 60 x 089
							102	60	42	ST7481 60 x 102
63	85	120	100	9.0	9.0	46	89	47	42	ST7481 63 x 089
							102	60	42	ST7481 63 x 102
80	105	148	125	11.0	11.0	56	125	75	50	ST7481 80 x 125

ST7471 Guide bush

Sliding guide with solid lubricant, with shoulder



Referring to DIN 9831 / ISO 9448

Material

Steel 1.7131; with solid lubricant insert

Hardness

64 ±1 HRC

Installation instruction

Fixing with 3 holding clamps; one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO H6

Scope of supply

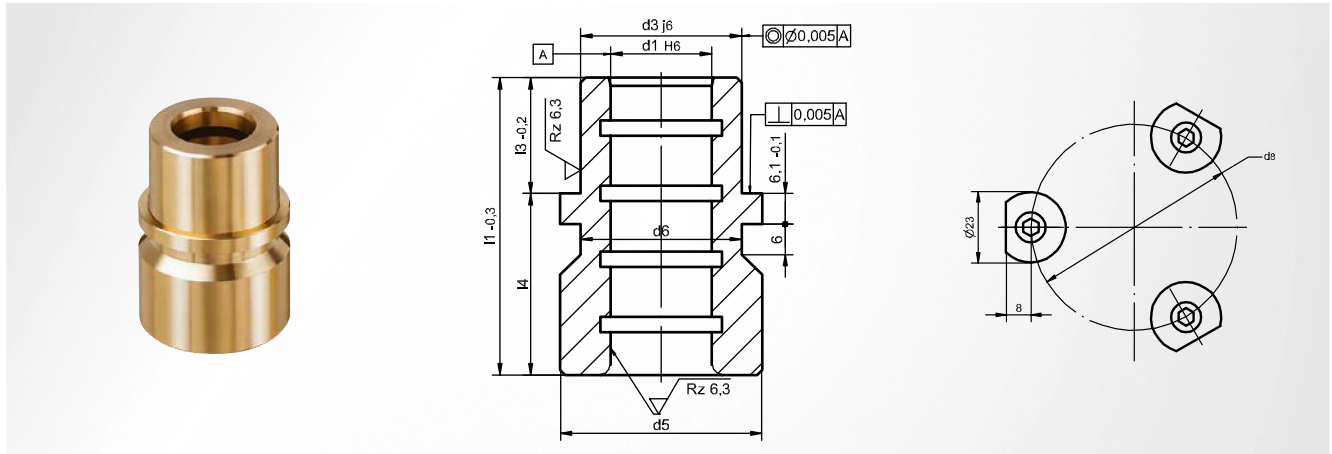
ST7367

d_1^{H6}	d_3^{js4}	d_5	d_6	d_8	$l_3^{-0.2}$	$l_1^{-0.3}$	l_4	Item number
19	32	40	32	59	23	35	12	ST7471 19 x 035
						43	20	ST7471 19 x 043
						59	36	ST7471 19 x 059
20	32	40	32	59	23	35	12	ST7471 20 x 035
						43	20	ST7471 20 x 043
						59	36	ST7471 20 x 059
24	40	48	40	65	23	35	12	ST7471 24 x 035
						60	37	ST7471 24 x 060
						80	57	ST7471 24 x 080
25	40	48	40	65	23	35	12	ST7471 25 x 035
						60	37	ST7471 25 x 060
						80	57	ST7471 25 x 080
30	48	56	48	73	30	42	12	ST7471 30 x 042
						75	45	ST7471 30 x 075
						93	63	ST7471 30 x 093
32	48	56	48	73	30	42	12	ST7471 32 x 042
						75	45	ST7471 32 x 075
						93	63	ST7471 32 x 093
38	58	66	58	83	37	52	15	ST7471 38 x 052
						82	45	ST7471 38 x 082

d_1^{H6}	d_3^{js4}	d_5	d_6	d_8	$l_3^{-0.2}$	$l_1^{-0.3}$	l_4	Item number
38	58	66	58	83	37	107	70	ST7471 38 x 107
40	58	66	58	83	37	52	15	ST7471 40 x 052
						82	45	ST7471 40 x 082
						107	70	ST7471 40 x 107
48	70	80	70	97	47	65	18	ST7471 48 x 065
						97	50	ST7471 48 x 097
						127	80	ST7471 48 x 127
50	70	80	70	97	47	65	18	ST7471 50 x 065
						97	50	ST7471 50 x 097
						127	80	ST7471 50 x 127
60	85	95	85	112	60	80	20	ST7471 60 x 080
						115	55	ST7471 60 x 115
						150	90	ST7471 60 x 150
63	85	95	85	112	60	80	20	ST7471 63 x 080
						115	55	ST7471 63 x 115
						150	90	ST7471 63 x 150
80	105	118	105	135	60	80	20	ST7471 80 x 080
						120	60	ST7471 80 x 120
						150	90	ST7471 80 x 150

ST7431 Guide bush

Sliding guide with solid lubricant, with shoulder



Referring to DIN 9831 / ISO 9448

Material

Bronze (CuSn8/CuZn25Al5); with solid lubricant rings

Installation instruction

Fixing with 3 holding clamps; one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO H6

Scope of supply

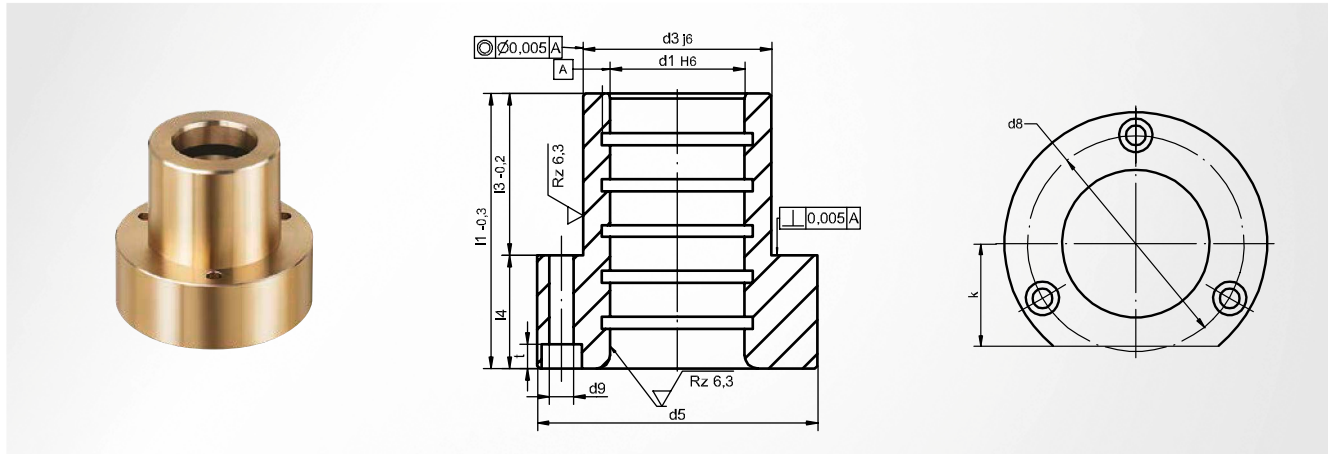
ST7367

d_1^{H6}	d_3^{j6}	d_5	d_6	d_8	$l_3^{-0.2}$	$l_1^{-0.3}$	l_4	Item number
19	32	40	32	59	23	35	12	ST7431 19 x 035
						43	20	ST7431 19 x 043
						59	36	ST7431 19 x 059
20	32	40	32	59	23	35	12	ST7431 20 x 035
						43	20	ST7431 20 x 043
						59	36	ST7431 20 x 059
24	40	48	40	65	23	35	12	ST7431 24 x 035
						60	37	ST7431 24 x 060
						80	57	ST7431 24 x 080
25	40	48	40	65	23	35	12	ST7431 25 x 035
						60	37	ST7431 25 x 060
						80	57	ST7431 25 x 080
30	48	56	48	73	30	42	12	ST7431 30 x 042
						75	45	ST7431 30 x 075
						93	63	ST7431 30 x 093
32	48	56	48	73	30	42	12	ST7431 32 x 042
						75	45	ST7431 32 x 075
						93	63	ST7431 32 x 093
38	58	66	58	83	37	52	15	ST7431 38 x 052
						82	45	ST7431 38 x 082

d_1^{H6}	d_3^{j6}	d_5	d_6	d_8	$l_3^{-0.2}$	$l_1^{-0.3}$	l_4	Item number
38	58	66	58	83	37	107	70	ST7431 38 x 107
40	58	66	58	83	37	52	15	ST7431 40 x 052
						82	45	ST7431 40 x 082
						107	70	ST7431 40 x 107
48	70	80	70	97	47	65	18	ST7431 48 x 065
						97	50	ST7431 48 x 097
						127	80	ST7431 48 x 127
50	70	80	70	97	47	65	18	ST7431 50 x 065
						97	50	ST7431 50 x 097
						127	80	ST7431 50 x 127
60	85	95	85	112	60	80	20	ST7431 60 x 080
						115	55	ST7431 60 x 115
						150	90	ST7431 60 x 150
63	85	95	85	112	60	80	20	ST7431 63 x 080
						115	55	ST7431 63 x 115
						150	90	ST7431 63 x 150
80	105	118	105	135	60	80	20	ST7431 80 x 080
						120	60	ST7431 80 x 120
						150	90	ST7431 80 x 150

ST7441 Guide bush

Sliding guide with solid lubricant, with flange



Referring to DIN 9831 / ISO 9448

Installation in mounting bore

ISO H6

Material

Bronze (CuSn8/CuZn25Al5); with solid lubricant rings

Optional accessories

SZ8510

Installation instruction

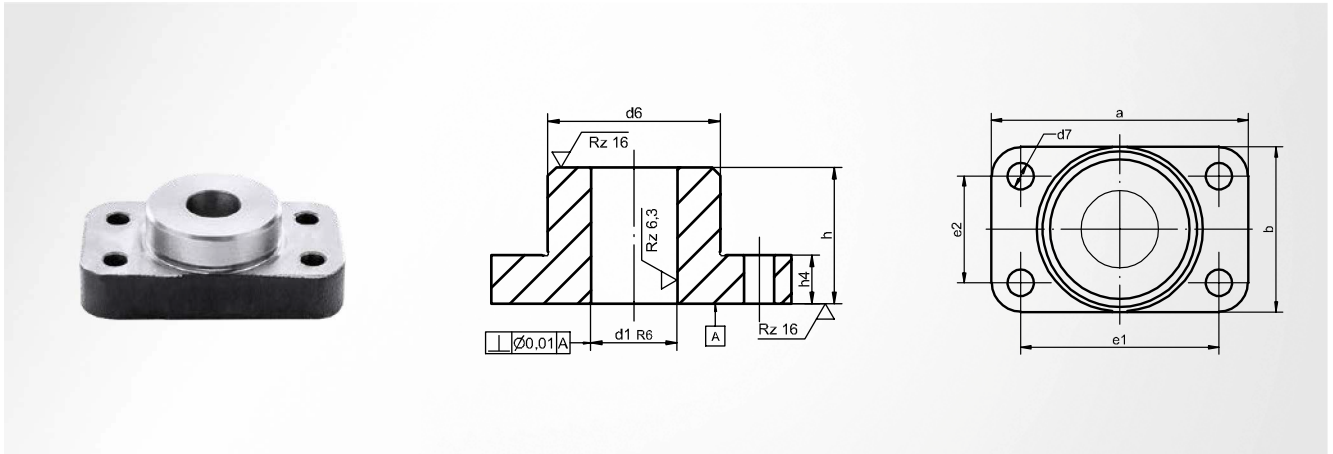
Fixing with 3 socket-head screws (not included in the scope of delivery); one-sided entry chamfer or centring attachment

d_1^{H6}	d_3^{j6}	d_5	d_8	d_9	t	k	$l_1^{-0.3}$	$l_3^{-0.2}$	l_4	Item number
15	28	45	35	4.5	3.5	15	29	23	6	ST7441 15 x 029
							36	30	6	ST7441 15 x 036
16	28	45	35	4.5	3.5	15	29	23	6	ST7441 16 x 029
							36	30	6	ST7441 16 x 036
19	32	50	40	4.5	4.6	18	38	23	15	ST7441 19 x 038
							45	30	15	ST7441 19 x 045
							51	36	15	ST7441 19 x 051
20	32	50	40	4.5	4.6	18	38	23	15	ST7441 20 x 038
							45	30	15	ST7441 20 x 045
							51	36	15	ST7441 20 x 051
24	40	63	50	5.5	5.7	23	38	23	15	ST7441 24 x 038
							55	30	25	ST7441 24 x 055
							62	37	25	ST7441 24 x 062
25	40	63	50	5.5	5.7	23	38	23	15	ST7441 25 x 038
							55	30	25	ST7441 25 x 055
							62	37	25	ST7441 25 x 062
30	48	72	58	5.5	5.7	28	45	30	15	ST7441 30 x 045
							62	37	25	ST7441 30 x 062
							72	47	25	ST7441 30 x 072
32	48	72	58	5.5	5.7	28	45	30	15	ST7441 32 x 045

d_1^{H6}	d_3^{j6}	d_5	d_8	d_9	t	k	$l_1^{-0.3}$	$l_3^{-0.2}$	l_4	Item number
32	48	72	58	5.5	5.7	28	62	37	25	ST7441 32 x 062
							72	47	25	ST7441 32 x 072
38	58	85	70	6.6	6.8	33	55	30	25	ST7441 38 x 055
							67	37	30	ST7441 38 x 067
							77	47	30	ST7441 38 x 077
40	58	85	70	6.6	6.8	33	55	30	25	ST7441 40 x 055
							67	37	30	ST7441 40 x 067
							77	47	30	ST7441 40 x 077
48	70	104	86	9.0	9.0	38	62	37	25	ST7441 48 x 062
							89	47	42	ST7441 48 x 089
							102	60	42	ST7441 48 x 102
50	70	104	86	9.0	9.0	38	62	37	25	ST7441 50 x 062
							89	47	42	ST7441 50 x 089
							102	60	42	ST7441 50 x 102
60	85	120	100	9.0	9.0	46	89	47	42	ST7441 60 x 089
							102	60	42	ST7441 60 x 102
63	85	120	100	9.0	9.0	46	89	47	42	ST7441 63 x 089
							102	60	42	ST7441 63 x 102
80	105	148	125	11.0	11.0	56	125	75	50	ST7441 80 x 125

ST7210 Pillar bearing

machined, with rectangular flange



Material

Grey cast irons EN-GJL-250

Note

both flange surfaces machined

Guide diameter

ISO H5

Mounting bore

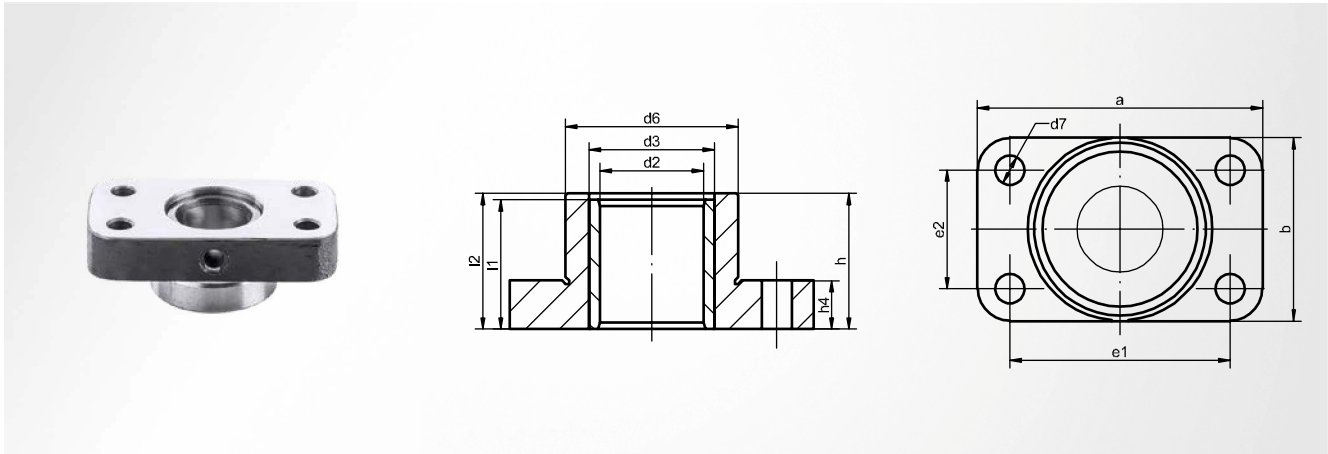
ISO R6

a	b	d ₆	d ₇	e ₁	e ₂	h	h ₄	d ₁ R6	Item number
71	40	37	6.6	53	22	25	14.0	15	ST7210 15
								16	ST7210 16
80	45	42	9.0	60	25	32	16.0	19	ST7210 19
								20	ST7210 20
90	56	52	9.0	69	35	40	16.0	24	ST7210 24
								25	ST7210 25
112	71	65	11.0	86	45	50	17.5	30	ST7210 30
								32	ST7210 32
132	85	80	14.0	102	55	63	22.5	38	ST7210 38
								40	ST7210 40
160	112	107	18.0	126	78	80	25.0	48	ST7210 48
								50	ST7210 50
200	132	125	18.0	154	86	100	33.0	60	ST7210 60
								63	ST7210 63
224	140	130	22.0	172	88	125	36.5	80	ST7210 80

ST7216 Guide bearing

STEINEL®

machined, Ball guide without ball cage, with rectangular flange



Material

Grey cast irons EN-GJL-250

Note

both flange surfaces machined

Guide diameter

ISO H5

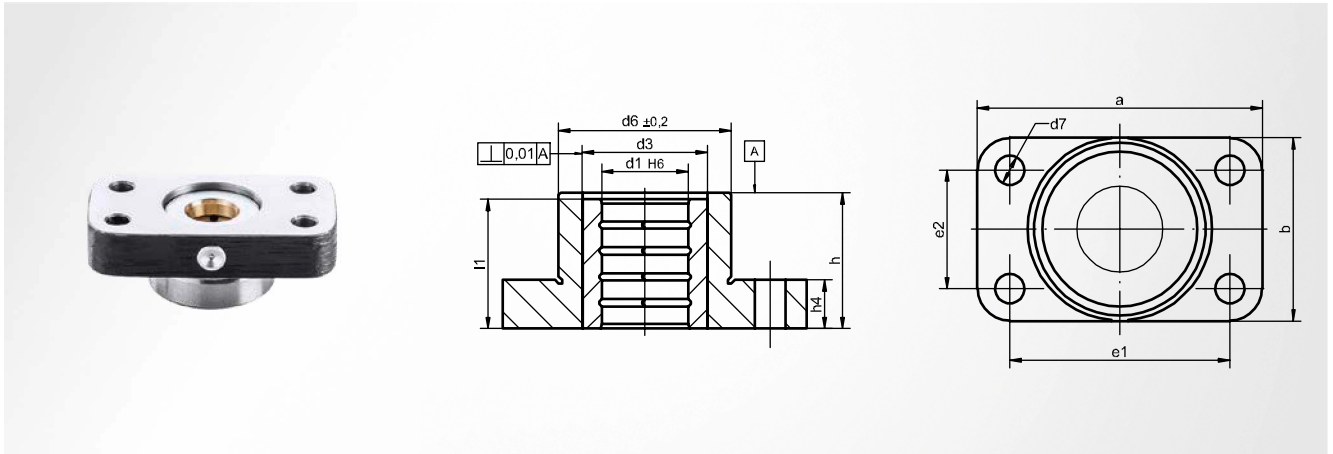
Scope of supply

ST7406

a	b	d ₃	d ₆	d ₇	e ₁	e ₂	h	h ₄	l ₁	l ₂	d ₁	d ₂	Item number
71	40	28	37	6.6	53	22	25	14.0	23	30	15	21	ST7216 15
											16	22	ST7216 16
80	45	32	42	9.0	60	25	32	16.0	30	38	19	25	ST7216 19
											20	26	ST7216 20
90	56	40	52	9.0	69	35	40	16.0	37	43	24	30	ST7216 24
											25	31	ST7216 25
112	71	48	65	11.0	86	45	50	17.5	47	58	30	38	ST7216 30
											32	40	ST7216 32
132	85	58	80	14.0	102	55	63	22.5	60	68	38	46	ST7216 38
											40	48	ST7216 40
160	112	70	107	18.0	126	78	80	25.0	77	88	48	56	ST7216 48
											50	58	ST7216 50
200	132	85	125	18.0	154	86	100	33.0	95	113	60	70	ST7216 60
											63	73	ST7216 63
224	140	105	130	22.0	172	88	125	36.5	120	138	80	92	ST7216 80

ST7219 Guide bearing

machined, Sliding guide with bronze coating, with rectangular flange



Material

Grey cast irons EN-GJL-250

Guide diameter

ISO H5

Note

Central lubrication via cup head lubrication nipple M8 x 1;
both flange surfaces machined

Scope of supply

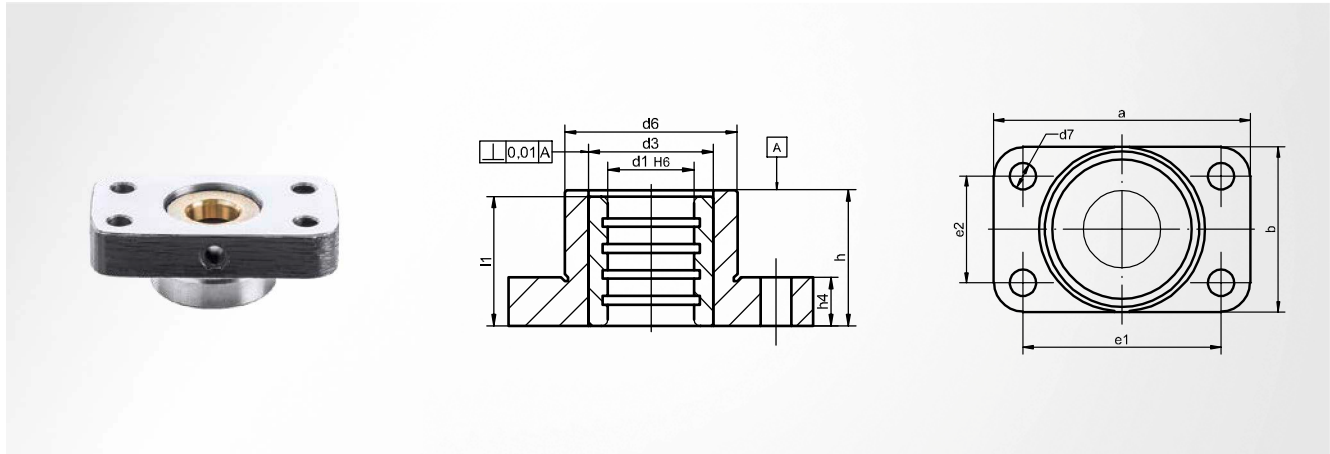
ST7409

a	b	d ₃	d ₆ ±0.2	d ₇	e ₁	e ₂	h	h ₄	l ₁	d ₁ H6	Item number
71	40	28	37	6.6	53	22	25	14.0	23	15	ST7219 15
										16	ST7219 16
80	45	32	42	9.0	60	25	32	16.0	30	19	ST7219 19
										20	ST7219 20
90	56	40	52	9.0	69	35	40	16.0	37	24	ST7219 24
										25	ST7219 25
112	71	48	65	11.0	86	45	50	17.5	47	30	ST7219 30
										32	ST7219 32
132	85	58	80	14.0	102	55	63	22.5	60	38	ST7219 38
										40	ST7219 40
160	112	70	107	18.0	126	78	80	25.0	77	48	ST7219 48
										50	ST7219 50
200	132	85	125	18.0	154	86	100	33.0	95	60	ST7219 60
										63	ST7219 63
224	140	105	130	22.0	172	88	125	36.5	120	80	ST7219 80

ST7211 Guide bearing

STEINEL®

machined, Sliding guide with solid lubricant, with rectangular flange



Material

Grey cast irons EN-GJL-250

Note

both flange surfaces machined

Guide diameter

ISO H5

Scope of supply

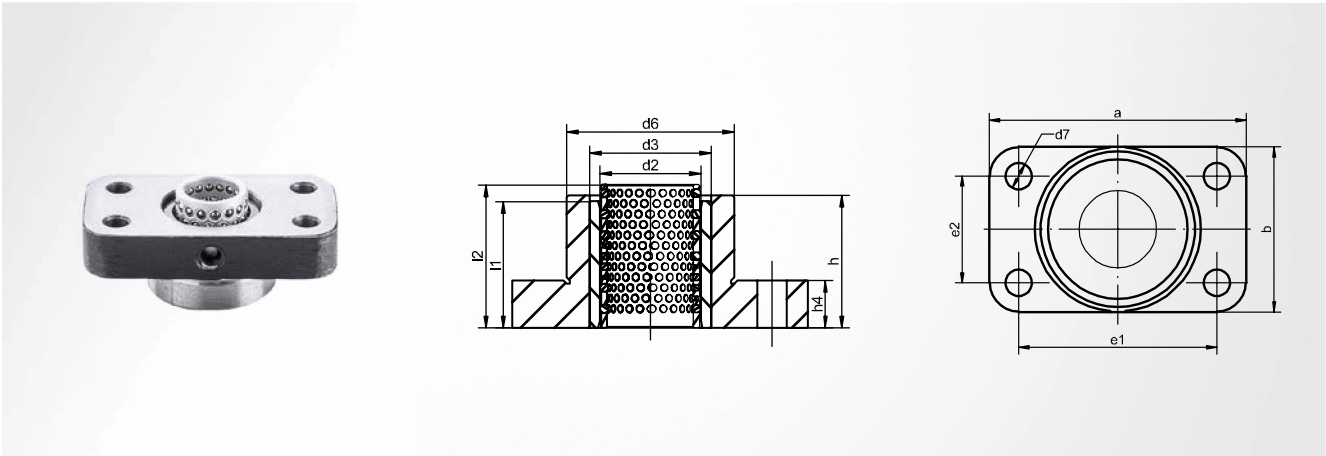
ST7451

a	b	d ₃	d ₆	d ₇	e ₁	e ₂	h	h ₄	l ₁	d ₁ H6	Item number
71	40	28	37	6.6	53	22	25	14.0	23	15	ST7211 15
										16	ST7211 16
90	56	40	52	9.0	69	35	40	16.0	37	24	ST7211 24
										25	ST7211 25
80	45	32	42	9.0	60	25	32	16.0	30	19	ST7219 19
										20	ST7211 20
112	71	48	65	11.0	86	45	50	17.5	47	30	ST7211 30
										32	ST7211 32
132	85	58	80	14.0	102	55	63	22.5	60	38	ST7211 38
										40	ST7211 40
160	112	70	107	18.0	126	78	80	25.0	77	48	ST7211 48
										50	ST7211 50
200	132	85	125	18.0	154	86	100	33.0	95	60	ST7211 60
										63	ST7211 63
224	140	105	130	22.0	172	88	125	36.5	120	80	ST7211 80

ST7212 Guide bearing



machined, Ball guide with ball cage, with rectangular flange



Material

Grey cast irons EN-GJL-250

Note

both flange surfaces machined

Guide diameter

ISO H5

Scope of supply

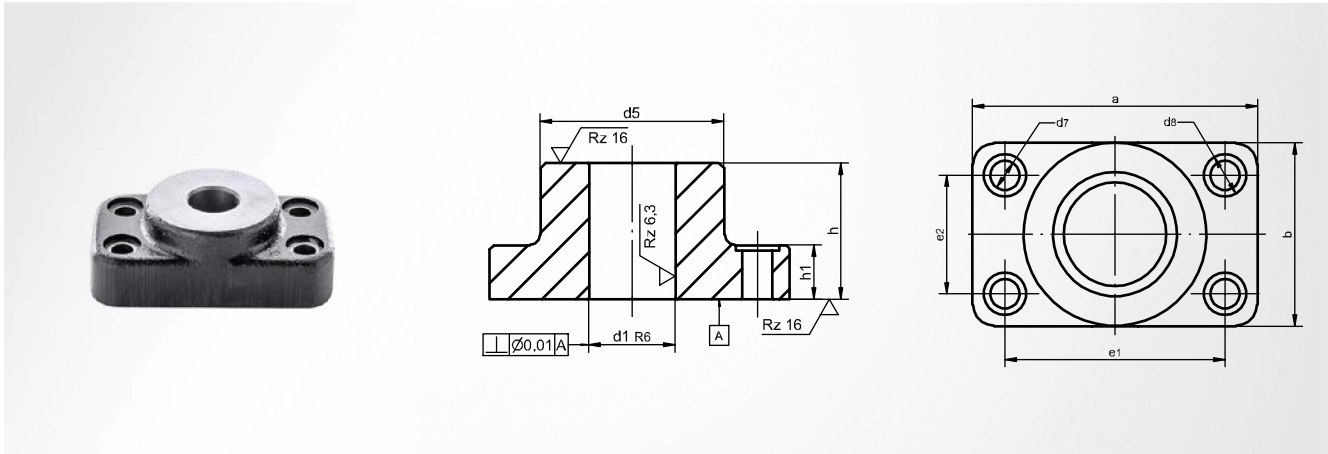
ST7130; ST7406

a	b	d ₃	d ₆	d ₇	e ₁	e ₂	h	h ₄	l ₁	l ₂	d ₁	d ₂	Item number
71	40	28	37	6.6	53	22	25	14.0	23	30	15	21	ST7212 15
											16	22	ST7212 16
80	45	32	42	9.0	60	25	32	16.0	30	38	19	25	ST7212 19
											20	26	ST7212 20
90	56	40	52	9.0	69	35	40	16.0	37	43	24	30	ST7212 24
											25	31	ST7212 25
112	71	48	65	11.0	86	45	50	17.5	47	58	30	38	ST7212 30
											32	40	ST7212 32
132	85	58	80	14.0	102	55	63	22.5	60	68	38	46	ST7212 38
											40	48	ST7212 40
160	112	70	107	18.0	126	78	80	25.0	77	88	48	56	ST7212 48
											50	58	ST7212 50
200	132	85	125	18.0	154	86	100	33.0	95	113	60	70	ST7212 60
											63	73	ST7212 63
224	140	105	130	22.0	172	88	125	36.5	120	138	80	92	ST7212 80



ST7200 Pillar bearing

with rectangular flange



Referring to ISO 11903

Guide diameter

ISO H5

Material

Grey cast irons EN-GJL-250

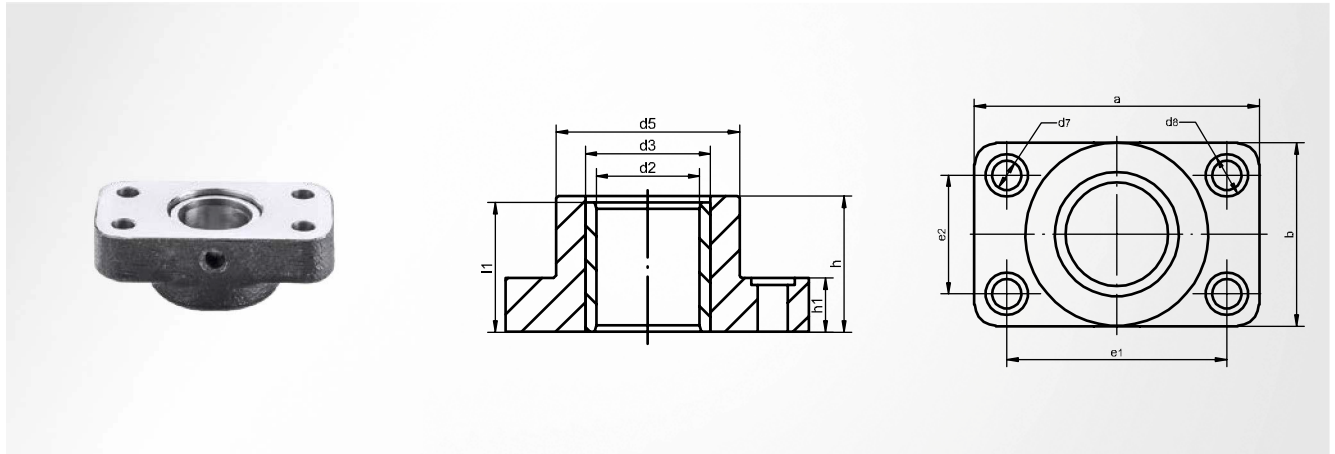
Mounting bore

ISO R6

a	b	d ₅	d ₇	d ₈	e ₁	e ₂	h	h ₁	d ₁ ^{R6}	Item number
71	40	40	6.6	11	53	22	25	16	15	ST7200 15
									16	ST7200 16
80	45	45	9.0	15	60	25	32	18	19	ST7200 19
									20	ST7200 20
90	56	56	9.0	15	69	35	40	18	24	ST7200 24
									25	ST7200 25
112	71	71	11.0	18	86	45	50	20	30	ST7200 30
									32	ST7200 32
132	85	85	14.0	20	102	55	63	25	38	ST7200 38
									40	ST7200 40
160	112	112	18.0	26	126	78	80	28	48	ST7200 48
									50	ST7200 50
200	132	132	18.0	26	154	86	100	36	60	ST7200 60
									63	ST7200 63
224	140	140	22.0	33	172	88	125	40	80	ST7200 80

ST7206 Guide bearing

Ball guide without ball cage, with rectangular flange



Referring to ISO 11903

Guide diameter

ISO H5

Material

Grey cast irons EN-GJL-250

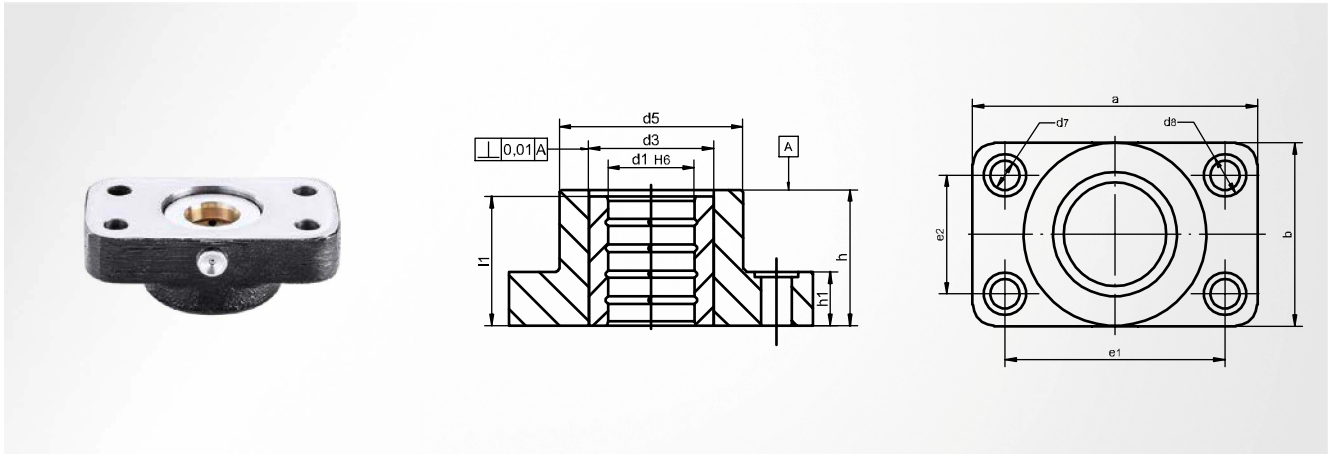
Scope of supply

ST7406

a	b	d ₃	d ₅	d ₇	d ₈	e ₁	e ₂	h	h ₁	l ₁	d ₁	d ₂	Item number
71	40	28	40	6.6	11	53	22	25	16	23	15	21	ST7206 15
											16	22	ST7206 16
80	45	32	45	9.0	15	60	25	32	18	30	19	25	ST7206 19
											20	26	ST7206 20
90	56	40	56	9.0	15	69	35	40	18	37	24	30	ST7206 24
											25	31	ST7206 25
112	71	48	71	11.0	18	86	45	50	20	47	30	38	ST7206 30
											32	40	ST7206 32
132	85	58	85	14.0	20	102	55	63	25	60	38	46	ST7206 38
											40	48	ST7206 40
160	112	70	112	18.0	26	126	78	80	28	77	48	56	ST7206 48
											50	58	ST7206 50
200	132	85	132	18.0	26	154	86	100	36	95	60	70	ST7206 60
											63	73	ST7206 63
224	140	105	140	22.0	33	172	88	125	40	120	80	92	ST7206 80

ST7209 Guide bearing

Sliding guide with bronze coating, with rectangular flange



Referring to ISO 11903

Material

Grey cast irons EN-GJL-250

Guide diameter

ISO H5

Note

Central lubrication via cup head lubrication nipple M8 x 1

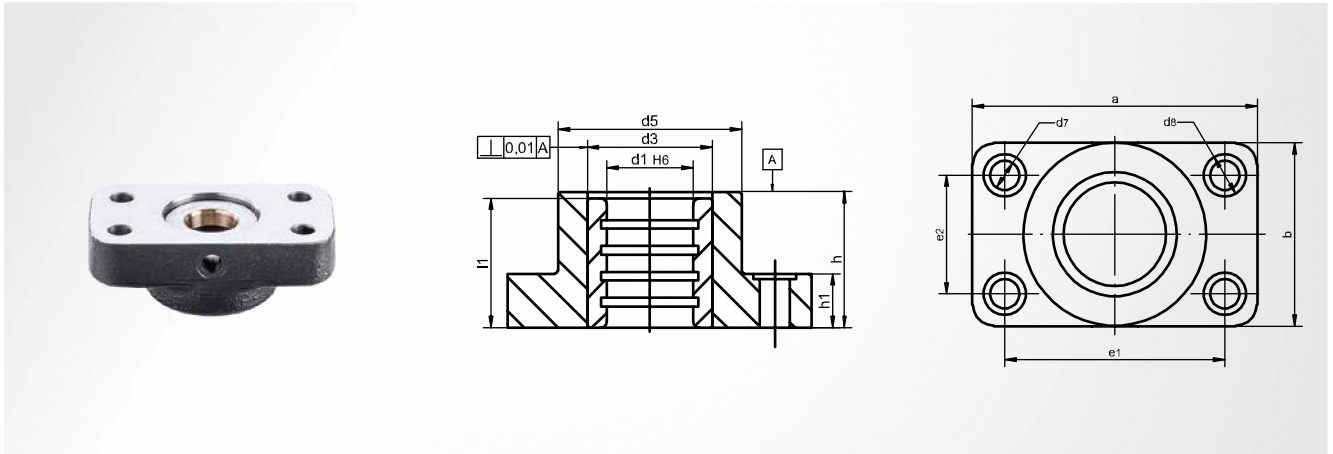
Scope of supply

ST7409

a	b	d ₃	d ₅	d ₇	d ₈	e ₁	e ₂	h	h ₁	l ₁	d ₁ H6	Item number
71	40	28	40	6.6	11	53	22	25	16	23	15	ST7209 15
											16	ST7209 16
80	45	32	45	9.0	15	60	25	32	18	30	19	ST7209 19
											20	ST7209 20
90	56	40	56	9.0	15	69	35	40	18	37	24	ST7209 24
											25	ST7209 25
112	71	48	71	11.0	18	86	45	50	20	47	30	ST7209 30
											32	ST7209 32
132	85	58	85	14.0	20	102	55	63	25	60	38	ST7209 38
											40	ST7209 40
160	112	70	112	18.0	26	126	78	80	28	77	48	ST7209 48
											50	ST7209 50
200	132	85	132	18.0	26	154	86	100	36	95	60	ST7209 60
											63	ST7209 63
224	140	105	140	22.0	33	172	88	125	40	120	80	ST7209 80

ST7201 Guide bearing

Sliding guide with solid lubricant, with rectangular flange



Referring to ISO 11903

Guide diameter

ISO H5

Material

Grey cast irons EN-GJL-250

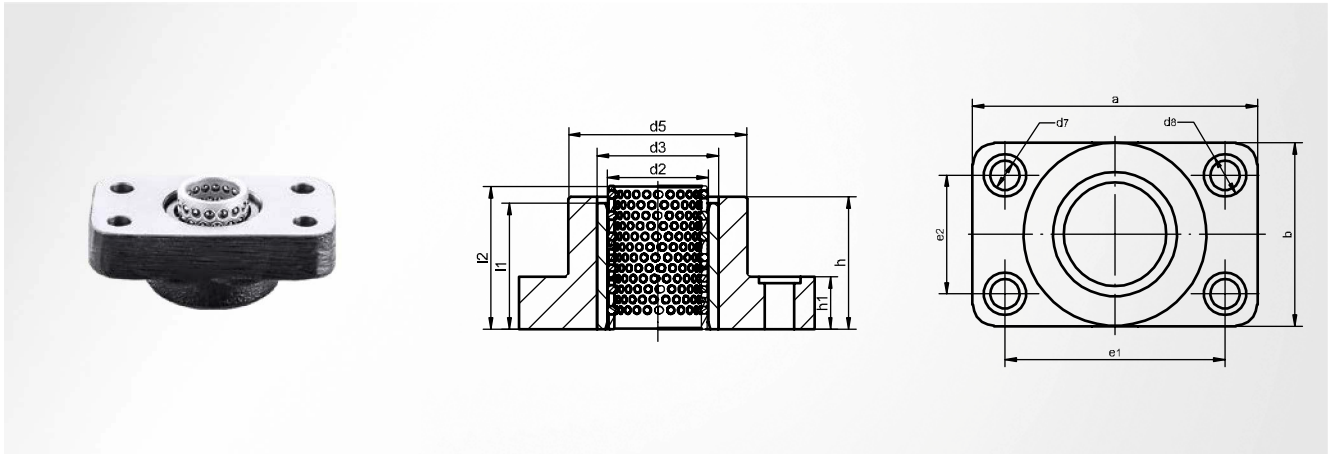
Scope of supply

ST7451

a	b	d ₃	d ₅	d ₇	d ₈	e ₁	e ₂	h	h ₁	l ₁	d ₁ H ₆	Item number
71	40	28	40	6.6	11	53	22	25	16	23	15	ST7201 15
											16	ST7201 16
80	45	32	45	9.0	15	60	25	32	18	30	19	ST7201 19
											20	ST7201 20
90	56	40	56	9.0	15	69	35	40	18	37	24	ST7201 24
											25	ST7201 25
112	71	48	71	11.0	18	86	45	50	20	47	30	ST7201 30
											32	ST7201 32
132	85	58	85	14.0	20	102	55	63	25	60	38	ST7201 38
											40	ST7201 40
160	112	70	112	18.0	26	126	78	80	28	77	48	ST7201 48
											50	ST7201 50
200	132	85	132	18.0	26	154	86	100	36	95	60	ST7201 60
											63	ST7201 63
224	140	105	140	22.0	33	172	88	125	40	120	80	ST7201 80

ST7202 Guide bearing

Ball guide with ball cage, with rectangular flange



Referring to ISO 11903

Guide diameter

ISO H5

Material

Grey cast irons EN-GJL-250

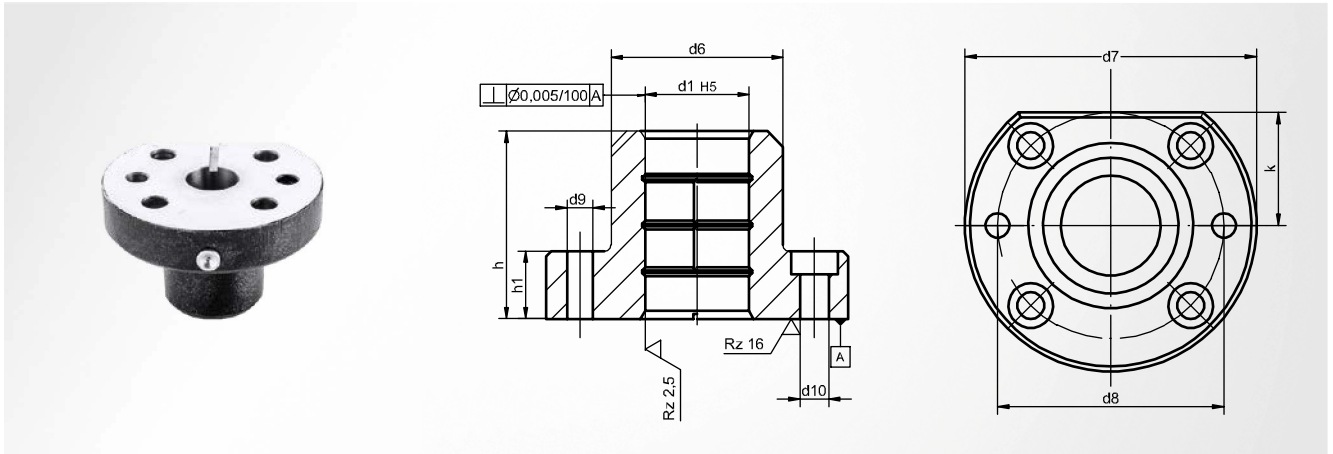
Scope of supply

ST7130; ST7406

a	b	d ₃	d ₅	d ₇	d ₈	e ₁	e ₂	h	h ₁	l ₁	l ₂	d ₂	Item number
71	40	28	40	6.6	11	53	22	25	16	23	30	21	ST7202 15
												22	ST7202 16
80	45	32	45	9.0	15	60	25	32	18	30	38	25	ST7202 19
												26	ST7202 20
90	56	40	56	9.0	15	69	35	40	18	37	43	30	ST7202 24
												31	ST7202 25
112	71	48	71	11.0	18	86	45	50	20	47	58	38	ST7202 30
												40	ST7202 32
132	85	58	85	14.0	20	102	55	63	25	60	68	46	ST7202 38
												48	ST7202 40
160	112	70	112	18.0	26	126	78	80	28	77	88	56	ST7202 48
												58	ST7202 50
200	132	85	132	18.0	26	154	86	100	36	95	113	70	ST7202 60
												73	ST7202 63
224	140	105	140	22.0	33	172	88	125	40	120	138	92	ST7202 80

ST7250 Guide bearing

Sliding guide, with round flange



Material

Grey cast irons EN-GJL-250

Note

Central lubrication via cup head lubrication nipple M8 x 1

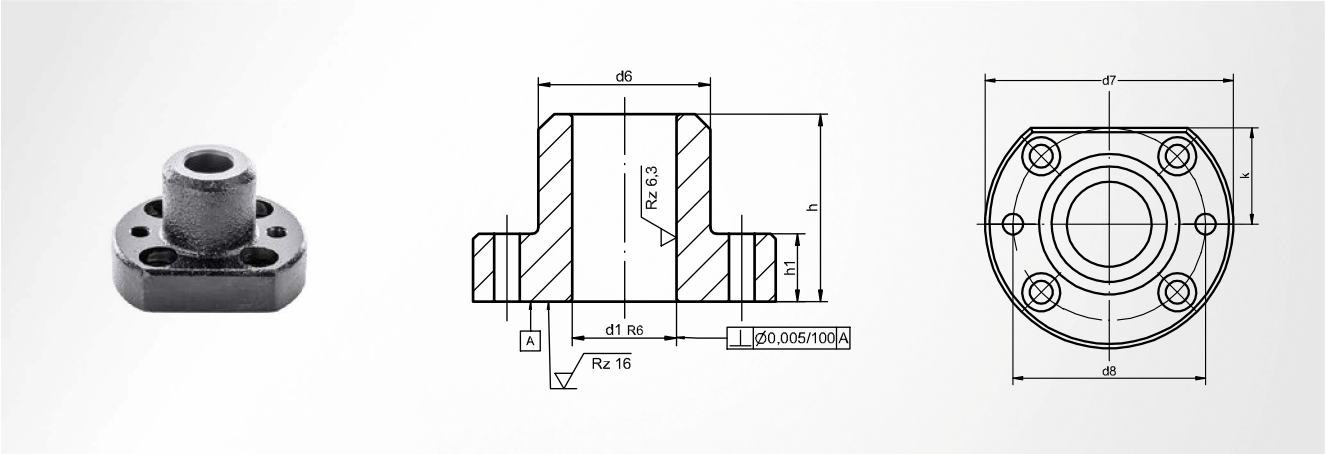
Guide diameter

ISO H5

d_6	d_7	d_8	d_9	d_{10}	h	h_1	k	d_1^{H5}	Item number
36	78	54	7.8	9.0	50	18	30	19	ST7250 19
								20	ST7250 20
46	86	64	7.8	9.0	55	20	33	24	ST7250 24
								25	ST7250 25
56	106	80	9.8	11.0	63	22	41	30	ST7250 30
								32	ST7250 32
66	116	90	9.8	11.0	72	26	45	38	ST7250 38
								40	ST7250 40
80	140	108	11.8	13.5	80	30	54	48	ST7250 48
								50	ST7250 50

ST7260 Pillar bearing

with round flange



Material
 Grey cast irons EN-GJL-250

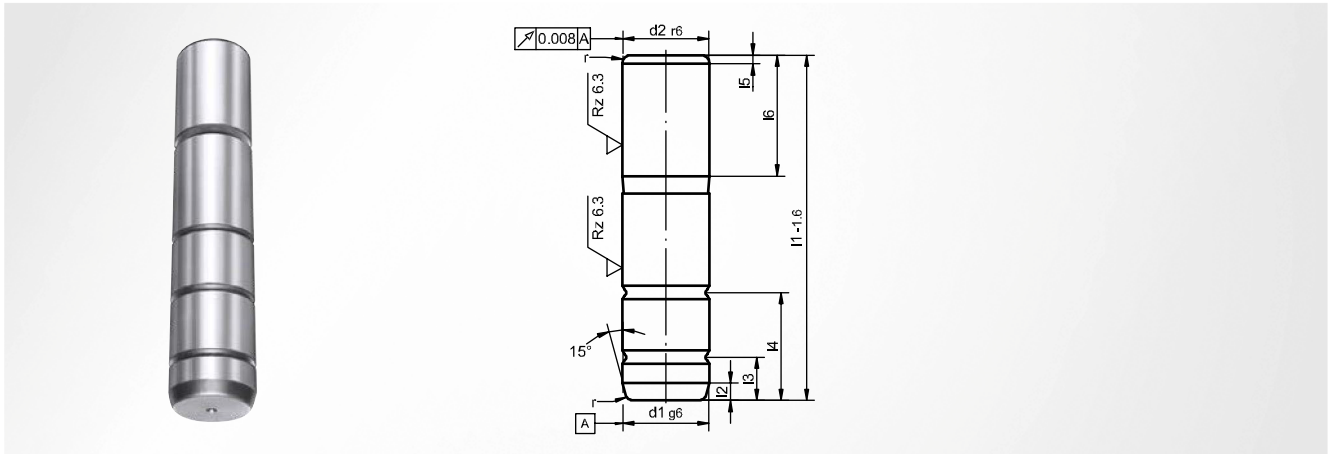
Mounting bore
 ISO R6

Guide diameter
 ISO H5

d ₆	d ₇	d ₈	h	h ₁	k	d ₁ ^{R6}	Item number
36	78	54	50	18	30	19	ST7260 19
						20	ST7260 20
46	86	64	55	20	33	24	ST7260 24
						25	ST7260 25
56	106	80	63	22	41	30	ST7260 30
						32	ST7260 32
66	116	90	72	26	45	38	ST7260 38
						40	ST7260 40
80	140	108	80	30	54	48	ST7260 48
						50	ST7260 50

ST7160 Guide pillar

for industrial tool making, with grooves



Referring to DIN 9833 / ISO 9182

Material

Steel 1.1221 (C60E); inductively hardened

Hardness

63 ±1 HRC

Installation in mounting bore

ISO H7

Attention

Use for sliding guide only

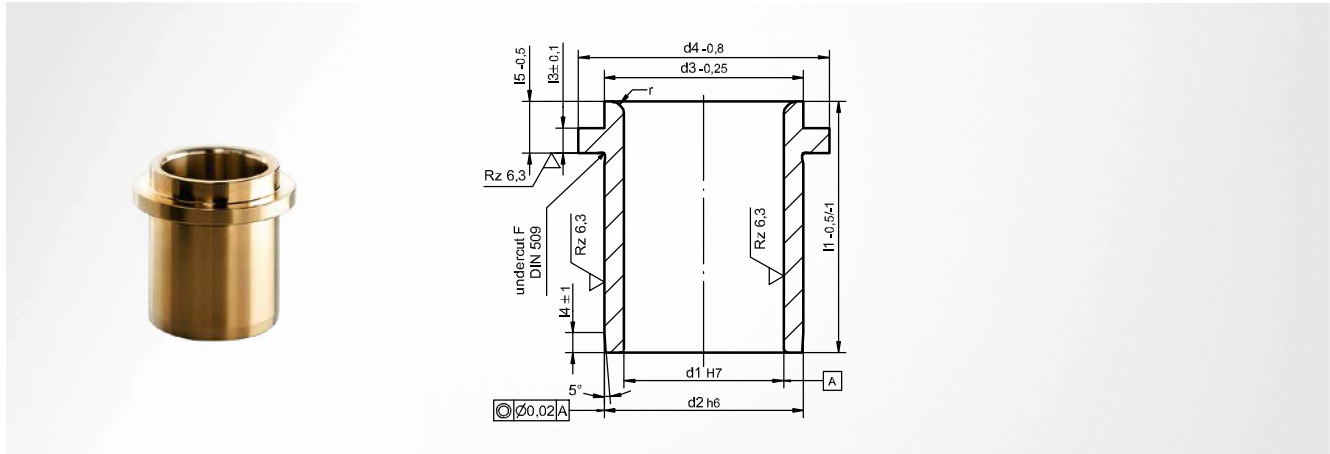
d ₁ ^{g6}	d ₂ ^{r6}	l ₂	l ₃	l ₄	l ₅	l ₆	r	l ₁ ^{-1.6}	Item number
25	25	8	20	45	4	40	2.0	125	ST7160 025 x 125
								140	ST7160 025 x 140
								160	ST7160 025 x 160
								180	ST7160 025 x 180
								200	ST7160 025 x 200
								224	ST7160 025 x 224
32	32	8	20	50	4	45	2.0	140	ST7160 032 x 140
								160	ST7160 032 x 160
								180	ST7160 032 x 180
								200	ST7160 032 x 200
								224	ST7160 032 x 224
								250	ST7160 032 x 250
40	40	8	20	50	4	56	2.0	160	ST7160 040 x 160
								180	ST7160 040 x 180
								200	ST7160 040 x 200
								224	ST7160 040 x 224
								250	ST7160 040 x 250
								280	ST7160 040 x 280
50	50	10	25	65	4	70	2.5	180	ST7160 050 x 180
								200	ST7160 050 x 200
								224	ST7160 050 x 224
								250	ST7160 050 x 250

d ₁ ^{g6}	d ₂ ^{r6}	l ₂	l ₃	l ₄	l ₅	l ₆	r	l ₁ ^{-1.6}	Item number
50	50	10	25	65	4	70	2.5	250	ST7160 050 x 250
								280	ST7160 050 x 280
								315	ST7160 050 x 315
								355	ST7160 050 x 355
63	63	10	32	72	4	80	2.5	200	ST7160 063 x 200
								224	ST7160 063 x 224
								250	ST7160 063 x 250
								280	ST7160 063 x 280
								315	ST7160 063 x 315
80	80	10	32	82	4	100	3.0	224	ST7160 080 x 224
								250	ST7160 080 x 250
								280	ST7160 080 x 280
								315	ST7160 080 x 315
								355	ST7160 080 x 355
100	100	10	32	82	4	125	3.0	250	ST7160 100 x 250
								280	ST7160 100 x 280
								315	ST7160 100 x 315
								355	ST7160 100 x 355
								400	ST7160 100 x 400
								450	ST7160 100 x 450

ST7460 Guide bush

STEINEL®

for industrial tool making, Sliding guide solid bronze, with shoulder



Referring to DIN 9834 / ISO 9448

Installation in mounting bore

ISO H7

Material

Bronze (CuSn8/CuZn25Al5)

Optional accessories

ST7377

Installation instruction

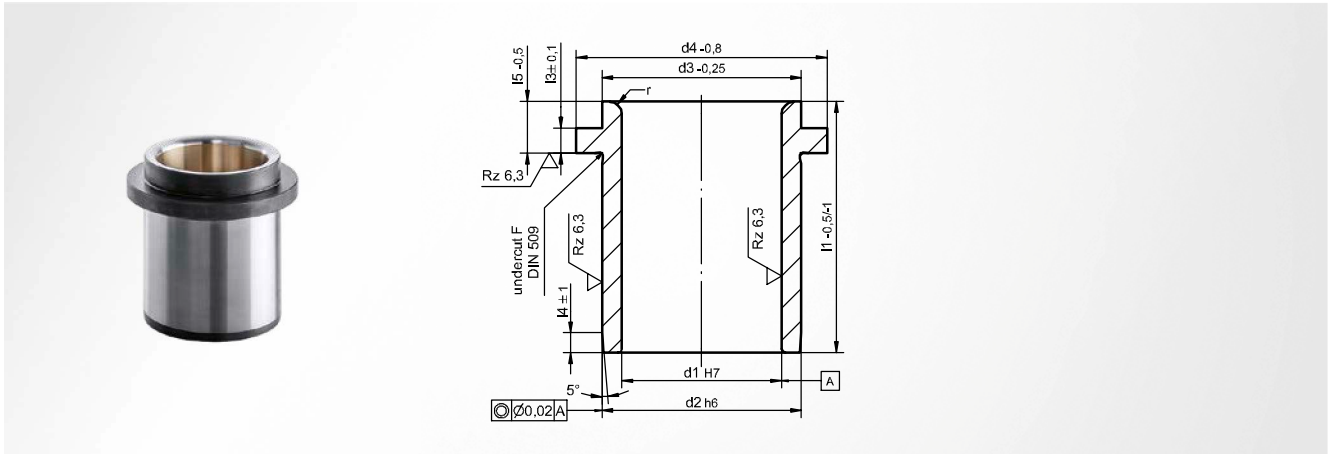
Fixing with 2 holding clamps (not included in the scope of delivery); one-sided entry chamfer or centring attachment

d_1^{H7}	d_2^{h6}	$d_3^{-0.25}$	$d_4^{-0.8}$	$l_1^{-0.5 \dots -1}$	$l_3^{\pm 0.1}$	$l_4^{\pm 1}$	$l_5^{0 \dots -0.5}$	r	Item number
25	32	32	40	40	6.3	3.0	10	3	ST7460 025
32	40	40	50	50	6.3	4.0	12	3	ST7460 032
40	50	50	63	63	6.3	5.0	15	3	ST7460 040
50	63	63	71	71	6.3	6.3	17	5	ST7460 050
63	80	80	90	80	10.0	8.0	19	6	ST7460 063
80	100	100	112	100	10.0	10.0	22	8	ST7460 080
100	125	125	140	125	10.0	12.5	21	10	ST7460 100

ST7469 Guide bush

STEINEL®

for industrial tool making, Sliding guide with bronze coating, with shoulder



Referring to DIN 9834 / ISO 9448

Material

Steel 1.7131 (16MnCr5); case-hardened

Hardness

62 ±1 HRC

Installation instruction

Fixing with 2 holding clamps (not included in the scope of delivery); one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO H7

Optional accessories

ST7377

d_1^{H7}	d_2^{h6}	$d_3^{-0.25}$	$d_4^{-0.8}$	$l_1^{-0.5/-1}$	$l_3^{\pm 0.1}$	$l_4^{\pm 1}$	$l_5^{0/-0.5}$	r	Item number
25	32	32	40	40	6.3	3.0	10	3	ST7469 025
32	40	40	50	50	6.3	4.0	12	3	ST7469 032
40	50	50	63	63	6.3	5.0	15	3	ST7469 040
50	63	63	71	71	6.3	6.3	17	5	ST7469 050
63	80	80	90	80	10.0	8.0	19	6	ST7469 063
80	100	100	112	100	10.0	10.0	22	8	ST7469 080
100	125	125	140	125	10.0	12.5	21	10	ST7469 100

Active
elements

Spring
elements

Nitrogen
systems

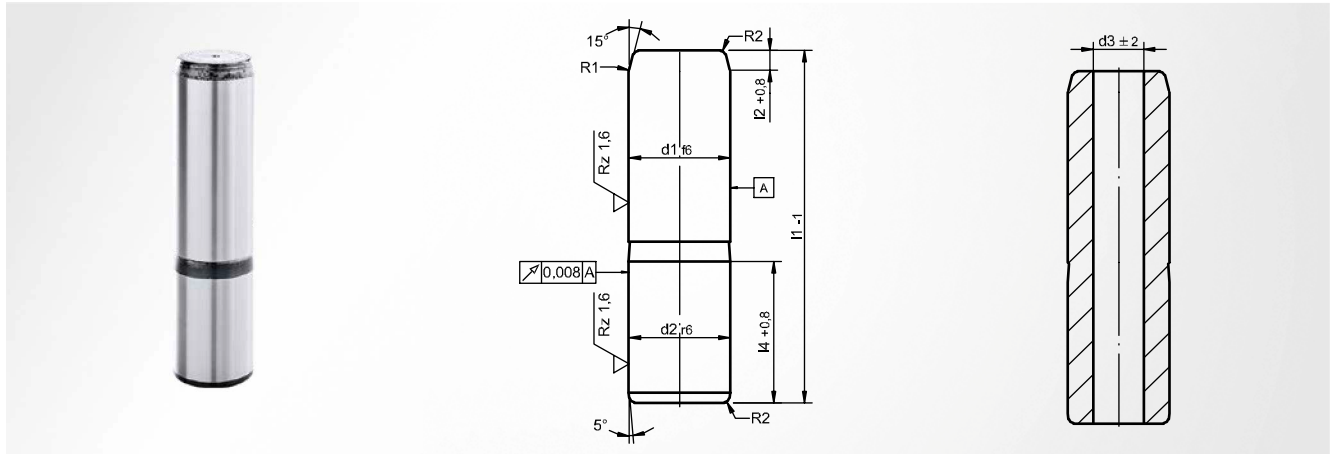
Tapping
units

Maschine
elements

Accessories

ST9833 Guide pillar for industrial tool making

STEINEL®



Referring to DIN 9833

Material

Steel 1.1221 (C60E); inductively hardened

Hardness

62 ±2 HRC

Installation instruction

one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO H7

Attention

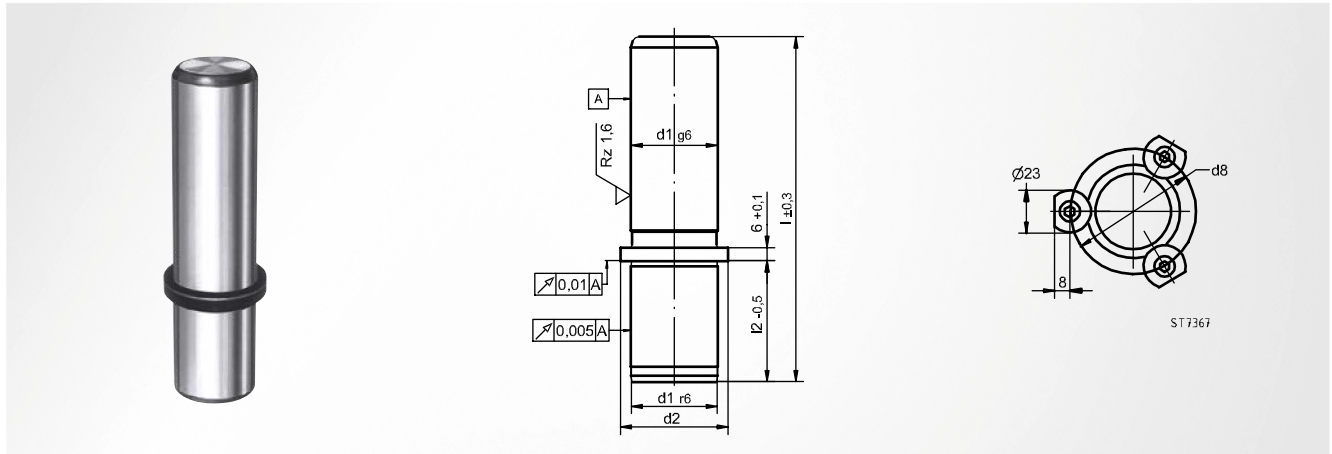
Use for sliding guide only

$d_1^{f_6}$	$d_2^{r_6}$	$d_3^{\pm 2}$	$l_2^{+0.8}$	$l_4^{+0.8}$	r_1	r_2	l_1^{-1}	Item number
25	25		8	40	3	2.0	125	ST9833 025 x 125
							140	ST9833 025 x 140
							160	ST9833 025 x 160
							180	ST9833 025 x 180
							200	ST9833 025 x 200
							224	ST9833 025 x 224
32	32		8	45	3	2.0	140	ST9833 032 x 140
							160	ST9833 032 x 160
							180	ST9833 032 x 180
							200	ST9833 032 x 200
							224	ST9833 032 x 224
							250	ST9833 032 x 250
40	40		8	56	3	2.0	140	ST9833 040 x 140
							160	ST9833 040 x 160
							180	ST9833 040 x 180
							200	ST9833 040 x 200
							224	ST9833 040 x 224
							250	ST9833 040 x 250
							280	ST9833 040 x 280
50	50		10	70	5	2.5	160	ST9833 050 x 160
							180	ST9833 050 x 180
							200	ST9833 050 x 200
							224	ST9833 050 x 224
							250	ST9833 050 x 250
							280	ST9833 050 x 280
							315	ST9833 050 x 315
							355	ST9833 050 x 355
63	63		10	80	6	2.5	180	ST9833 063 x 180
							200	ST9833 063 x 200
							224	ST9833 063 x 224

d_1^{f6}	d_2^{r6}	$d_3^{\pm 2}$	$l_2^{+0.8}$	$l_4^{+0.8}$	r_1	r_2	l_1^{-1}	Item number
63	63		10	80	6	2.5	250	ST9833 063 x 250
							280	ST9833 063 x 280
							315	ST9833 063 x 315
							355	ST9833 063 x 355
							400	ST9833 063 x 400
80	80	40	100	8	3.0	200	ST9833 080 x 200	
						224	ST9833 080 x 224	
						250	ST9833 080 x 250	
						280	ST9833 080 x 280	
						315	ST9833 080 x 315	
						355	ST9833 080 x 355	
						400	ST9833 080 x 400	
						450	ST9833 080 x 450	
100	100	50	125	10	3.0	224	ST9833 100 x 224	
						250	ST9833 100 x 250	
						280	ST9833 100 x 280	
						315	ST9833 100 x 315	
						355	ST9833 100 x 355	
						400	ST9833 100 x 400	
						450	ST9833 100 x 450	
125	125	65	140	12	4.0	315	ST9833 125 x 315	
						355	ST9833 125 x 355	
						400	ST9833 125 x 400	
						450	ST9833 125 x 450	
						500	ST9833 125 x 500	
160	160	95	180	18	4.0	400	ST9833 160 x 400	
						450	ST9833 160 x 450	
						500	ST9833 160 x 500	
						560	ST9833 160 x 560	

ST9825 Guide pillar

for industrial tool making, with shoulder



Material

Steel 1.1221 (C60E); inductively hardened

Hardness

63 ±1 HRC

Installation instruction

Fixing with 3 holding clamps; one-sided entry chamfer or centring attachment

Note

Pillars from diameter 80 with thread M12 x 18

Installation in mounting bore

ISO H7

Scope of supply

ST7367

Attention

Use for sliding guide only

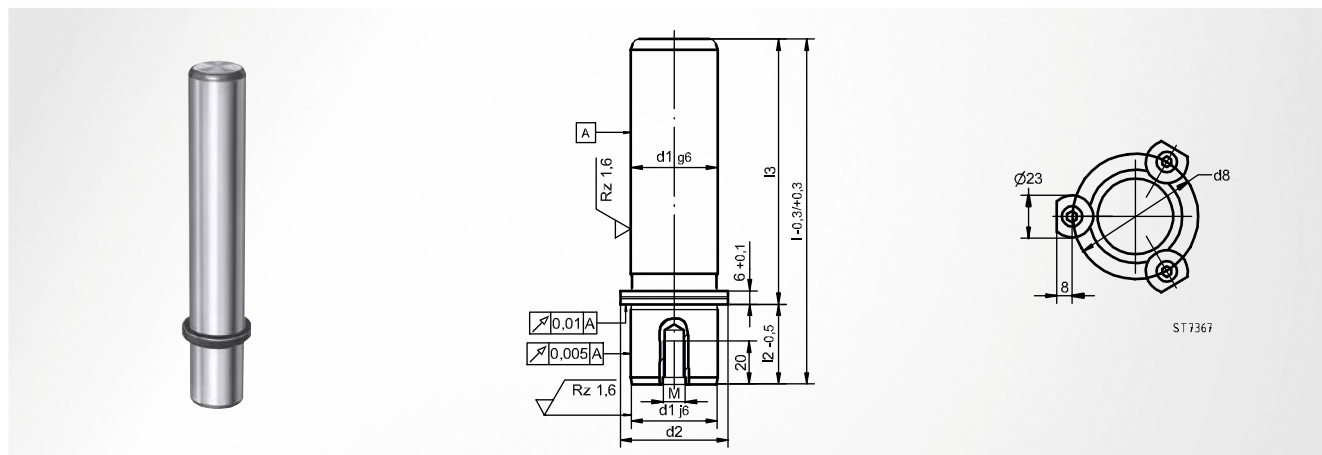
d_1^{g6}	d_2	d_8	$l_2^{-0.5}$	$l \pm 0.3$	Item number
25	32	49	40	125	ST9825 025 x 125
				140	ST9825 025 x 140
				160	ST9825 025 x 160
				180	ST9825 025 x 180
				200	ST9825 025 x 200
				224	ST9825 025 x 224
32	40	57	45	140	ST9825 032 x 140
				160	ST9825 032 x 160
				180	ST9825 032 x 180
				200	ST9825 032 x 200
				224	ST9825 032 x 224
				250	ST9825 032 x 250
40	50	67	56	160	ST9825 040 x 160
				180	ST9825 040 x 180
				200	ST9825 040 x 200
				224	ST9825 040 x 224
				250	ST9825 040 x 250
				280	ST9825 040 x 280
50	63	80	70	180	ST9825 050 x 180
				200	ST9825 050 x 200

d_1^{g6}	d_2	d_8	$l_2^{-0.5}$	$l \pm 0.3$	Item number
50	63	80	70	224	ST9825 050 x 224
				250	ST9825 050 x 250
				280	ST9825 050 x 280
				315	ST9825 050 x 315
				355	ST9825 050 x 355
63	80	97	80	200	ST9825 063 x 200
				224	ST9825 063 x 224
				250	ST9825 063 x 250
				280	ST9825 063 x 280
				315	ST9825 063 x 315
				355	ST9825 063 x 355
80	100	117	100	224	ST9825 080 x 224
				250	ST9825 080 x 250
				280	ST9825 080 x 280
				315	ST9825 080 x 315
				355	ST9825 080 x 355
100	125	142	125	400	ST9825 080 x 400
				280	ST9825 100 x 280
				315	ST9825 100 x 315
				355	ST9825 100 x 355
				400	ST9825 100 x 400

ST9827 Guide pillar

with shoulder

STEINEL®



Material

Steel 1.1221 (C60E); inductively hardened

Hardness

63 ±1 HRC

Installation instruction

Fixing with 3 holding clamps; one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO H6

Scope of supply

ST7367

Optional accessories

ST7387

Attention

Use for sliding guide only

d_1^{g6}	d_2	d_8	$l_2^{-0.5}$	M	$l \pm 0.3$	l_3	Item number
15	21	38	20	M8	115	95	ST9827 15 x 115
					125	105	ST9827 15 x 125
					140	120	ST9827 15 x 140
					160	140	ST9827 15 x 160
					180	160	ST9827 15 x 180
					200	180	ST9827 15 x 200
					224	204	ST9827 15 x 224
16	21	38	20	M8	115	95	ST9827 16 x 115
					125	105	ST9827 16 x 125
					140	120	ST9827 16 x 140
					160	140	ST9827 16 x 160
					180	160	ST9827 16 x 180
					200	180	ST9827 16 x 200
19	25	42	23	M8	115	92	ST9827 19 x 115
					125	102	ST9827 19 x 125
					140	117	ST9827 19 x 140
					160	137	ST9827 19 x 160
					180	157	ST9827 19 x 180
					200	177	ST9827 19 x 200
20	25	42	23	M8	115	92	ST9827 20 x 115
					125	102	ST9827 20 x 125
					140	117	ST9827 20 x 140
					160	137	ST9827 20 x 160
					180	157	ST9827 20 x 180
					200	177	ST9827 20 x 200
24	32	49	27	M8	115	92	ST9827 20 x 115
					125	102	ST9827 20 x 125
					140	117	ST9827 20 x 140
					160	137	ST9827 20 x 160
					180	157	ST9827 20 x 180
					200	177	ST9827 20 x 200

d_1^{g6}	d_2	d_8	$l_2^{-0.5}$	M	$l \pm 0.3$	l_3	Item number
24	32	49	27	M8	140	113	ST9827 24 x 140
					160	133	ST9827 24 x 160
					180	153	ST9827 24 x 180
					200	173	ST9827 24 x 200
					224	197	ST9827 24 x 224
					250	223	ST9827 24 x 250
					280	253	ST9827 24 x 280
25	32	49	27	M8	315	288	ST9827 24 x 315
					125	98	ST9827 25 x 125
					140	113	ST9827 25 x 140
					160	133	ST9827 25 x 160
					180	153	ST9827 25 x 180
					200	173	ST9827 25 x 200
					224	197	ST9827 25 x 224
30	40	57	37	M8	250	223	ST9827 25 x 250
					280	253	ST9827 25 x 280
					315	288	ST9827 25 x 315
					140	103	ST9827 30 x 140
					160	123	ST9827 30 x 160
					180	143	ST9827 30 x 180
					200	163	ST9827 30 x 200
32	40	57	37	M8	224	187	ST9827 30 x 224
					250	213	ST9827 30 x 250
					280	243	ST9827 30 x 280
					315	278	ST9827 30 x 315
					355	318	ST9827 30 x 355
					140	103	ST9827 32 x 140
					160	123	ST9827 32 x 160
200	163	200	180	200	180	143	ST9827 32 x 180
					224	187	ST9827 32 x 224
					250	213	ST9827 32 x 250

with shoulder

d_1^{g6}	d_2	d_8	$l_2^{-0.5}$	M	$l_{\pm 0.3}$	l_3	Item number
32	40	57	37	M8	250	213	ST9827 32 x 250
					280	243	ST9827 32 x 280
					315	278	ST9827 32 x 315
					355	318	ST9827 32 x 355
38	50	67	37	M10	160	123	ST9827 38 x 160
					180	143	ST9827 38 x 180
					200	163	ST9827 38 x 200
					224	187	ST9827 38 x 224
					250	213	ST9827 38 x 250
					280	243	ST9827 38 x 280
					315	278	ST9827 38 x 315
40	50	67	37	M10	355	318	ST9827 38 x 355
					400	363	ST9827 38 x 400
					160	123	ST9827 40 x 160
					180	143	ST9827 40 x 180
					200	163	ST9827 40 x 200
48	63	80	47	M10	224	187	ST9827 40 x 224
					250	213	ST9827 40 x 250
					280	243	ST9827 40 x 280
					315	278	ST9827 40 x 315
					355	318	ST9827 40 x 355
					400	363	ST9827 40 x 400
					180	133	ST9827 48 x 180
48	63	80	47	M10	200	153	ST9827 48 x 200
					224	177	ST9827 48 x 224
					250	203	ST9827 48 x 250
					280	233	ST9827 48 x 280
					315	268	ST9827 48 x 315
					355	308	ST9827 48 x 355
					400	353	ST9827 48 x 400
48	63	80	47	M10	450	403	ST9827 48 x 450

d_1^{g6}	d_2	d_8	$l_2^{-0.5}$	M	$l_{\pm 0.3}$	l_3	Item number
50	63	80	47	M10	180	133	ST9827 50 x 180
					200	153	ST9827 50 x 200
					224	177	ST9827 50 x 224
					250	203	ST9827 50 x 250
					280	233	ST9827 50 x 280
					315	268	ST9827 50 x 315
					355	308	ST9827 50 x 355
					400	353	ST9827 50 x 400
60	80	97	47	M12	450	403	ST9827 50 x 450
					224	177	ST9827 60 x 224
					250	203	ST9827 60 x 250
					280	233	ST9827 60 x 280
					315	268	ST9827 60 x 315
					355	308	ST9827 60 x 355
					400	353	ST9827 60 x 400
63	80	97	47	M12	450	403	ST9827 60 x 450
					224	177	ST9827 63 x 224
					250	203	ST9827 63 x 250
					280	233	ST9827 63 x 280
					315	268	ST9827 63 x 315
80	95	112	60	M12	355	308	ST9827 63 x 355
					400	353	ST9827 63 x 400
					450	403	ST9827 63 x 450
					280	220	ST9827 80 x 280
					315	255	ST9827 80 x 315
80	95	112	60	M12	355	295	ST9827 80 x 355
					400	340	ST9827 80 x 400
					450	390	ST9827 80 x 450
					500	440	ST9827 80 x 500
					560	500	ST9827 80 x 560

Active
elements

Spring
elements

Nitrogen
systems

Tapping
units

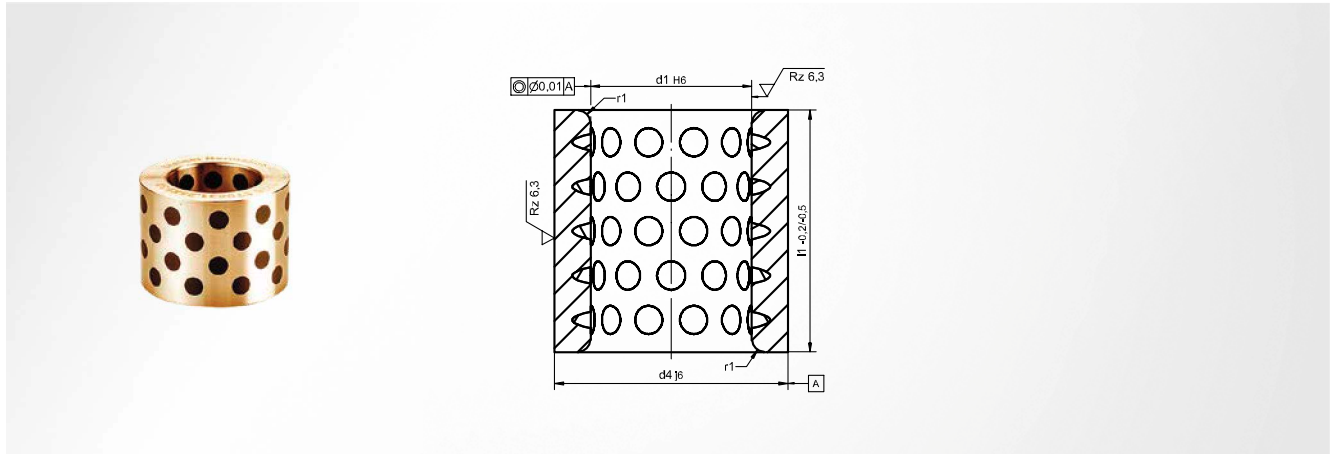
Maschine
elements

Accessories

ST9831 Guide bush



smooth, Sliding guide with solid lubricant



Material

Bronze (CuSn8/CuZn25Al5); with solid lubricant insert

Installation in mounting bore

ISO G6

Installation instruction

Secure with adhesive; do not press in; one-sided entry chamfer or centring attachment

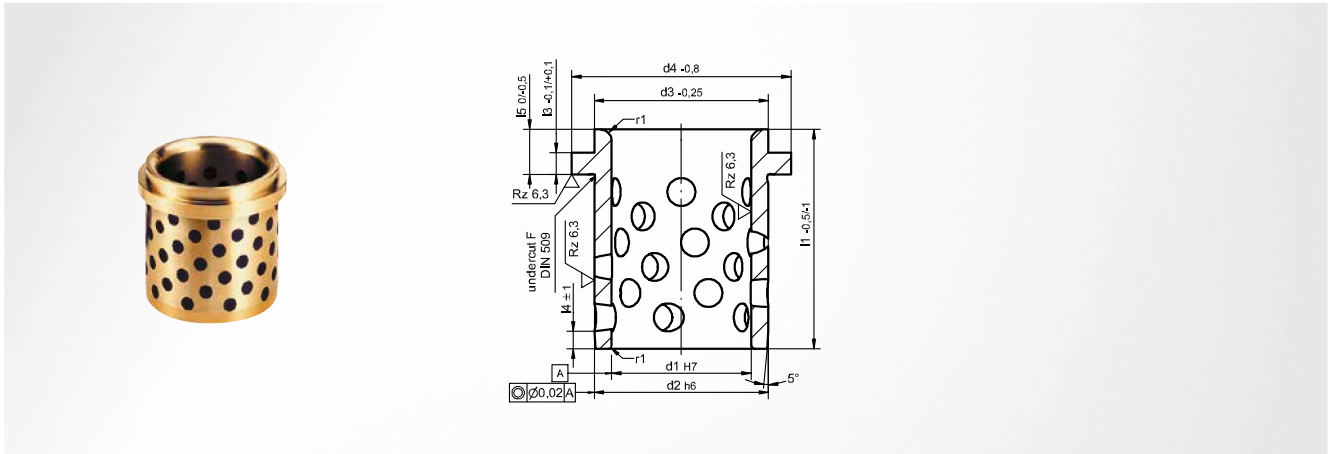
Optional accessories

SZ9742

d_1^{H6}	d_4^{j6}	r_1	$l_1^{-0.2 - -0.5}$	Item number
25	40	3	23	ST9831 25 x 023
			30	ST9831 25 x 030
			37	ST9831 25 x 037
			47	ST9831 25 x 047
			60	ST9831 25 x 060
			77	ST9831 25 x 077
32	48	3	30	ST9831 32 x 030
			37	ST9831 32 x 037
			47	ST9831 32 x 047
			60	ST9831 32 x 060
			77	ST9831 32 x 077
40	58	3	95	ST9831 32 x 095
			30	ST9831 40 x 030
			37	ST9831 40 x 037
			47	ST9831 40 x 047
			60	ST9831 40 x 060

d_1^{H6}	d_4^{j6}	r_1	$l_1^{-0.2 - -0.5}$	Item number
40	58	3	77	ST9831 40 x 077
			95	ST9831 40 x 095
			120	ST9831 40 x 120
50	70	5	37	ST9831 50 x 037
			47	ST9831 50 x 047
			60	ST9831 50 x 060
			77	ST9831 50 x 077
			95	ST9831 50 x 095
63	85	6	120	ST9831 50 x 120
			60	ST9831 63 x 060
			77	ST9831 63 x 077
			95	ST9831 63 x 095
80	105	8	120	ST9831 63 x 120
			120	ST9831 80 x 120
			135	ST9831 80 x 135

Sliding guide with solid lubricant, with shoulder



Referring to DIN 9834

Material

Bronze (CuSn8/CuZn25Al5); with solid lubricant insert

Installation instruction

Fixing with 2 holding clamps (not included in the scope of delivery); one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO H7

Optional accessories

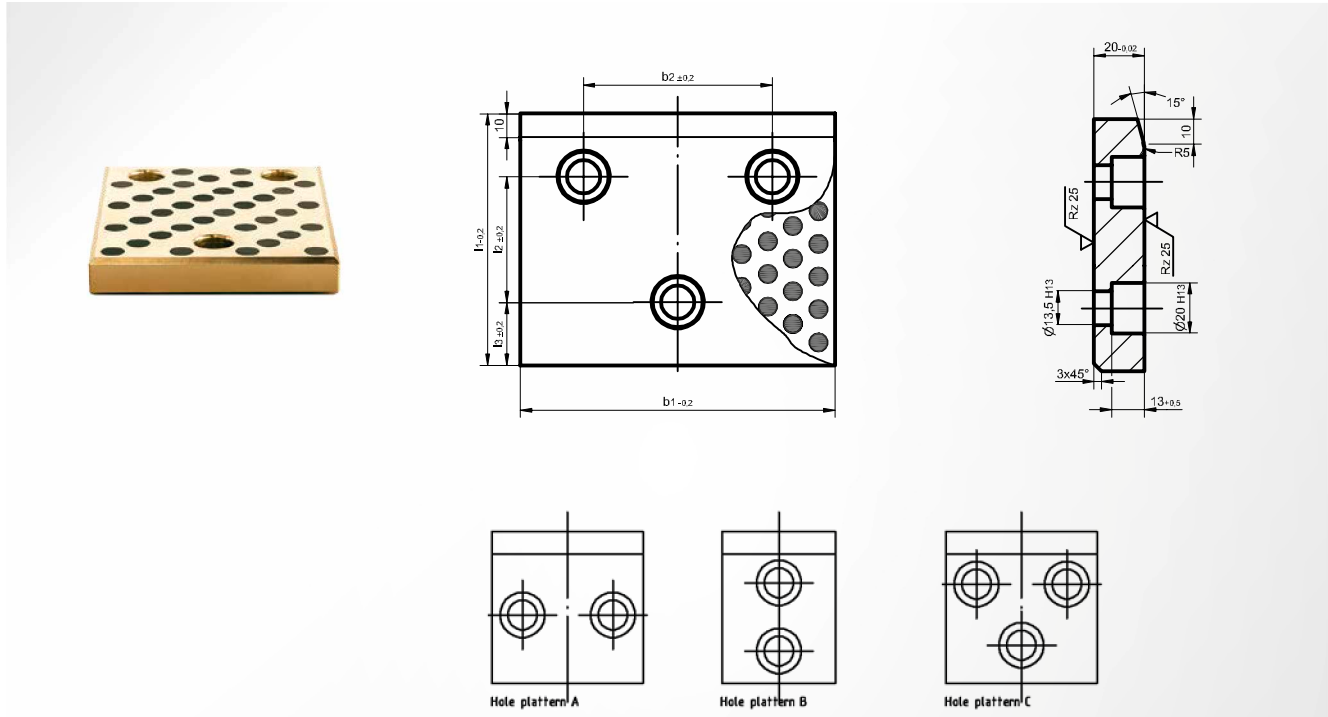
ST7377

d_1^{H7}	d_2^{h6}	$d_3^{0-0.25}$	$d_4^{0-0.8}$	$l_1^{-0.5 - -1}$	$l_3^{\pm 0.1}$	$l_4^{\pm 1}$	$l_5^{0 - -0.5}$	r_1	Item number
25	32	32	40	40	6.3	3.0	10	3	ST9834 025
32	40	40	50	50	6.3	4.0	12	3	ST9834 032
40	50	50	63	63	6.3	5.0	15	3	ST9834 040
50	63	63	71	71	6.3	6.3	17	5	ST9834 050
63	80	80	90	80	10.0	8.0	19	6	ST9834 063
80	100	100	112	100	10.0	10.0	22	8	ST9834 080
100	125	125	140	125	10.0	12.5	21	10	ST9834 100
125	160	160	180	160	10.0	16.0	30	12	ST9834 125
160	200	200	220	200	10.0	16.0	32	18	ST9834 160

ST7571 Guide plate

with solid lubricant, Solid bronze

STEINEL®



Referring to VDI 3357

Material

Bronze WF 750 1A

Installation instruction

Fixing with socket screws DIN EN ISO 4762

Optional accessories

SZ8510

$b_1^{-0.2}$	$b_2^{\pm 0.2}$	$l_1^{-0.2}$	$l_2^{\pm 0.2}$	$l_3^{\pm 0.2}$	Hole pattern	Screw	Item number
50		80	30	25	B	M8 x 25	ST7571 050 x 080
		100	50	25	B	M12 x 25	ST7571 050 x 100
		125	75	25	B	M12 x 25	ST7571 050 x 125
		160	110	25	B	M12 x 25	ST7571 050 x 160
		200	150	25	B	M12 x 25	ST7571 050 x 200
80	30	50		25	A	M8 x 25	ST7571 080 x 050
		80	30	25	B	M12 x 25	ST7571 080 x 080
		100	50	25	B	M12 x 25	ST7571 080 x 100
		125	75	25	B	M12 x 25	ST7571 080 x 125
		160	110	25	B	M12 x 25	ST7571 080 x 160
		200	150	25	B	M12 x 25	ST7571 080 x 200
100	50	50		25	A	M12 x 25	ST7571 100 x 050
		80		40	A	M12 x 25	ST7571 100 x 080
		100	50	25	B	M12 x 25	ST7571 100 x 100
		125	75	25	B	M12 x 25	ST7571 100 x 125
		160	110	25	B	M12 x 25	ST7571 100 x 160
		200	150	25	B	M12 x 25	ST7571 100 x 200
125	75	50		25	A	M12 x 25	ST7571 125 x 050
		80		40	A	M12 x 25	ST7571 125 x 080
		100	50	25	C	M12 x 25	ST7571 125 x 100
		125	75	25	C	M12 x 25	ST7571 125 x 125
		160	110	25	C	M12 x 25	ST7571 125 x 160
		200	150	25	C	M12 x 25	ST7571 125 x 200
160	110	50		25	A	M12 x 25	ST7571 160 x 050
		80		40	A	M12 x 25	ST7571 160 x 080
		100	50	25	C	M12 x 25	ST7571 160 x 100
		125	75	25	C	M12 x 25	ST7571 160 x 125

ST7571 Guide plate

with solid lubricant, Solid bronze

$b_1^{-0.2}$	$b_2^{\pm 0.2}$	$l_1^{-0.2}$	$l_2^{\pm 0.2}$	$l_3^{\pm 0.2}$	Hole pattern	Screw	Item number
160	110	160	110	25	C	M12 x 25	ST7571 160 x 160
	110	200	150	25	C	M12 x 25	ST7571 160 x 200

Active
elements

Spring
elements

Nitrogen
systems

Tapping
units

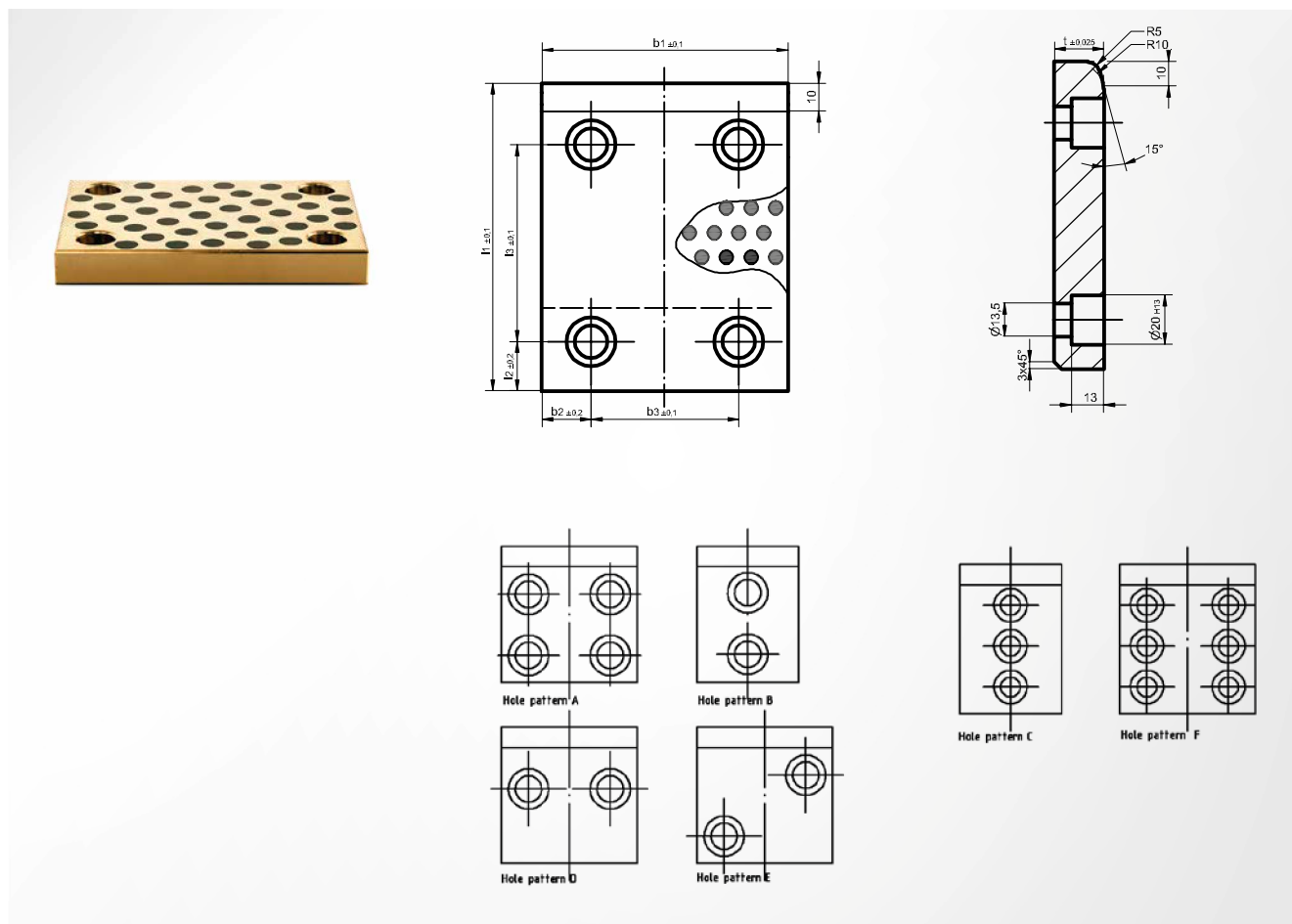
Maschine
elements

Accessories

ST7561 Guided plate

with solid lubricant, Solid bronze

STEINEL®



Referring to ISO 9183

Material

Bronze WF 750 1A

Installation instruction

Fixing with socket screws DIN EN ISO 4762

Optional accessories

SZ8510

$b_1 \pm 0.1$	$b_2 \pm 0.2$	$t \pm 0.025$	$b_3 \pm 0.1$	$l_1 \pm 0.1$	$l_2 \pm 0.2$	$l_3 \pm 0.1$	Hole pattern	Screw	Item number
50	25	20		80	20	35	B	M12 x 25	ST7561 050 x 080 x 20
				100	20	55	B	M12 x 25	ST7561 050 x 100 x 20
				125	20	80	B	M12 x 25	ST7561 050 x 125 x 20
				160	20	115	B	M12 x 25	ST7561 050 x 160 x 20
				200	20	155	B	M12 x 25	ST7561 050 x 200 x 20
				250	20	100	C	M12 x 25	ST7561 050 x 250 x 20
80	20	20	40	50	25		D	M12 x 25	ST7561 080 x 050 x 20
			40	80	20	35	E	M12 x 25	ST7561 080 x 080 x 20
			40	100	20	55	E	M12 x 25	ST7561 080 x 100 x 20
			40	125	20	80	E	M12 x 25	ST7561 080 x 125 x 20
			40	160	20	115	A	M12 x 25	ST7561 080 x 160 x 20
			40	200	20	155	A	M12 x 25	ST7561 080 x 200 x 20
			40	250	20	100	F	M12 x 25	ST7561 080 x 250 x 20
			40	315	20	132	F	M12 x 25	ST7561 080 x 315 x 20
100	20	20	60	50	25		D	M12 x 25	ST7561 100 x 050 x 20
			60	80	20	35	E	M12 x 25	ST7561 100 x 080 x 20
			60	100	20	55	E	M12 x 25	ST7561 100 x 100 x 20
			60	125	20	80	A	M12 x 25	ST7561 100 x 125 x 20
			60	160	20	115	A	M12 x 25	ST7561 100 x 160 x 20

ST7561 Guided plate

with solid lubricant, Solid bronze

$b_1 \pm 0.1$	$b_2 \pm 0.2$	$t \pm 0.025$	$b_3 \pm 0.1$	$l_1 \pm 0.1$	$l_2 \pm 0.2$	$l_3 \pm 0.1$	Hole pattern	Screw	Item number
100	20	20	60	200	20	155	A	M12 x 25	ST7561 100 x 200 x 20
			60	250	20	100	F	M12 x 25	ST7561 100 x 250 x 20
			60	315	20	132	F	M12 x 25	ST7561 100 x 315 x 20
125	20	20	85	50	25		D	M12 x 25	ST7561 125 x 050 x 20
			85	80	20	35	E	M12 x 25	ST7561 125 x 080 x 20
			85	100	20	55	A	M12 x 25	ST7561 125 x 100 x 20
			85	125	20	80	A	M12 x 25	ST7561 125 x 125 x 20
			85	160	20	115	A	M12 x 25	ST7561 125 x 160 x 20
			85	200	20	155	A	M12 x 25	ST7561 125 x 200 x 20
			85	250	20	100	F	M12 x 25	ST7561 125 x 250 x 20
			85	315	20	132	F	M12 x 25	ST7561 125 x 315 x 20
160	20	20	120	50	25		D	M12 x 25	ST7561 160 x 050 x 20
			120	80	20	35	A	M12 x 25	ST7561 160 x 080 x 20
			120	100	20	55	A	M12 x 25	ST7561 160 x 100 x 20
			120	125	20	80	A	M12 x 25	ST7561 160 x 125 x 20
			120	160	20	115	A	M12 x 25	ST7561 160 x 160 x 20
			120	200	20	155	A	M12 x 25	ST7561 160 x 200 x 20
			120	250	20	100	F	M12 x 25	ST7561 160 x 250 x 20
			120	315	20	132	F	M12 x 25	ST7561 160 x 315 x 20

Active
elements

Spring
elements

Nitrogen
systems

Tapping
units

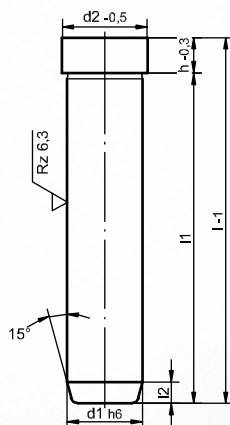
Maschine
elements

Accessories

ST7111 Guide pillar

STEINEL®

smooth, with head



Referring to ISO 9182

Installation in mounting bore

ISO N7; ISO H7

Material

Steel 1.1221 (C60E); inductively hardened

Attention

Use for sliding guide only

Hardness

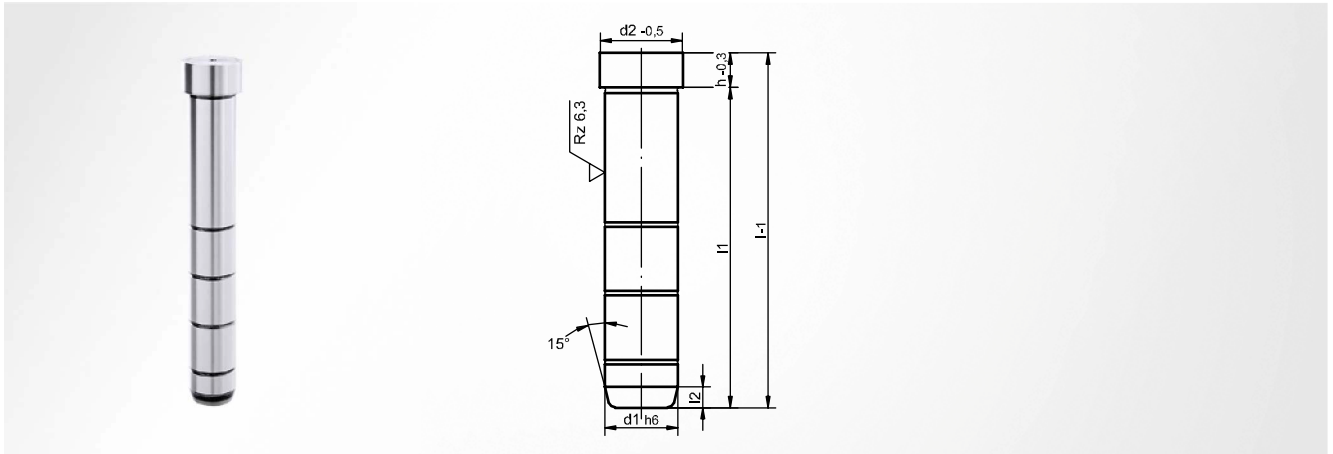
63 ±1 HRC

d_1^{h6}	$d_2^{-0.5}$	$h^{-0.3}$	l_2	l_1	Item number
10	14	6	5	66	ST7111 10 x 060
				86	ST7111 10 x 080
				106	ST7111 10 x 100
				131	ST7111 10 x 125
12	16	6	5	66	ST7111 12 x 060
				86	ST7111 12 x 080
				106	ST7111 12 x 100
				131	ST7111 12 x 125
15	20	8	7	166	ST7111 12 x 160
				88	ST7111 15 x 080
				108	ST7111 15 x 100
				133	ST7111 15 x 125
16	20	8	8	168	ST7111 15 x 160
				208	ST7111 15 x 200
				88	ST7111 16 x 080
				108	ST7111 16 x 100
19	24	8	8	133	ST7111 16 x 125
				168	ST7111 16 x 160
				208	ST7111 16 x 200
				88	ST7111 19 x 080
				108	ST7111 19 x 100
				133	ST7111 19 x 125
				168	ST7111 19 x 160
				188	ST7111 19 x 180
				228	ST7111 19 x 220

d_1^{h6}	$d_2^{-0.5}$	$h^{-0.3}$	l_2	l_1	Item number
20	24	8	8	88	ST7111 20 x 080
				108	ST7111 20 x 100
				133	ST7111 20 x 125
				168	ST7111 20 x 160
				188	ST7111 20 x 180
				228	ST7111 20 x 220
24	30	15	8	115	ST7111 20 x 240
				140	ST7111 24 x 100
				175	ST7111 24 x 125
				215	ST7111 24 x 160
25	30	15	8	255	ST7111 24 x 200
				115	ST7111 24 x 240
				140	ST7111 25 x 100
				175	ST7111 25 x 125
30	36	15	9	215	ST7111 25 x 160
				255	ST7111 25 x 200
				155	ST7111 25 x 240
				195	ST7111 30 x 140
32	36	15	9	195	ST7111 30 x 180
				235	ST7111 30 x 220
				275	ST7111 30 x 260
				155	ST7111 32 x 140
				195	ST7111 32 x 180
				235	ST7111 32 x 220
				275	ST7111 32 x 260

ST7112 Guide pillar

with head, oil grooves



Referring to ISO 9182

Material

Steel 1.1221 (C60E); inductively hardened

Hardness

63 ±1 HRC

Installation in mounting bore

ISO N7; ISO H7

Attention

Use for sliding guide only

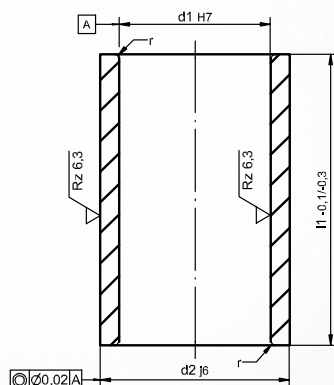
d_1^{h6}	$d_2^{-0.5}$	$h^{-0.3}$	l_2	l^{-1}	l_1	Item number
10	14	6	5	66	60	ST7112 10 x 060
				86	80	ST7112 10 x 080
				106	100	ST7112 10 x 100
				131	125	ST7112 10 x 125
12	16	6	5	66	60	ST7112 12 x 060
				86	80	ST7112 12 x 080
				106	100	ST7112 12 x 100
				131	125	ST7112 12 x 125
15	20	8	7	166	160	ST7112 12 x 160
				88	80	ST7112 15 x 080
				108	100	ST7112 15 x 100
				133	125	ST7112 15 x 125
16	20	8	8	168	160	ST7112 15 x 160
				208	200	ST7112 15 x 200
				88	80	ST7112 16 x 080
				108	100	ST7112 16 x 100
19	24	8	8	133	125	ST7112 16 x 125
				168	160	ST7112 16 x 160
				208	200	ST7112 16 x 200
				88	80	ST7112 19 x 080
				108	100	ST7112 19 x 100
				133	125	ST7112 19 x 125
				168	160	ST7112 19 x 160
				188	180	ST7112 19 x 180
				228	220	ST7112 19 x 220

d_1^{h6}	$d_2^{-0.5}$	$h^{-0.3}$	l_2	l^{-1}	l_1	Item number
20	24	8	8	88	80	ST7112 20 x 080
				108	100	ST7112 20 x 100
				133	125	ST7112 20 x 125
				168	160	ST7112 20 x 160
24	30	15	8	188	180	ST7112 20 x 180
				228	220	ST7112 20 x 220
				115	100	ST7112 24 x 100
				140	125	ST7112 24 x 125
25	30	15	8	175	160	ST7112 24 x 160
				215	200	ST7112 24 x 200
				255	240	ST7112 24 x 240
				115	100	ST7112 25 x 100
30	36	15	9	140	125	ST7112 25 x 125
				175	160	ST7112 25 x 160
				215	200	ST7112 25 x 200
				255	240	ST7112 25 x 240
32	36	15	9	155	140	ST7112 30 x 140
				195	180	ST7112 30 x 180
				235	220	ST7112 30 x 220
				275	260	ST7112 30 x 260
				155	140	ST7112 32 x 140
				195	180	ST7112 32 x 180
				235	220	ST7112 32 x 220
				275	260	ST7112 32 x 260

ST7361 Guide bush

STEINEL®

smooth, Solid bronze



Material

Bronze (CuSn8/CuZn25Al5)

Installation in mounting bore

ISO G6

Installation instruction

Secure with adhesive; do not press in; one-sided entry chamfer or centring attachment

Optional accessories

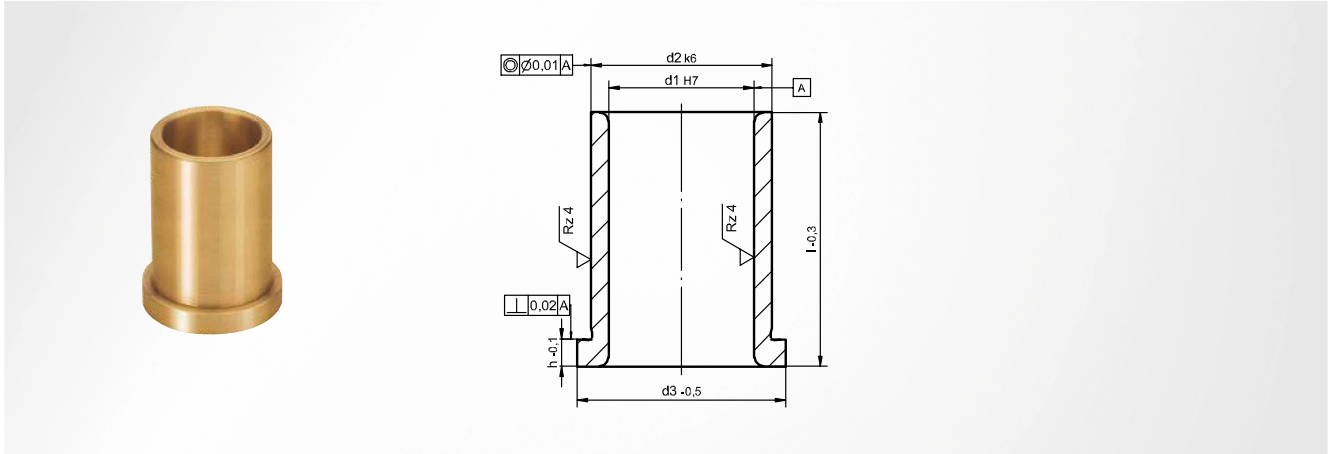
SZ9742

d_1^{H7}	d_2^{j6}	r	$l_1^{-0.1/-0.3}$	Item number
8	12	0.50	10	ST7361 08 x 010
			15	ST7361 08 x 015
			20	ST7361 08 x 020
10	16	0.50	10	ST7361 10 x 010
			15	ST7361 10 x 015
			23	ST7361 10 x 023
			30	ST7361 10 x 030
12	18	0.50	37	ST7361 10 x 037
			10	ST7361 12 x 010
			15	ST7361 12 x 015
			23	ST7361 12 x 023
15	21	0.75	30	ST7361 12 x 030
			37	ST7361 12 x 037
			15	ST7361 15 x 015
			23	ST7361 15 x 023
16	22	0.75	30	ST7361 15 x 030
			37	ST7361 15 x 037
			47	ST7361 15 x 047
			15	ST7361 16 x 015
19	26	0.75	23	ST7361 16 x 023
			30	ST7361 16 x 030
			37	ST7361 16 x 037
			47	ST7361 16 x 047
20	28	0.75	23	ST7361 19 x 023
			30	ST7361 19 x 030
			37	ST7361 19 x 037
			47	ST7361 19 x 047
			60	ST7361 19 x 060
			23	ST7361 20 x 023
			30	ST7361 20 x 030
			37	ST7361 20 x 037
			47	ST7361 20 x 047

d_1^{H7}	d_2^{j6}	r	$l_1^{-0.1/-0.3}$	Item number
20	28	0.75	60	ST7361 20 x 060
24	32	0.75	23	ST7361 24 x 023
			30	ST7361 24 x 030
			37	ST7361 24 x 037
			47	ST7361 24 x 047
25	33	0.75	60	ST7361 24 x 060
			23	ST7361 25 x 023
			30	ST7361 25 x 030
			37	ST7361 25 x 037
30	38	1.00	47	ST7361 25 x 047
			60	ST7361 25 x 060
			23	ST7361 30 x 023
			30	ST7361 30 x 030
32	40	1.00	37	ST7361 30 x 037
			47	ST7361 30 x 047
			60	ST7361 30 x 060
			23	ST7361 32 x 023
38	48	1.00	30	ST7361 32 x 030
			37	ST7361 32 x 037
			47	ST7361 32 x 047
			60	ST7361 32 x 060
40	50	1.00	30	ST7361 38 x 030
			37	ST7361 38 x 037
			47	ST7361 38 x 047
			60	ST7361 38 x 060
			77	ST7361 38 x 077
			30	ST7361 40 x 030
			37	ST7361 40 x 037
			47	ST7361 40 x 047
			60	ST7361 40 x 060
			77	ST7361 40 x 077

ST7360 Guide bush

with shoulder, Solid bronze



Referring to DIN 16716 / ISO 8018

Material

Bronze (CuSn8/CuZn25Al5)

Installation instruction

one-sided entry chamfer or centring attachment

Installation in mounting bore

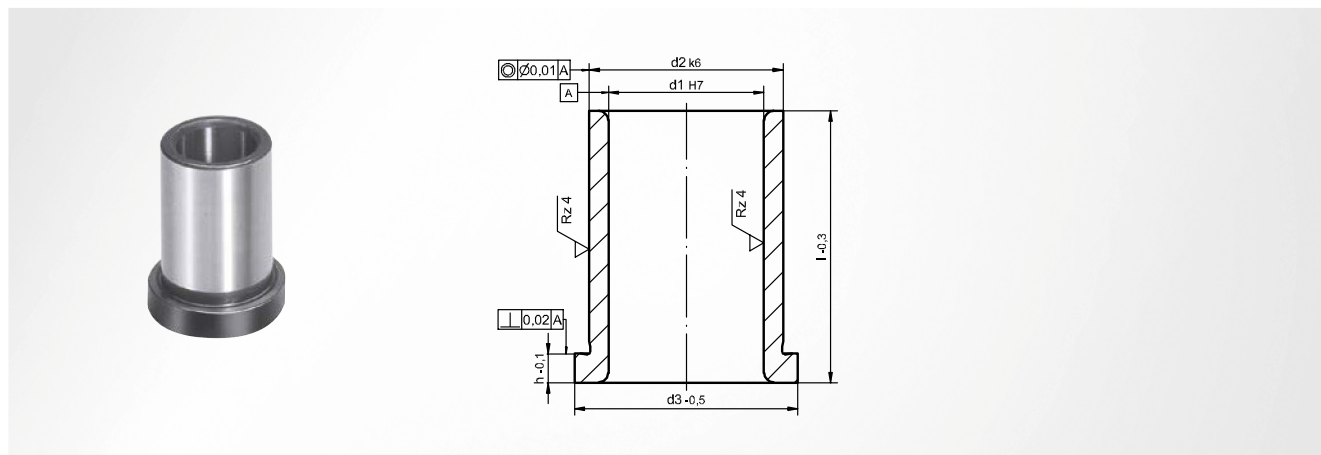
ISO H7

d_1^{H7}	d_2^{k6}	$d_3^{-0.5}$	$h^{-0.1}$	$l^{-0.3}$	Item number
10	16	20	3.5	12	ST7360 16.10 x 012
				17	ST7360 16.10 x 017
				22	ST7360 16.10 x 022
				27	ST7360 16.10 x 027
				36	ST7360 16.10 x 036
12	16	20	3.5	12	ST7360 16.12 x 012
				17	ST7360 16.12 x 017
				22	ST7360 16.12 x 022
				27	ST7360 16.12 x 027
				36	ST7360 16.12 x 036
15	20	25	6.0	17	ST7360 20.15 x 017
				22	ST7360 20.15 x 022
				27	ST7360 20.15 x 027
				36	ST7360 20.15 x 036
				46	ST7360 20.15 x 046
16	20	25	6.0	17	ST7360 20.16 x 017
				22	ST7360 20.16 x 022
				27	ST7360 20.16 x 027
				36	ST7360 20.16 x 036
				46	ST7360 20.16 x 046
19	26	31	6.0	22	ST7360 26.19 x 022

d_1^{H7}	d_2^{k6}	$d_3^{-0.5}$	$h^{-0.1}$	$l^{-0.3}$	Item number
19	26	31	6.0	27	ST7360 26.19 x 027
				36	ST7360 26.19 x 036
				46	ST7360 26.19 x 046
20	26	31	6.0	22	ST7360 26.20 x 022
				27	ST7360 26.20 x 027
				36	ST7360 26.20 x 036
24	30	35	6.0	27	ST7360 30.24 x 027
				36	ST7360 30.24 x 036
				46	ST7360 30.24 x 046
25	30	35	6.0	56	ST7360 30.24 x 056
				27	ST7360 30.25 x 027
				36	ST7360 30.25 x 036
30	40	46	6.0	46	ST7360 30.25 x 046
				56	ST7360 30.25 x 056
				36	ST7360 40.30 x 036
32	40	46	6.0	46	ST7360 40.30 x 046
				56	ST7360 40.30 x 056
				36	ST7360 40.32 x 036
				46	ST7360 40.32 x 046
				56	ST7360 40.32 x 056

ST7366 Guide bush

with shoulder



Referring to DIN 16716 / ISO 8018

Material

Steel 1.7131 (16MnCr5); hardened

Hardness

61 ±1 HRC

Installation instruction

one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO H7

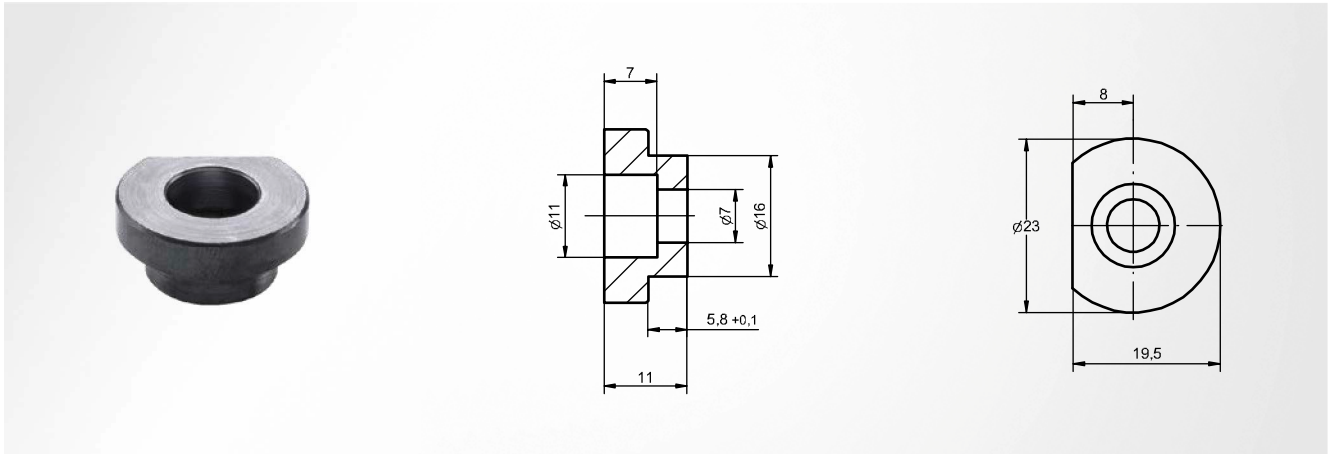
d_1^{H7}	d_2^{k6}	$d_3^{-0.5}$	$h^{-0.1}$	$l^{\pm 0.3}$	Item number
10	16	20	3.5	12	ST7366 16.10 x 012
				17	ST7366 16.10 x 017
				22	ST7366 16.10 x 022
				27	ST7366 16.10 x 027
				36	ST7366 16.10 x 036
12	16	20	3.5	12	ST7366 16.12 x 012
				17	ST7366 16.12 x 017
				22	ST7366 16.12 x 022
				27	ST7366 16.12 x 027
				36	ST7366 16.12 x 036
15	20	25	6.0	17	ST7366 20.15 x 017
				22	ST7366 20.15 x 022
				27	ST7366 20.15 x 027
				36	ST7366 20.15 x 036
				46	ST7366 20.15 x 046
16	20	25	6.0	17	ST7366 20.16 x 017
				22	ST7366 20.16 x 022
				27	ST7366 20.16 x 027
				36	ST7366 20.16 x 036
				46	ST7366 20.16 x 046
19	26	31	6.0	22	ST7366 26.19 x 022

d_1^{H7}	d_2^{k6}	$d_3^{-0.5}$	$h^{-0.1}$	$l^{\pm 0.3}$	Item number
19	26	31	6.0	27	ST7366 26.19 x 027
				36	ST7366 26.19 x 036
				46	ST7366 26.19 x 046
				56	ST7366 26.19 x 056
20	26	31	6.0	22	ST7366 26.20 x 022
				27	ST7366 26.20 x 027
				36	ST7366 26.20 x 036
				46	ST7366 26.20 x 046
24	30	35	6.0	27	ST7366 30.24 x 027
				36	ST7366 30.24 x 036
				46	ST7366 30.24 x 046
				56	ST7366 30.24 x 056
25	30	35	6.0	27	ST7366 30.25 x 027
				36	ST7366 30.25 x 036
				46	ST7366 30.25 x 046
				56	ST7366 30.25 x 056
30	40	46	6.0	36	ST7366 40.30 x 036
				46	ST7366 40.30 x 046
				56	ST7366 40.30 x 056
				66	ST7366 40.30 x 066
32	40	46	6.0	36	ST7366 40.32 x 036
				46	ST7366 40.32 x 046
				56	ST7366 40.32 x 056
				66	ST7366 40.32 x 066

ST7367 Holding clamp

round

STEINEL®



Material

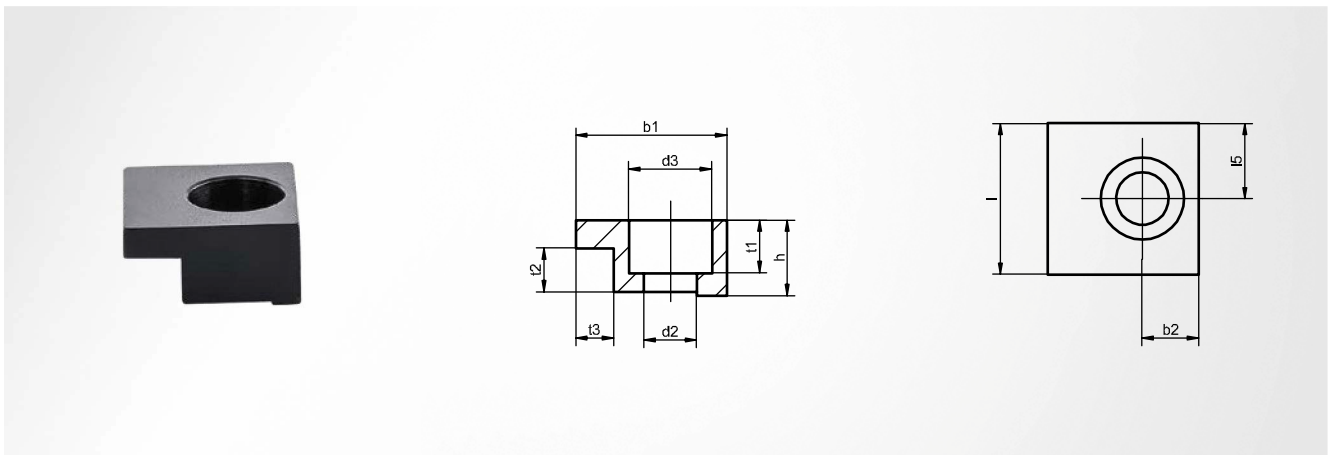
Steel 1.0715 (9SMn28K)

Item number

ST7367

ST7377 Holding clamp

rectangular



Referring to DIN 9832

Optional accessories

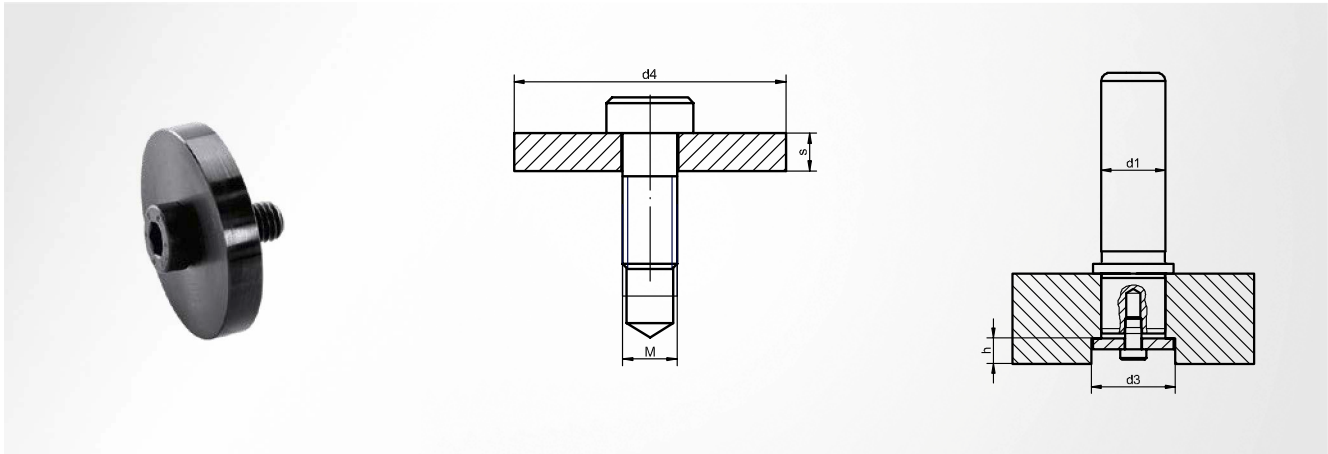
SZ8510

Material

Steel 1.0122

d ₁	d ₂	d ₃	b ₁	b ₂	h	l	l ₅	t ₁	t ₂	t ₃	Screws	Item number
25	7.0	11.0	20	7.5	10	20	10	7.0	6.3	5	M6 x 16	ST7377.01
32	7.0	11.0	20	7.5	10	20	10	7.0	6.3	5	M6 x 16	ST7377.01
40	7.0	11.0	20	7.5	10	20	10	7.0	6.3	5	M6 x 16	ST7377.01
50	7.0	11.0	20	7.5	10	20	10	7.0	6.3	5	M6 x 16	ST7377.01
63	11.5	17.5	32	11.0	16	32	16	11.5	10.0	10	M10 x 25	ST7377.02
80	11.5	17.5	32	11.0	16	32	16	11.5	10.0	10	M10 x 25	ST7377.02
100	11.5	17.5	32	11.0	16	32	16	11.5	10.0	10	M10 x 25	ST7377.02
125	11.5	17.5	32	11.0	16	32	16	11.5	10.0	10	M10 x 25	ST7377.02
160	11.5	17.5	32	11.0	16	32	16	11.5	10.0	10	M10 x 25	ST7377.02

ST7387 Holding disc



Material

Steel 1.0503 (C45)

Scope of supply

SZ8512

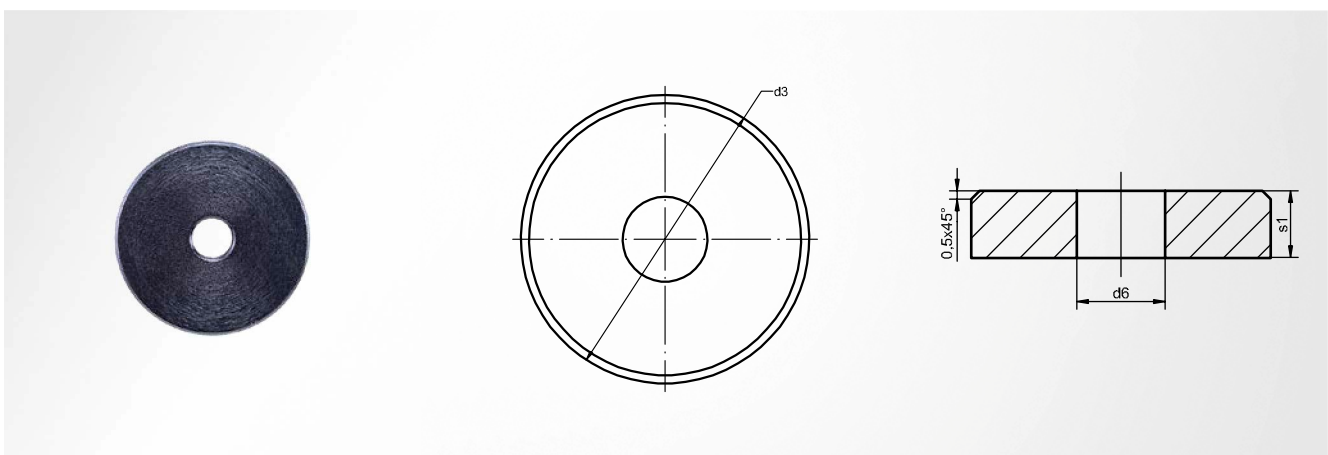
Note

suitable socket screws DIN 6912 included in the scope of delivery

d_1	d_3	d_4	M	s	h_{min}	Item number
15 and 16	23	21	8	6	13	ST7387 16
19 and 20	27	25	8	6	13	ST7387 20
24 and 25	34	32	8	6	13	ST7387 25
30 and 32	42	40	8	7	14	ST7387 32

d_1	d_3	d_4	M	s	h_{min}	Item number
38 and 40	52	50	10	7	16	ST7387 40
48 and 50	62	60	10	8	17	ST7387 50
60 and 63	72	70	12	8	19	ST7387 63
80	98	95	12	10	15	ST7387 80

SZ7368 Holding disc



Material

Steel 1.0727 (45S20K)

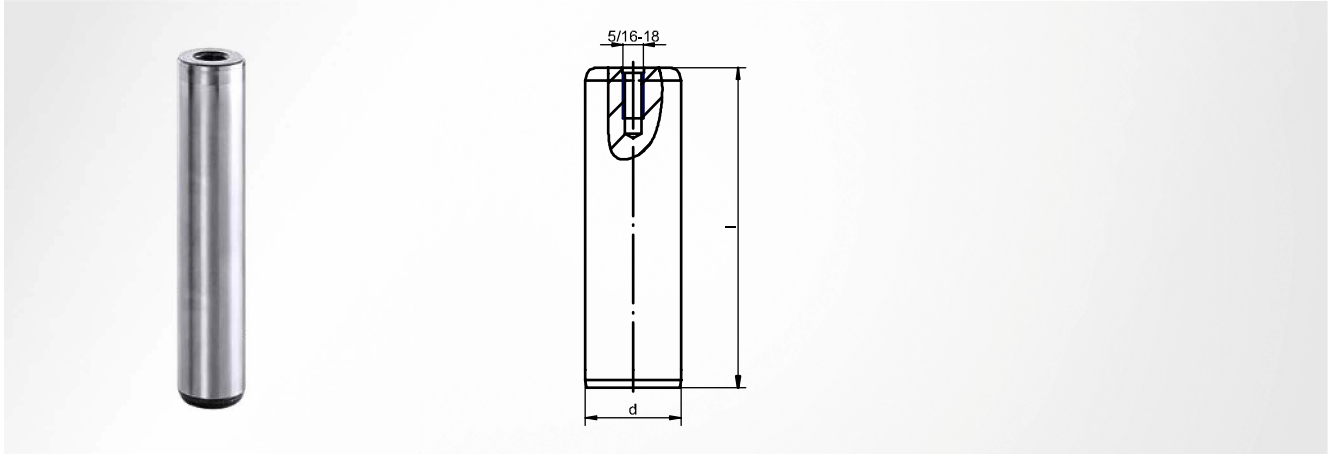
d_3	d_6	s_1	Item number
18	5.3	4	SZ7368 20
24	6.4	5	SZ7368 24
30	6.4	5	SZ7368 30

d_3	d_6	s_1	Item number
40	8.4	6	SZ7368 40
50	10.5	6	SZ7368 50
56	13.0	6	SZ7368 63

ST7108 (inch) Guide pillar

STEINEL®

smooth, with internal thread



Material

Steel 1.1221 (C60E); hardened

Hardness

63 ±1 HRC

Installation instruction

press in; one-sided entry chamfer or centring attachment

Installation in mounting bore

ISO R6

d (")	l (")	Item number
1	4	ST7108 -1.00X04.000
	4 1/2	ST7108 -1.00X04.500
	5	ST7108 -1.00X05.000
	5 1/2	ST7108 -1.00X05.500
	6	ST7108 -1.00X06.000
	6 1/2	ST7108 -1.00X06.500
	7	ST7108 -1.00X07.000
	7 1/2	ST7108 -1.00X07.500
	8	ST7108 -1.00X08.000
	8 1/2	ST7108 -1.00X08.500
1 1/4	9	ST7108 -1.00X09.000
	10	ST7108 -1.00X10.000
	4	ST7108 -1.25X04.000
	4 1/2	ST7108 -1.25X04.500
	5	ST7108 -1.25X05.000
	5 1/2	ST7108 -1.25X05.500
	6	ST7108 -1.25X06.000
	6 1/2	ST7108 -1.25X06.500
	7	ST7108 -1.25X07.000
	7 1/2	ST7108 -1.25X07.500
1 1/2	8	ST7108 -1.25X08.000
	8 1/2	ST7108 -1.25X08.500
	9	ST7108 -1.25X09.000
	10	ST7108 -1.25X10.000
	11	ST7108 -1.25X11.000
	12	ST7108 -1.25X12.000
	13	ST7108 -1.25X13.000
	5	ST7108 -1.50X05.000
	5 1/2	ST7108 -1.50X05.500
	6	ST7108 -1.50X06.000
	6 1/2	ST7108 -1.50X06.500
	7	ST7108 -1.50X07.000
	7 1/2	ST7108 -1.50X07.500
	8	ST7108 -1.50X08.000
	8 1/2	ST7108 -1.50X08.500
	9	ST7108 -1.50X09.000

d (")	l (")	Item number
1 1/2	10	ST7108 -1.50X10.000
	11	ST7108 -1.50X11.000
	12	ST7108 -1.50X12.000
	13	ST7108 -1.50X13.000
	14	ST7108 -1.50X14.000
1 3/4	6	ST7108 -1.75X06.000
	6 1/2	ST7108 -1.75X06.500
	7	ST7108 -1.75X07.000
	7 1/2	ST7108 -1.75X07.500
	8	ST7108 -1.75X08.000
	8 1/2	ST7108 -1.75X08.500
	9	ST7108 -1.75X09.000
	10	ST7108 -1.75X10.000
	11	ST7108 -1.75X11.000
	12	ST7108 -1.75X12.000
2	13	ST7108 -1.75X13.000
	14	ST7108 -1.75X14.000
	15	ST7108 -1.75X15.000
	16	ST7108 -1.75X16.000
	17	ST7108 -1.75X17.000
	6	ST7108 -2.00X06.000
	6 1/2	ST7108 -2.00X06.500
	7	ST7108 -2.00X07.000
	7 1/2	ST7108 -2.00X07.500
	8	ST7108 -2.00X08.000
	8 1/2	ST7108 -2.00X08.500
	9	ST7108 -2.00X09.000
	10	ST7108 -2.00X10.000
	11	ST7108 -2.00X11.000
	12	ST7108 -2.00X12.000
	13	ST7108 -2.00X13.000
	14	ST7108 -2.00X14.000
	15	ST7108 -2.00X15.000
	16	ST7108 -2.00X16.000
	17	ST7108 -2.00X17.000

Active
elements

Spring
elements

Nitrogen
systems

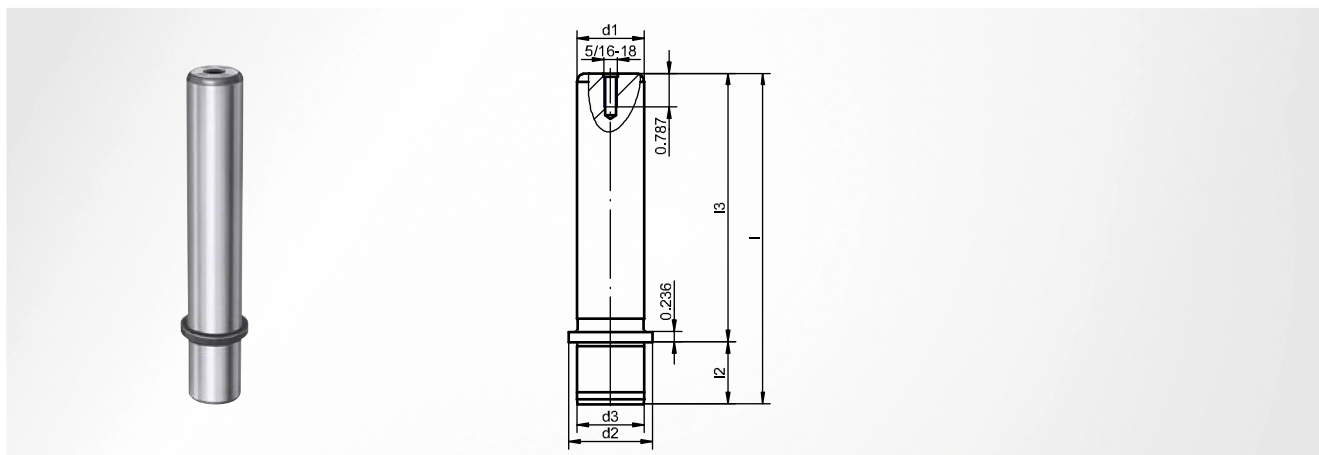
Tapping
units

Machining
elements

Accessories

ST7120 (inch) Guide pillar

with shoulder and internal thread



Material

Steel 1.1221 (C60E); inductively hardened

Scope of supply

ST7367

Hardness

63 ±1 HRC

Optional accessories

ST7132 (inch)

Installation instruction

Fixing with 3 holding clamps

d ₁ (")	d ₂ (")	d ₃ (")	l ₂ (")	l (")	l ₃ (")	Item number
1	1.312	1	1.1880	5.188	4	ST7120 -1.00X04.000
				5.688	4 1/2	ST7120 -1.00X04.500
				6.188	5	ST7120 -1.00X05.000
				6.688	5 1/2	ST7120 -1.00X05.500
				7.188	6	ST7120 -1.00X06.000
				7.688	6 1/2	ST7120 -1.00X06.500
				8.188	7	ST7120 -1.00X07.000
				8.688	7 1/2	ST7120 -1.00X07.500
				9.188	8	ST7120 -1.00X08.000
				9.688	8 1/2	ST7120 -1.00X08.500
				10.188	9	ST7120 -1.00X09.000
1 1/4	1.562	1 1/4	1.5620	11.188	10	ST7120 -1.00X10.000
				5.562	4	ST7120 -1.25X04.000
				6.062	4 1/2	ST7120 -1.25X04.500
				6.562	5	ST7120 -1.25X05.000
				7.062	5 1/2	ST7120 -1.25X05.500
				7.562	6	ST7120 -1.25X06.000
				8.062	6 1/2	ST7120 -1.25X06.500
				8.562	7	ST7120 -1.25X07.000
				9.062	7 1/2	ST7120 -1.25X07.500
				9.562	8	ST7120 -1.25X08.000
				10.062	8 1/2	ST7120 -1.25X08.500
1 1/2	1.857	1 1/2	1.8750	10.562	9	ST7120 -1.25X09.000
				11.562	10	ST7120 -1.25X10.000
				6.875	5	ST7120 -1.50X05.000
				7.375	5 1/2	ST7120 -1.50X05.500
				7.875	6	ST7120 -1.50X06.000
				8.375	6 1/2	ST7120 -1.50X06.500
				8.875	7	ST7120 -1.50X07.000
				9.375	7 1/2	ST7120 -1.50X07.500
				9.875	8	ST7120 -1.50X08.000
				10.875	9	ST7120 -1.50X09.000

ST7120 (inch) Guide pillar

with shoulder and internal thread

d ₁ (")	d ₂ (")	d ₃ (")	l ₂ (")	l (")	l ₃ (")	Item number
1 1/2	1.857	1 1/2	1.8750	11.875	10	ST7120 -1.50X10.000
				12.875	11	ST7120 -1.50X11.000
				13.875	12	ST7120 -1.50X12.000
1 3/4	2.250	1 3/4	2.2500	7.250	5	ST7120 -1.75X05.000
				7.750	5 1/2	ST7120 -1.75X05.500
				8.250	6	ST7120 -1.75X06.000
				8.750	6 1/2	ST7120 -1.75X06.500
				9.250	7	ST7120 -1.75X07.000
				9.750	7 1/2	ST7120 -1.75X07.500
				10.250	8	ST7120 -1.75X08.000
				11.250	9	ST7120 -1.75X09.000
				12.250	10	ST7120 -1.75X10.000
				13.250	11	ST7120 -1.75X11.000
				14.250	12	ST7120 -1.75X12.000
2	2.500	2	2.5000	7.500	5	ST7120 -2.00X05.000
				8.000	5 1/2	ST7120 -2.00X05.500
				8.500	6	ST7120 -2.00X06.000
				9.000	6 1/2	ST7120 -2.00X06.500
				9.500	7	ST7120 -2.00X07.000
				10.000	7 1/2	ST7120 -2.00X07.500
				10.500	8	ST7120 -2.00X08.000
				11.500	9	ST7120 -2.00X09.000
				12.500	10	ST7120 -2.00X10.000
				13.500	11	ST7120 -2.00X11.000
				14.500	12	ST7120 -2.00X12.000

Active
elements

Spring
elements

Nitrogen
systems

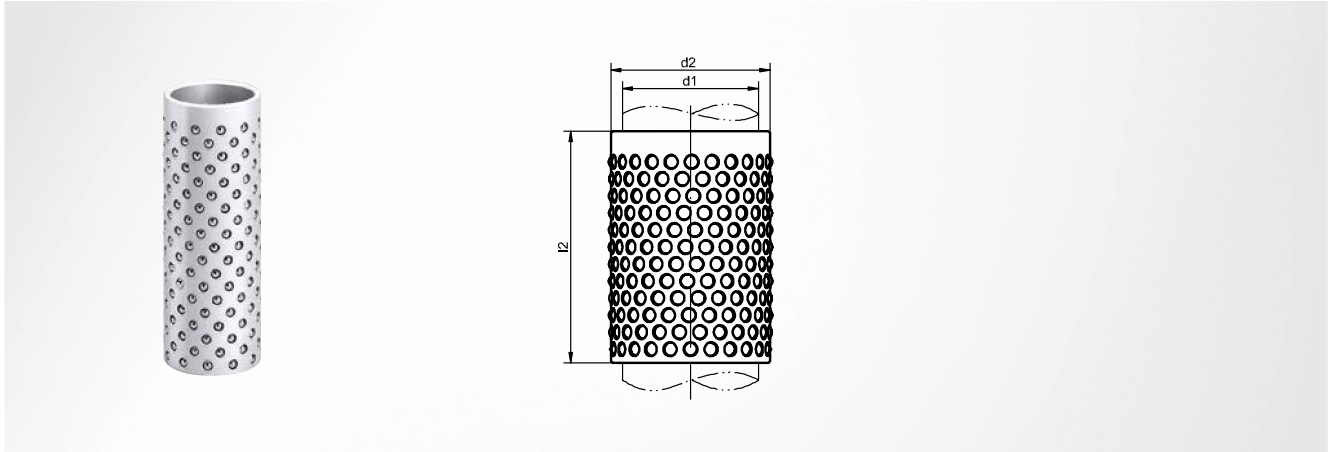
Tapping
units

Maschine
elements

Accessories

ST7130 (inch) Ball cage

Aluminium



Material

Aluminium 3.1645

Note

Cage travel = 1/2 stroke length

ball property

Steel; hardened; quality class 1; sorted

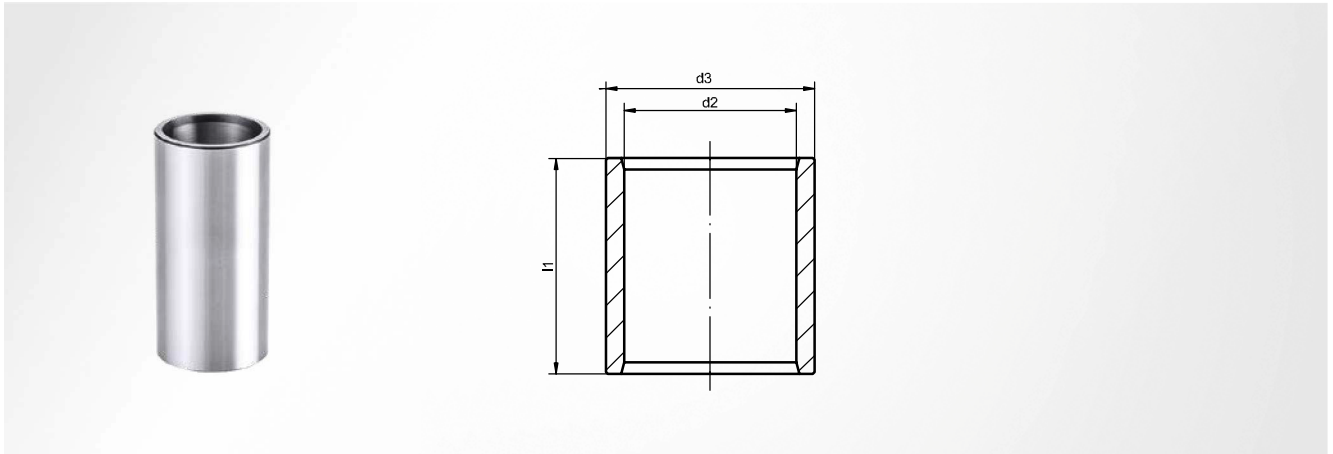
d ₁ (")	d ₂ (")	l ₂ (")	Item number
1	1.2362	1 1/2	ST7130 - 1.00X01.500
		1 3/4	ST7130 - 1.00X01.750
		2	ST7130 - 1.00X02.000
		2 1/4	ST7130 - 1.00X02.250
		2 1/5	ST7130 - 1.00X02.500
1 1/4	1.5650	2	ST7130 - 1.25X02.000
		2 1/4	ST7130 - 1.25X02.250
		2 1/5	ST7130 - 1.25X02.500
		2 3/4	ST7130 - 1.25X02.750
		3	ST7130 - 1.25X03.000
1 1/2	1.8150	3 1/4	ST7130 - 1.25X03.250
		2 1/5	ST7130 - 1.50X02.500
		2 3/4	ST7130 - 1.50X02.750
		3	ST7130 - 1.50X03.000
		3 1/4	ST7130 - 1.50X03.250
		3 1/2	ST7130 - 1.50X03.500

d ₁ (")	d ₂ (")	l ₂ (")	Item number
1 1/2	1.8150	3 3/4	ST7130 - 1.50X03.750
		4	ST7130 - 1.50X04.000
1 3/4	2.0650	2 3/4	ST7130 - 1.75X02.750
		3	ST7130 - 1.75X03.000
		3 1/4	ST7130 - 1.75X03.250
		3 1/2	ST7130 - 1.75X03.500
		3 3/4	ST7130 - 1.75X03.750
		4	ST7130 - 1.75X04.000
		4 1/4	ST7130 - 1.75X04.250
2	2.3150	3 1/4	ST7130 - 2.00X03.250
		3 1/2	ST7130 - 2.00X03.500
		3 3/4	ST7130 - 2.00X03.750
		4	ST7130 - 2.00X04.000
		4 1/4	ST7130 - 2.00X04.250
		4 1/2	ST7130 - 2.00X04.500
		5 1/2	ST7130 - 2.00X05.500

ST7406 (inch) Guide bush

STEINEL®

smooth



Material

Steel 1.3505 (100 Cr6)

Installation in mounting bore

ISO G6

Hardness

64 ±1 HRC

Optional accessories

SZ9742

Installation instruction

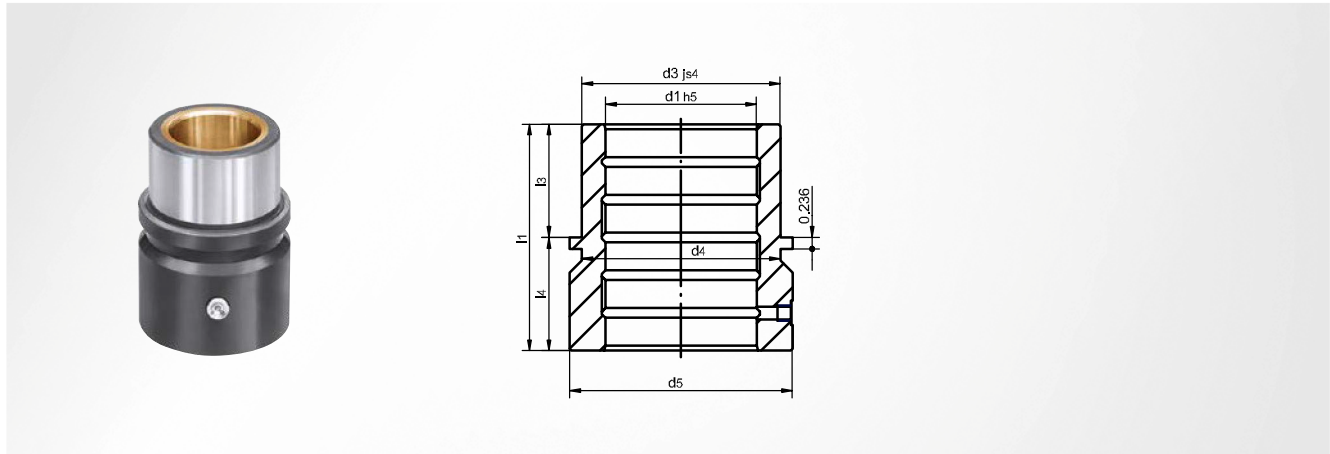
Secure with adhesive; do not press in; one-sided entry
chamfer or centring attachment

d ₁ (")	d ₂ (")	d ₃ (")	l ₁ (")	Item number
1	1.2362	1.7170	2 7/16	ST7406 -1.00X02.437
			2 15/16	ST7406 -1.00X02.937
			3 7/16	ST7406 -1.00X03.437
			3 15/16	ST7406 -1.00X03.937
1 1/4	1.5650	2.1070	2 7/16	ST7406 -1.25X02.437
			2 15/16	ST7406 -1.25X02.937
			3 7/16	ST7406 -1.25X03.437
			3 15/16	ST7406 -1.25X03.937
1 1/2	1.8150	2.4370	3	ST7406 -1.50X03.000
			3 3/4	ST7406 -1.50X03.750
			4 1/2	ST7406 -1.50X04.500
			5	ST7406 -1.50X05.000
1 3/4	2.0650	2.7470	3	ST7406 -1.75X03.000
			4	ST7406 -1.75X04.000
			5	ST7406 -1.75X05.000
			5 1/2	ST7406 -1.75X05.500
2	2.3150	3.1620	3	ST7406 -2.00X03.000
			4	ST7406 -2.00X04.000
			5	ST7406 -2.00X05.000
			5 1/2	ST7406 -2.00X05.500

ST7419 (inch) Guide bush

STEINEL®

bronze coating, Steel sliding guide, hardened, with shoulder



Material

Steel 1.7131; case-hardened

Installation in mounting bore

ISO H6

Hardness

64 ±1 HRC

Scope of supply

ST7367

Installation instruction

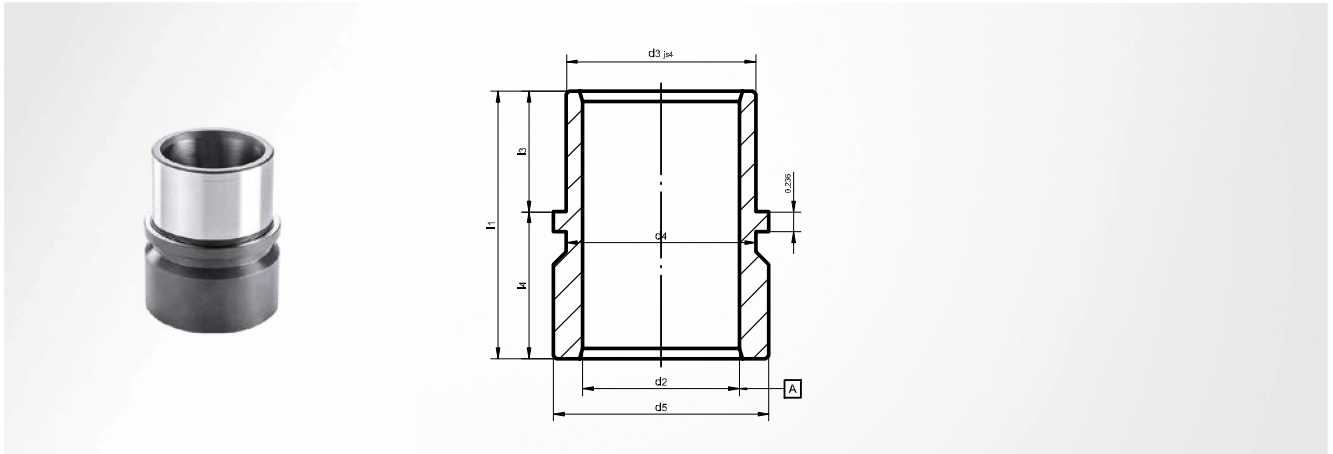
Fixing with 3 holding clamps; central lubrication via cup
head lubrication nipple M8 x 1

d_1^{H5} (")	d_3^{js4} (")	d_4 (")	d_5 (")	l_1 (")	l_3 (")	l_4 (")	Item number
1	1.7170	2.0320	1.7170	1 3/4	0.9375	0.8125	ST7419 -1.00X01.750
			2.0320	2 11/16	0.9375	1.7500	ST7419 -1.00X02.687
			2.0320	3 15/16	0.9375	3.0000	ST7419 -1.00X03.937
1 1/4	2.1070	2.4220	2.1070	1 15/16	1.1250	0.8125	ST7419 -1.25X01.937
			2.4220	3 1/8	1.1250	2.0000	ST7419 -1.25X03.125
			2.4220	4 1/8	1.1250	3.0000	ST7419 -1.25X04.125
1 1/2	2.4370	2.7520	2.4370	2	1.1875	0.8125	ST7419 -1.50X02.000
			2.7520	3 3/16	1.1875	2.0000	ST7419 -1.50X03.187
			2.7520	4 3/16	1.1875	3.0000	ST7419 -1.50X04.187
1 3/4	2.7470	3.0620	2.7470	2 3/8	1.3750	1.0000	ST7419 -1.75X02.375
			3.0620	3 3/8	1.3750	2.0000	ST7419 -1.75X03.375
			3.0620	4 3/8	1.3750	3.0000	ST7419 -1.75X04.375
2	3.1620	3.4770	3.1620	2 5/8	1.6250	1.0000	ST7419 -2.00X02.625
			3.4770	3 5/8	1.6250	2.0000	ST7419 -2.00X04.625
			3.4770	4 5/8	1.6250	3.0000	ST7419 -2.00X03.625

ST7416 (inch) Guide bush

STEINEL®

with shoulder



Material

Steel 1.7131; case-hardened

Installation in mounting bore

ISO H6

Hardness

64 ±1 HRC

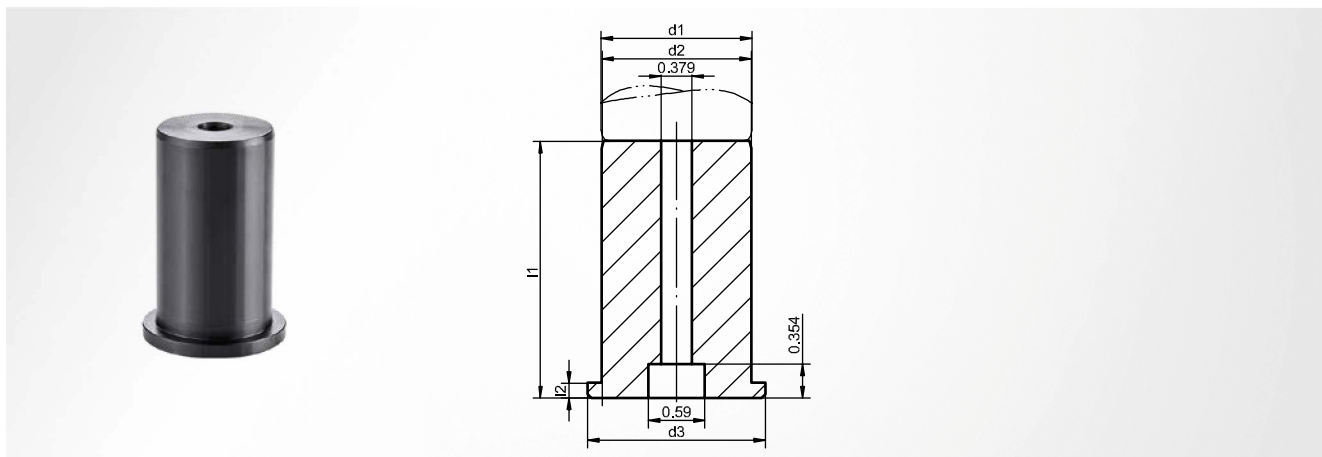
Scope of supply

ST7367

Installation instruction

Fixing with 3 holding clamps

d (")	d ₂ (")	d ₃ js4 (")	d ₄ (")	l ₃ (")	d ₅ (")	l ₁ (")	l ₄ (")	Item number
1	1.2362	1.7170	2.0320	0.9375	1.7170	2 7/16	1.5000	ST7416 -1.00X02.437
					2.0320	2 15/16	2.0000	ST7416 -1.00X02.937
					2.0320	3 7/16	2.5000	ST7416 -1.00X03.437
1 1/4	1.5650	2.1070	2.4220	1.1250	2.1070	2 15/16	1.8125	ST7416 -1.25X02.937
					2.4220	3 7/16	2.3125	ST7416 -1.25X03.437
					2.4220	3 15/16	2.8125	ST7416 -1.25X03.937
1 1/2	1.8150	2.4370	2.7520	1.1875	2.4370	2 15/16	1.7500	ST7416 -1.50X02.937
					2.7520	3 11/16	2.5000	ST7416 -1.50X03.687
					2.7520	4 7/16	3.2500	ST7416 -1.50X04.437
1 3/4	2.0650	2.7470	3.0620	1.3750	2.7470	3 7/16	2.0625	ST7416 -1.75X03.437
					3.0620	4 3/16	2.8125	ST7416 -1.75X04.187
					3.0620	4 15/16	3.5625	ST7416 -1.75X04.937
2	2.3150	3.1620	3.4770	1.6250	3.1620	4 7/16	1.8125	ST7416 -2.00X03.437
					3.4770	4 11/16	3.0625	ST7416 -2.00X04.687
					3.4770	5 7/16	3.8125	ST7416 -2.00X05.437



Material

Steel 1.0503 (C45)

Note

the length of the cage holder should be half of that of the cage used

d ₁ (")	d ₂ (")	d ₃ (")	l ₁ (")	l ₂ (")	Screw (")	Item number
1	0.9803	1.2165	2	0.118	5/16-20-UNC x 2 1/4	ST7132 -1.00X02.000
1 1/4	1.2303	1.5433	2	0.157	5/16-20-UNC x 2 1/4	ST7132 -1.25X02.000
1 1/2	1.4803	1.7953	2 1/5	0.157	5/16-20-UNC x 2 3/4	ST7132 -1.50X02.500
1 3/4	1.7303	2.0827	2 1/5	0.157	5/16-20-UNC x 2 3/4	ST7132 -1.75X02.500
2	1.9803	2.2953	2 1/5	0.157	5/16-20-UNC x 2 3/4	ST7132 -2.00X02.500

SZ8514 (inch) Socket-head screw
with hexagon socket



Screw (")	Item number
1/4" x 7/16" UNC	SZ8514 .1
5/16" x 2 1/4" UNC	SZ8514 .2
5/16" x 2 3/4" UNC	SZ8514 .3

Active
elements

Spring
elements

Nitrogen
systems

Tapping
units

Maschine
elements

Accessories

