STEINEL®

High-precision inch guide units
Made in Germany

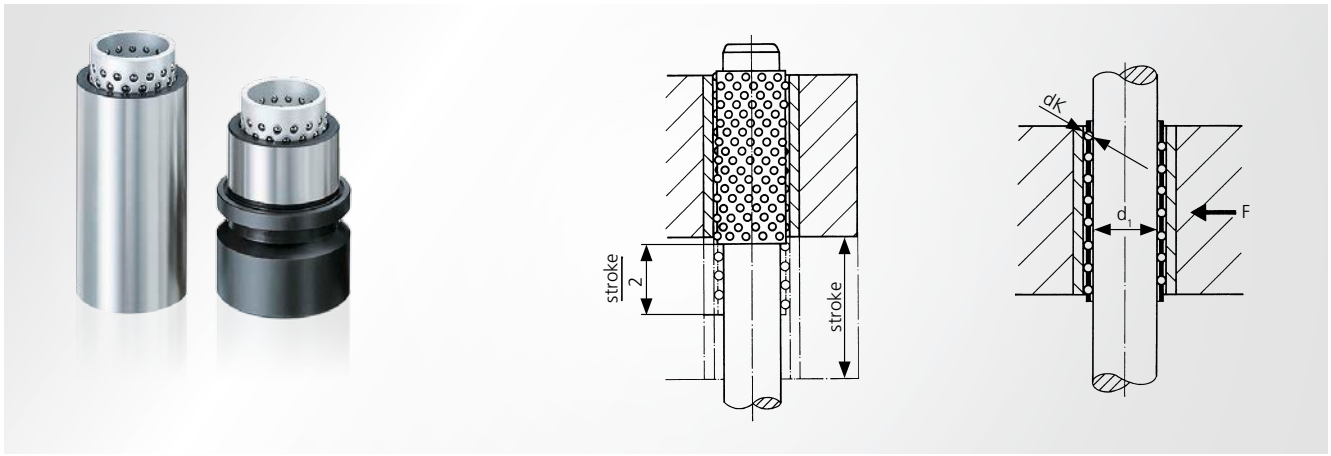
STEINEL – All you need for tools

Your partner for punching and bending technology

Since more than 80 years STEINEL Normalien AG, registered office in Villingen-Schwenningen, provides the worldwide market of high-end tool design and construction with Standard Parts and is emerging to be a system partner in this industrial sector. STEINEL is your partner in all respects of punching and bending technology. The German rooted family-run enterprise offers their customers Standard Parts in standard and customised size as well as support in realisation of complete solutions. This includes all productivity: The own product development process as well as the construction and placing system modules at the disposal. Therefore we warrant top level process reliability and highest quality as well as accuracy along with appropriate service. In order to offer a maximum of service and to achieve optimal increase in efficiency as to the punching and bending process STEINEL offers all productivity from one source:

- Guide units in standard and special size
- Tool frames and die sets
- Manifold plates and composite systems
- System springs and nitrogen cylinders
- Process-integrated tapping
- Active elements and spare parts management

STEINEL precision ball guides



Special features of STEINEL precision ball guides

- Precision due to the microfinished contact surfaces and uniformly selected precision steel balls.
- Friction-free movement due to the rolling motion of the balls.

Clearance-free guidance due to the optimal preloaded rolling motion of the balls between the guide pillar and guide bush.

- Long lifespan due to the free-wheeling mounting and helical positioning of the balls, so that each ball has its own track.
- High load capacities, precision guidance and high stroke speeds are achieved due to the highest precision of the uniformly selected precision steel balls, honed guide bushes and superfine ground guide pillars. The large number of balls in the cage as well as an even force distribution in the guidance system allow high stroke speeds of 98–131 feet/min (30–40 m/min) and more.
- Interchangeability is ensured due to the uniformly selected precision steel balls.
- Special designs can be manufactured according to your drawings.

Load capacities – preload

The radial load capacity of the ball guide grows with the increasing preload while simultaneously decreasing the friction-free movement. Extremely high preloading will overstrain the ball guide due to the excessive surface pressure on the balls.

Ball cage with safety part and screw

Special characteristics: Guide pillars mounted in the upper plate and the possibility for the ball cage to come completely out of the guide bushing.

Limiting sleeve

Special characteristics: Prevents the ball cage from shifting down.

Low maintenance

Low maintenance is needed for the practically maintenance-free ball guides. Lubrication with a high-performance grease when mounting is sufficient for continuous operation.

Component arrangement and function

The STEINEL precision ball guide is composed of a guide pillar, guide bushing and ball cage, which are tensionally paired by preloading.

Due to the tensional structure of the balls within the cage, the ball cage only travels at half the speed of the ball guide motion. The travel length of the ball cage is always half of the stroke of the guide bushing or the guide pillar.

STEINEL precision sliding guides

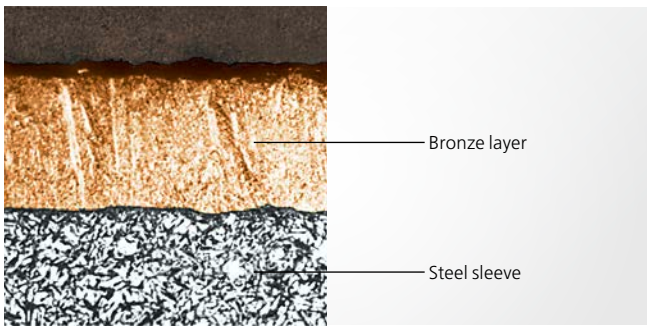
Steel sliding guide with bronze coating

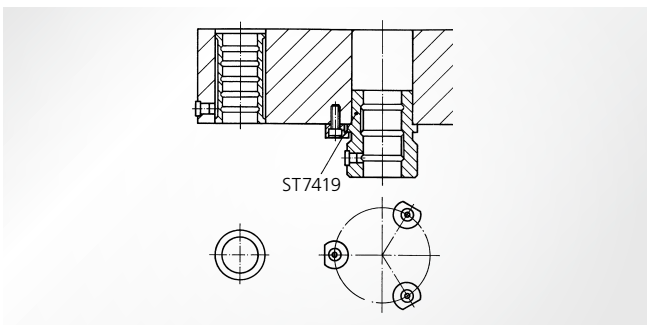
Fields of application

STEINEL precision sliding guides "steel with bronze coating" are used for longitudinal movement in the manufacture of tools, fixtures, machines, medical devices and cars. They are characterised by their high loading capacity and resistance to wear.

Component arrangement

The STEINEL precision sliding guide "steel with bronze coating" is composed of a guide pillar and guide bush with honed guide clearance.





Bronze coating

The hardened steel sleeve absorbs strong lateral forces and prevents the guide bush from deforming when strong edge pressure is present. The galvanised bronze coating is very hard, wear-resistant and honed to highest surface quality. In addition to its excellent dry-running properties it also has very good heat dissipation characteristics that ensure the rapid disbursement of excessive frictional heat.

Lubrication

All STEINEL precision sliding guides "steel with bronze coating" are supplied with an internal lubrication system, where the parallel transverse oil grooves are connected with axial channels. As a result, an equal distance to all lubrication points is ensured. At the same time, the internal lubrication system guarantees a shielding effect against dirt. The internal lubrication system must be supplied with high-quality oil or high-quality grease several times a day, depending on sliding speed.

Sliding speed

The recommended sliding speed is 49–98 feet/min (15–30 m/min). Under ideal conditions of lubrication, guide clearance, stroke length, radial load and heat dissipation, very high stroke speeds of 600–800 strokes/min can be achieved with the STEINEL precision sliding guide "steel with bronze coating".

Guide clearance

The guide bushes are precision-turned and honed. An additional compression of the running surface takes place at the tool start-up, resulting in better sliding characteristics. The clearance is 0.000078"–0.000275" (2–7 µm). If more clearance is required, please indicate it on the order as "smooth-running honed".

Guide Pillar ST7108

precision ground, to press-in, with internal thread

Material / Version

Steel 1.11221 (Ck 60) induction hardened, hardness 62–64 HRC

Guide diameter ISO h3 superfinish ground and microfinished mounting into mounting-holes ISO R6. Starting at sheet thickness 1.97" (50 mm) N6.

Application

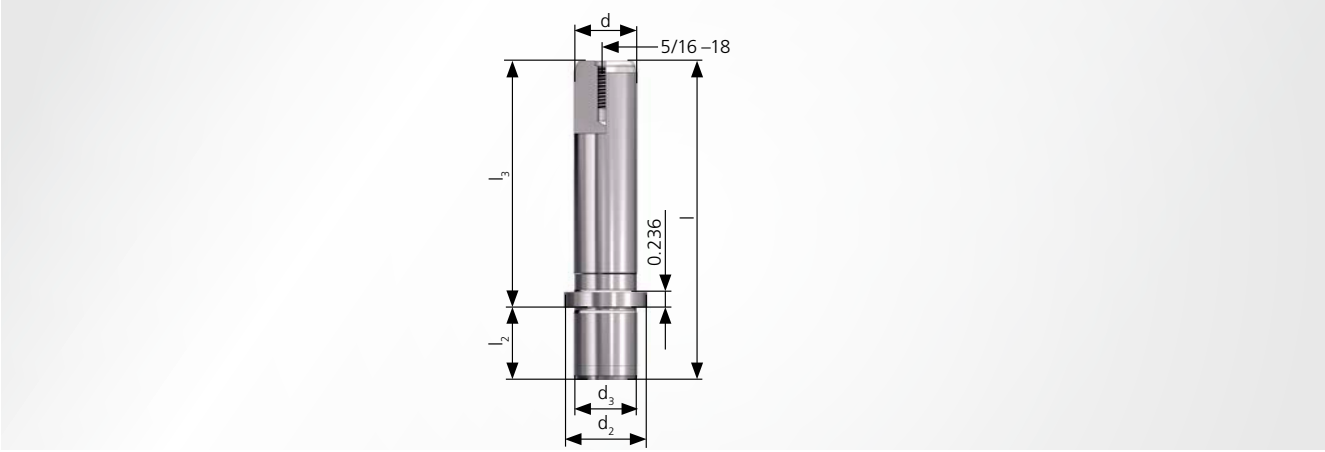
Due to the high precision of the guide pillars ST7108 they are suitable for all STEINEL guide bushes for sliding- and ball guides. Especially in connection with ball cages ST7130.

Ø d	l	Item number
1"	4"	ST7108-**1.00X04.000**
	4½"	ST7108-**1.00X04.500**
	5"	ST7108-**1.00X05.000**
	5½"	ST7108-**1.00X05.500**
	6"	ST7108-**1.00X06.000**
	6½"	ST7108-**1.00X06.500**
	7"	ST7108-**1.00X07.000**
	7½"	ST7108-**1.00X07.500**
	8"	ST7108-**1.00X08.000**
	8½"	ST7108-**1.00X08.500**
	9"	ST7108-**1.00X09.000**
	10"	ST7108-**1.00X10.000**
1¼"	4"	ST7108-**1.25X04.000**
	4½"	ST7108-**1.25X04.500**
	5"	ST7108-**1.25X05.000**
	5½"	ST7108-**1.25X05.500**
	6"	ST7108-**1.25X06.000**
	6½"	ST7108-**1.25X06.500**
	7"	ST7108-**1.25X07.000**
	7½"	ST7108-**1.25X07.500**
	8"	ST7108-**1.25X08.000**
	8½"	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**

Ø d	l	Item number
1½"	5"	ST7108-**1.50X05.000**
	5½"	ST7108-**1.50X05.500**
	6"	ST7108-**1.50X06.000**
	6½"	ST7108-**1.50X06.500**
	7"	ST7108-**1.50X07.000**
	7½"	ST7108-**1.50X07.500**
	8"	ST7108-**1.50X08.000**
	8½"	ST7108-**1.50X08.500**
	9"	ST7108-**1.50X09.000**
	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**
1¾"	6"	ST7108-**1.75X06.000**
	6½"	ST7108-**1.75X06.500**
	7"	ST7108-**1.75X07.000**
	7½"	ST7108-**1.75X07.500**
	8"	ST7108-**1.75X08.000**
	8½"	ST7108-**1.75X08.500**
	9"	ST7108-**1.75X09.000**
	10"	ST7108-**1.75X10.000**
	11"	ST7108-**1.75X11.000**
	12"	ST7108-**1.75X12.000**
	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**
2"	6"	ST7108-**2.00X06.000**
	6½"	ST7108-**2.00X06.500**
	7"	ST7108-**2.00X07.000**
	7½"	ST7108-**2.00X07.500**
	8"	ST7108-**2.00X08.000**
	8½"	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**

Guide Pillar ST7120

with shoulder



Material / Version

Steel 1.11221 induction hardened, hardness 62–64 HRC

Guide pillars with shoulder enable an easy and quick assembly and disassembly of the pillars, if, for example, you want to sharpen cutting tools with a surface grinding machine.

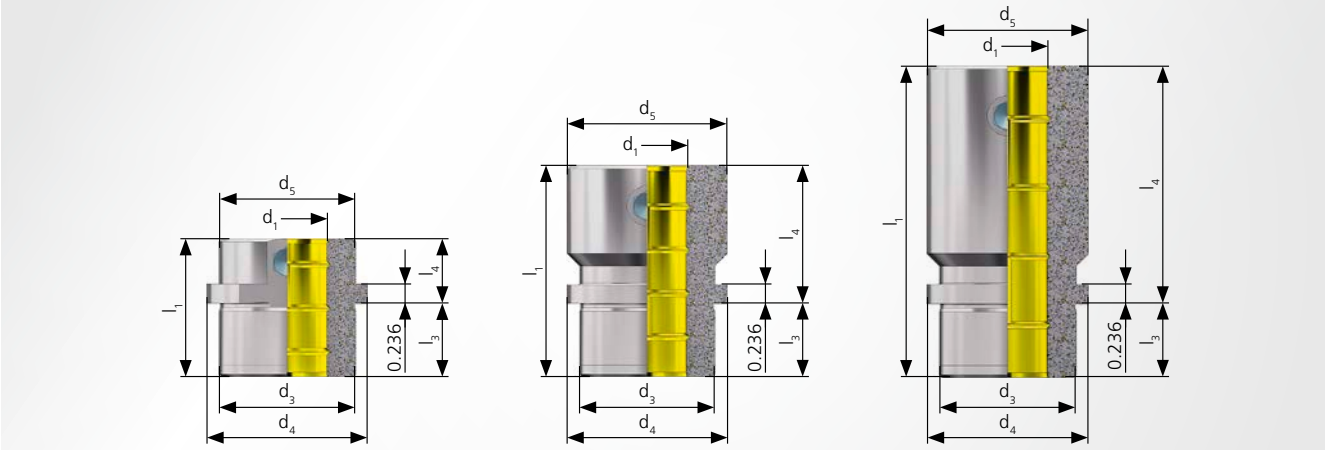
Application

Guide pillars with shoulder are suitable to all STEINEL guide bushes for sliding- and ball guides. Especially in connection with ball cages ST7130.

Ø d	l_3	Ø d_3	Ø d_2	l_2	l	Item number
1"	4"	1"	1.312"	1.1880"	5.188"	ST7120-**1.00X04.000**
	4½"				5.688"	ST7120-**1.00X04.500**
	5"				6.188"	ST7120-**1.00X05.000**
	5½"				6.688"	ST7120-**1.00X05.500**
	6"				7.188"	ST7120-**1.00X06.000**
	6½"				7.688"	ST7120-**1.00X06.500**
	7"				8.188"	ST7120-**1.00X07.000**
	7½"				8.688"	ST7120-**1.00X07.500**
	8"				9.188"	ST7120-**1.00X08.000**
	8½"				9.688"	ST7120-**1.00X08.500**
	9"				10.188"	ST7120-**1.00X09.000**
	10"				11.188"	ST7120-**1.00X10.000**
1¼"	4"	1¼"	1.562"	1.5620"	5.562"	ST7120-**1.25X04.000**
	4½"				6.062"	ST7120-**1.25X04.500**
	5"				6.562"	ST7120-**1.25X05.000**
	5½"				7.062"	ST7120-**1.25X05.500**
	6"				7.562"	ST7120-**1.25X06.000**
	6½"				8.062"	ST7120-**1.25X06.500**
	7"				8.562"	ST7120-**1.25X07.000**
	7½"				9.062"	ST7120-**1.25X07.500**
	8"				9.562"	ST7120-**1.25X08.000**
	8½"				10.062"	ST7120-**1.25X08.500**
	9"				10.562"	ST7120-**1.25X09.000**
	10"				11.562"	ST7120-**1.25X10.000**
1½"	5"	1½"	1.875"	1.8750"	6.875"	ST7120-**1.50X05.000**
	5½"				7.375"	ST7120-**1.50X05.500**
	6"				7.875"	ST7120-**1.50X06.000**
	6½"				8.375"	ST7120-**1.50X06.500**
	7"				8.875"	ST7120-**1.50X07.000**
	7½"				9.375"	ST7120-**1.50X07.500**
	8"				9.875"	ST7120-**1.50X08.000**
	9"				10.875"	ST7120-**1.50X09.000**
	10"				11.875"	ST7120-**1.50X10.000**
	11"				12.875"	ST7120-**1.50X11.000**
	12"				13.875"	ST7120-**1.50X12.000**
1¾"	5"	1¾"	2.25"	2.2500"	7.25"	ST7120-**1.75X05.000**
	5½"				7.75"	ST7120-**1.75X05.500**
	6"				8.25"	ST7120-**1.75X06.000**
	6½"				8.75"	ST7120-**1.75X06.500**
	7"				9.25"	ST7120-**1.75X07.000**
	7½"				9.75"	ST7120-**1.75X07.500**
	8"				10.25"	ST7120-**1.75X08.000**
	9"				11.25"	ST7120-**1.75X09.000**
	10"				12.25"	ST7120-**1.75X10.000**
	11"				13.25"	ST7120-**1.75X11.000**
	12"				14.25"	ST7120-**1.75X12.000**
2"	5"	2"	2.5"	2.5000"	7.5"	ST7120-**2.00X05.000**
	5½"				8.0"	ST7120-**2.00X05.500**
	6"				8.5"	ST7120-**2.00X06.000**
	6½"				9.0"	ST7120-**2.00X06.500**
	7"				9.5"	ST7120-**2.00X07.000**
	7½"				10.0"	ST7120-**2.00X07.500**
	8"				10.5"	ST7120-**2.00X08.000**
	9"				11.5"	ST7120-**2.00X09.000**
	10"				12.5"	ST7120-**2.00X10.000**
	11"				13.5"	ST7120-**2.00X11.000**
	12"				14.5"	ST7120-**2.00X12.000**

Guide bush ST7419

with shoulder, sliding guide steel with bronze coating



Material / Version

Guide bush made of steel 1.7131, case-hardened, hardness 61–63 HRC

Guide diameter ISO H5 honed. Mounting diameter ISO js4, ground.

Important

Due to the galvanically applied bronze coating onto the hardened steel sleeve, this bush is suitable especially for high sliding speeds and strong lateral forces.

Lubrication

Lubrication by cup head lubrication nipple, connection M8 x 1 provided for central lubrication.

Mounting instructions

Fit in mounting bore hole ISO H6. Fix with 3 holding clamps ST7367 (included in delivery). The shoulder surface, right-angled ground to the guide bore, will be squeezed onto the plate by the holding clamps and guarantees an absolute chucking of the guide bush.

Holding clamps

When reordering the holding clamps please order:
1 set = 3 pieces, order number ST7367

Guide bush – short

Ø d	Ø d_1	l_1	Ø d_3	Ø d_4	Ø d_5	l_3	l_4	Item number
1"	1"	1 ¾"	1.7170"	2.0320"	1.7170"	0.9375"	0.8125"	ST7419-**1.00X01.750**
1 ¼"	1 ¼"	1 15/16"	2.1070"	2.4220"	2.1070"	1.1250"	0.8125"	ST7419-**1.25X01.937**
1 ½"	1 ½"	2"	2.4370"	2.7520"	2.4370"	1.1875"	0.8125"	ST7419-**1.50X02.000**
1 ¾"	1 ¾"	2 ⅜"	2.7470"	3.0620"	2.7470"	1.3750"	1.0000"	ST7419-**1.75X02.375**
2"	2"	2 ⅝"	3.1620"	3.4770"	3.1620"	1.6250"	1.0000"	ST7419-**2.00X02.625**

Guide bush – standard

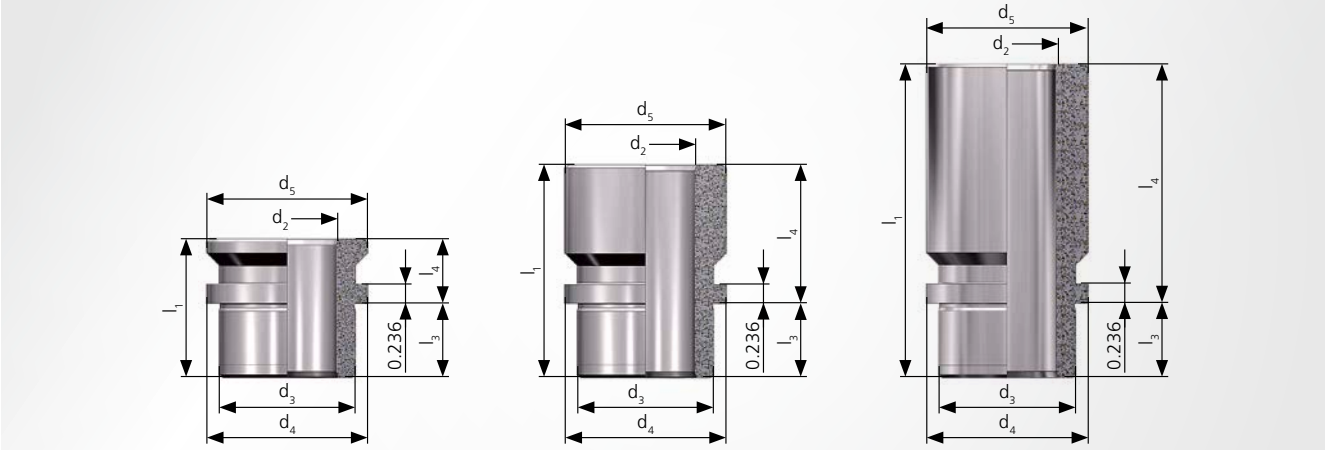
Ø d	Ø d_1	l_1	Ø d_3	Ø d_4	Ø d_5	l_3	l_4	Item number
1"	1"	2 11/16"	1.7170"	2.0320"	2.0320"	0.9375"	1.7500"	ST7419-**1.00X02.687**
1 ¼"	1 ¼"	3 ⅛"	2.1070"	2.4220"	2.4220"	1.1250"	2.0000"	ST7419-**1.25X03.125**
1 ½"	1 ½"	3 3/16"	2.4370"	2.7520"	2.7520"	1.1875"	2.0000"	ST7419-**1.50X03.187**
1 ¾"	1 ¾"	3 ⅜"	2.7470"	3.0620"	3.0620"	1.3750"	2.0000"	ST7419-**1.75X03.375**
2"	2"	3 ⅝"	3.1620"	3.4770"	3.4770"	1.6250"	2.0000"	ST7419-**2.00X03.625**

Guide bush – long

Ø d	Ø d_1	l_1	Ø d_3	Ø d_4	Ø d_5	l_3	l_4	Item number
1"	1"	3 15/16"	1.7170"	2.0320"	2.0320"	0.9375"	3.0000"	ST7419-**1.00X03.937**
1 ¼"	1 ¼"	4 ⅛"	2.1070"	2.4220"	2.4220"	1.1250"	3.0000"	ST7419-**1.25X04.125**
1 ½"	1 ½"	4 3/16"	2.4370"	2.7520"	2.7520"	1.1875"	3.0000"	ST7419-**1.50X04.187**
1 ¾"	1 ¾"	4 ⅜"	2.7470"	3.0620"	3.0620"	1.3750"	3.0000"	ST7419-**1.75X04.375**
2"	2"	4 ⅝"	3.1620"	3.4770"	3.4770"	1.6250"	3.0000"	ST7419-**2.00X04.625**

Guide bush ST7416

with shoulder, ball guide



Material / Version

Guide bushes made of steel 1.7131, case-hardened, hardness 61–63 HRC

Guide diameter honed, matched to ball cage and guide pillar. Mounting diameter ground ISO js4.

Important

If possible, order the complete ball guide so that it can be matched with the correct preload.

Mounting instructions

Fit in mounting bore hole ISO H6. Fix with 3 holding clamps ST7367 (included in delivery). The shoulder surface, right-angled ground to the guide bore, will be squeezed onto the plate by the holding clamps and guarantees an absolute chucking of the guide bush.

Holding clamps

When reordering the holding clamps please order:
1 set = 3 pieces, order number ST7367

Guide bush – short

Ø d	Ø d_2	l_1	Ø d_3	Ø d_4	Ø d_5	l_3	l_4	Item number
1"	1.2362"	2 7/16"	1.7170"	2.0320"	1.7170"	0.9375"	1.5000"	ST7416-**1.00X02.437**
1 1/4"	1.5650"	2 15/16"	2.1070"	2.4220"	2.1070"	1.1250"	1.8125"	ST7416-**1.25X02.937**
1 1/2"	1.8150"	2 15/16"	2.4370"	2.7520"	2.4370"	1.1875"	1.7500"	ST7416-**1.50X02.937**
1 3/4"	2.0650"	3 7/16"	2.7470"	3.0620"	2.7470"	1.3750"	2.0625"	ST7416-**1.75X03.437**
2"	2.3150"	3 7/16"	3.1620"	3.4770"	3.1620"	1.6250"	1.8125"	ST7416-**2.00X03.437**

Guide bush – standard

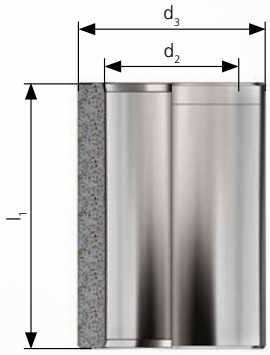
Ø d	Ø d_2	l_1	Ø d_3	Ø d_4	Ø d_5	l_3	l_4	Item number
1"	1.2362"	2 15/16"	1.7170"	2.0320"	2.0320"	0.9375"	2.0000"	ST7416-**1.00X02.937**
1 1/4"	1.5650"	3 7/16"	2.1070"	2.4220"	2.4220"	1.1250"	2.3125"	ST7416-**1.25X03.437**
1 1/2"	1.8150"	3 11/16"	2.4370"	2.7520"	2.7520"	1.1875"	2.5000"	ST7416-**1.50X06.687**
1 3/4"	2.0650"	4 3/16"	2.7470"	3.0620"	3.0620"	1.3750"	2.8125"	ST7416-**1.75X04.187**
2"	2.3150"	4 11/16"	3.1620"	3.4770"	3.4770"	1.6250"	3.0625"	ST7416-**2.00X04.687**

Guide bush – long

Ø d	Ø d_2	l_1	Ø d_3	Ø d_4	Ø d_5	l_3	l_4	Item number
1"	1.2362"	3 7/16"	1.7170"	2.0320"	2.0320"	0.9375"	2.5000"	ST7416-**1.00X03.437**
1 1/4"	1.5650"	3 15/16"	2.1070"	2.4220"	2.4220"	1.1250"	2.8125"	ST7416-**1.25X03.937**
1 1/2"	1.8150"	4 7/16"	2.4370"	2.7520"	2.7520"	1.1875"	3.2500"	ST7416-**1.50X04.437**
1 3/4"	2.0650"	4 15/16"	2.7470"	3.0620"	3.0620"	1.3750"	3.5625"	ST7416-**1.75X04.937**
2"	2.3150"	5 7/16"	3.1620"	3.4770"	3.4770"	1.6250"	3.8125"	ST7416-**2.00X05.437**

Guide bush ST7406

smooth, ball guide



Material / Version

Guide bushes made of steel 1.3505 hardened, hardness 61–63 HRC

Guide diameter honed, suitable for ball cage and guide pillar. Mounting diameter ground.

Important

If possible, order the complete set, so that it can be matched with the correct preload.

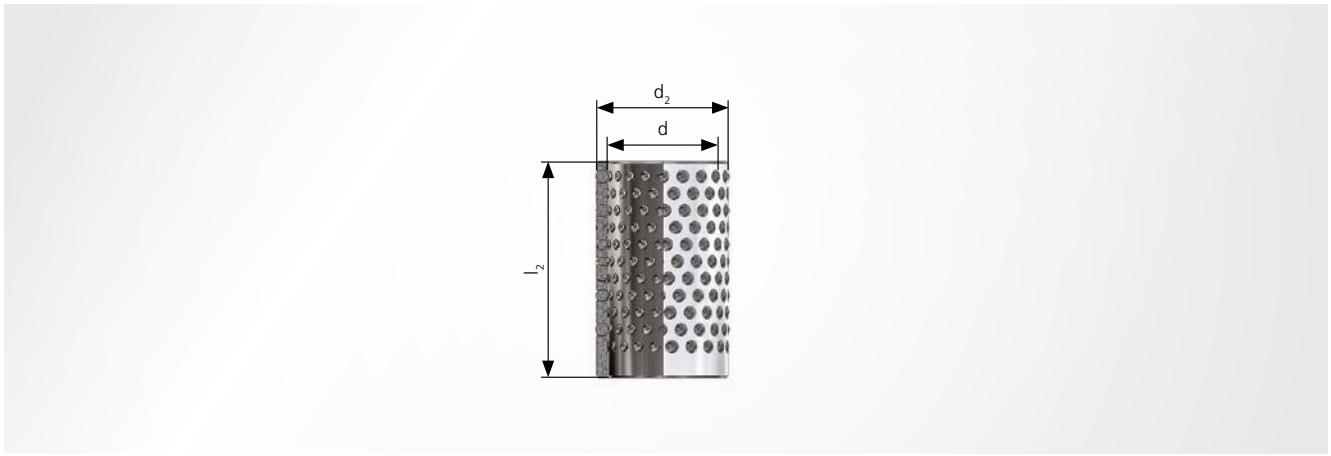
Mounting instructions

1) To glue into the mounting hole ISO G6.
   LOCTITE 603 SZ9742 see on page 13.
2) If possible, avoid press fit, because the internal diameter will decrease.

Ø d	Ø d_2	l_1	Ø d_3	Item number
1"	1.2362"	2 7/16"	1.7170"	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 ¼"	1.5650"	2 7/16"	2.1070"	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 ½"	1.8150"	3"	2.4370"	ST7406-**1.50X03.000**
		3 ¾"		ST7406-**1.50X03.750**
		4 ½"		ST7406-**1.50X04.500**
		5"		ST7406-**1.50X05.000**
1 ¾"	2.0650"	3"	2.7470"	ST7406-**1.75X03.000**
		4"		ST7406-**1.75X04.000**
		5"		ST7406-**1.75X05.000**
		5 ½"		ST7406-**1.75X05.500**
2"	2.3150"	3"	3.1620"	ST7406-**2.00X03.000**
		4"		ST7406-**2.00X04.000**
		5"		ST7406-**2.00X05.000**
		5 ½"		ST7406-**2.00X05.500**

Ball cage ST7130

aluminium



Material / Version

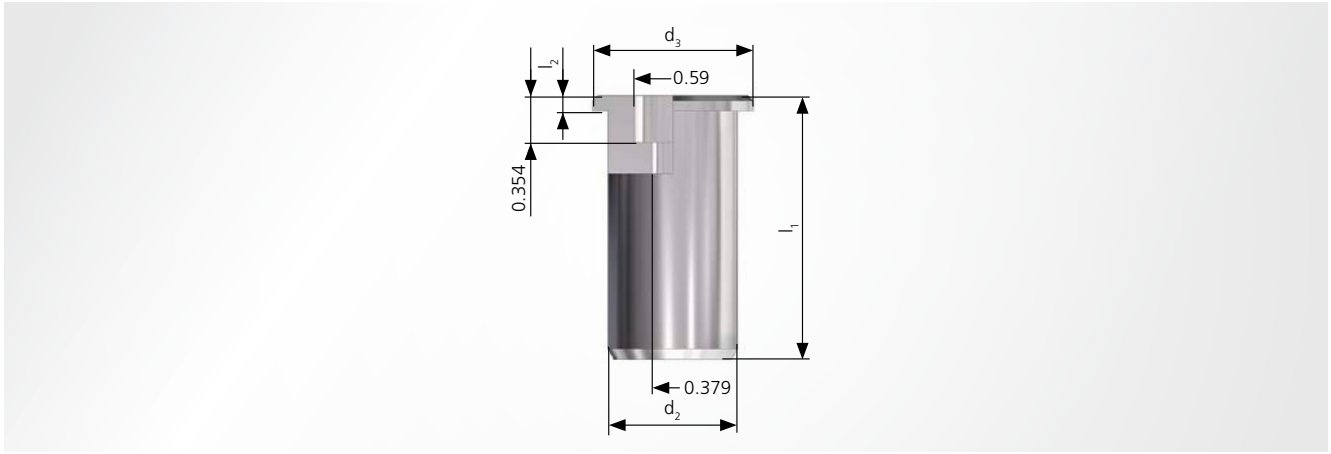
Ball cage made of aluminium, balls of steel, hardened, quality grade 1, sorted

The balls in the mounting bore are free-wheeling mounted. They are helically arranged in the axial direction, so that each ball has its own track.

Ø d	l_2	Ø $Ball_1$	Ø d_2	Item number
1"	1 ½"	0.118"	1.2362"	ST7130-**1.00X01.500**
	1 ¾"			ST7130-**1.00X01.750**
	2"			ST7130-**1.00X02.000**
	2 ¼"			ST7130-**1.00X02.250**
	2 ½"			ST7130-**1.00X02.500**
1 ¼"	2"	0.157"	1.5650"	ST7130-**1.25X02.000**
	2 ¼"			ST7130-**1.25X02.250**
	2 ½"			ST7130-**1.25X02.500**
	2 ¾"			ST7130-**1.25X02.750**
	3"			ST7130-**1.25X03.000**
	3 ¼"			ST7130-**1.25X03.250**
1 ½"	2 ½"	0.157"	1.8150"	ST7130-**1.50X02.500**
	2 ¾"			ST7130-**1.50X02.750**
	3"			ST7130-**1.50X03.000**
	3 ¼"			ST7130-**1.50X03.250**
	3 ½"			ST7130-**1.50X03.500**
	3 ¾"			ST7130-**1.50X03.750**
	4"			ST7130-**1.50X04.000**
1 ¾"	2 ¾"	0.157"	2.0650"	ST7130-**1.75X02.750**
	3"			ST7130-**1.75X03.000**
	3 ¼"			ST7130-**1.75X03.250**
	3 ½"			ST7130-**1.75X03.500**
	3 ¾"			ST7130-**1.75X03.750**
	4"			ST7130-**1.75X04.000**
	4 ¼"			ST7130-**1.75X04.250**
2"	3 ¼"	0.157"	2.3150"	ST7130-**2.00X03.250**
	3 ½"			ST7130-**2.00X03.500**
	3 ¾"			ST7130-**2.00X03.750**
	4"			ST7130-**2.00X04.000**
	4 ¼"			ST7130-**2.00X04.250**
	4 ½"			ST7130-**2.00X04.500**
	5 ½"			ST7130-**2.00X05.500**

Cage holder ST7132

Steel



Material / Version

Steel

The cage holder can be used for our ball cages. The length of the cage holder should be half the length of the cage in use (If necessary please shorten).

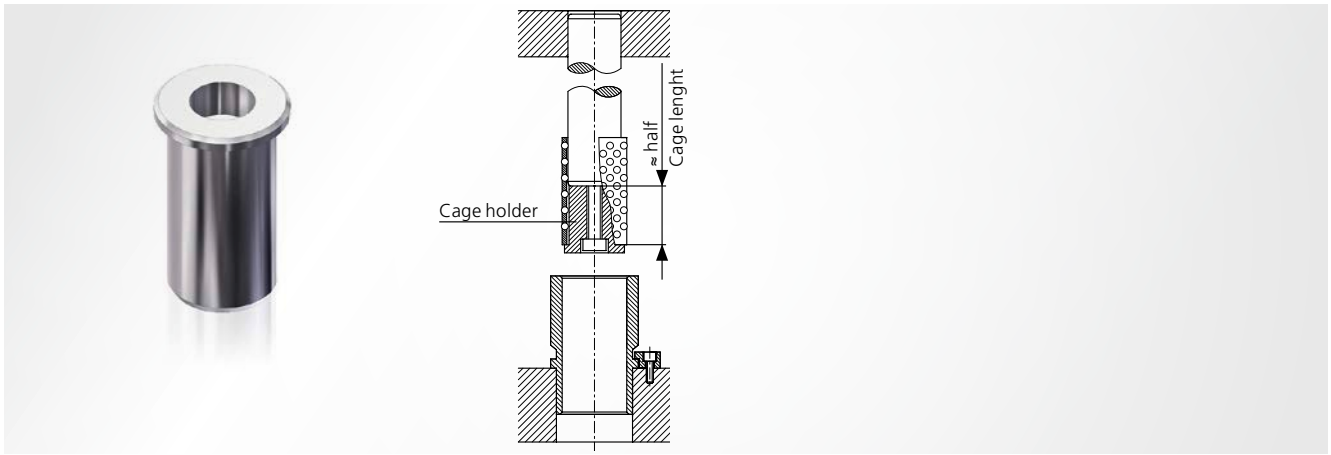
Application

In all die sets in which the guide pillars are fastened in the upper plate.

Screws SZ8514.2 and SZ8514.3 are included in delivery.

Ø d_1	Ø d_2	Ø d_3	l_1	Screw	Item number
1"	0.9803"	1.2165"	2"	5/16-20-UNC x 2 ¼"	ST7416-**1.00X02.000**
1 ¼"	1.2303"	1.5433"	2"	5/16-20-UNC x 2 ¼"	ST7416-**1.25X02.000**
1 ½"	1.4803"	1.7953"	2 ½"	5/16-20-UNC x 2 ¾"	ST7416-**1.50X02.500**
1 ¾"	1.7303"	2.0827"	2 ½"	5/16-20-UNC x 2 ¾"	ST7416-**1.75X02.500**
2"	1.9803"	2.2953"	2 ½"	5/16-20-UNC x 2 ¾"	ST7416-**2.00X02.500**

Mounting example



LOCTITE 603 SZ9742

For tension-free, enduring fastening of parts with radial and axial pressure, such as bearings, bushings, axles, pins, rotors, gear wheels, rings, tires and sinter bearings. The extrusion force of press fits increases by approximately 100% and more. Fitting rust and leakage are avoided. Thin liquid, only very difficult to break fastening.

Glue gap

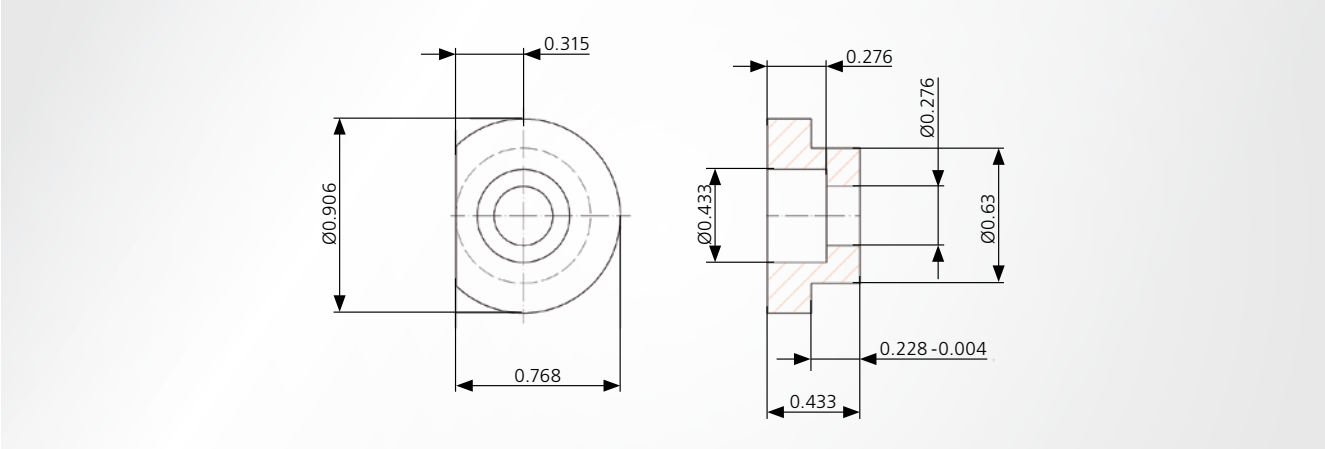
- Max. 0.0059" (0.15 mm)
- Preferably 0.0020" (0.05 mm)

Hardening time

- Hard to the touch 10–30 min
- Functional hardness 30–60 min
- Final hardness ≈ 6 hrs

Colour green, 50 ml in plastic bottle.

Clamp ST7367



Socket-head screw SZ8514

Screw for clamp	Item number
¼" x 7⁄16" UNC	SZ8514.1

Screw for cage holder	Ø d	Item number
5⁄16" x 2 ¼" UNC	1" + 1 ¼"	SZ8514.2
5⁄16" x 2 ¾" UNC	from 1 ½"	SZ8514.3

Bore dimensions and clamp information

Bore size for STEINEL guide pillar

Ø	ST7108 Plate thickness < 1 Press fit	ST7108 Plate thickness > 1 Press fit	ST7120 Clamp fit
	ISO R6	ISO N6	ISO N6
1"	1"	1"	1"
1.25"	1.25"	1.25"	1.25"
1.5"	1.5"	1.5"	1.5"
1.75"	1.75"	1.75"	1.75"
2"	2"	2"	2"

Bore size for STEINEL guide bushes

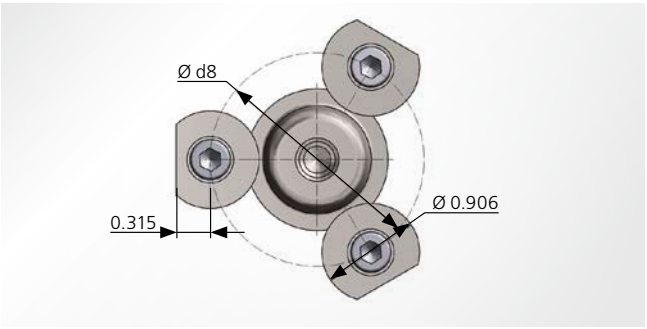
Ø	ST7419 Clamp fit	ST7416 Clamp fit	ST7406 Cement fit
	ISO H6	ISO H6	ISO G6
1"	1.717"	1.717"	1.717"
1.25"	2.107"	2.107"	2.107"
1.5"	2.437"	2.437"	2.437"
1.75"	2.747"	2.747"	2.747"
2"	3.162"	3.162"	3.162"

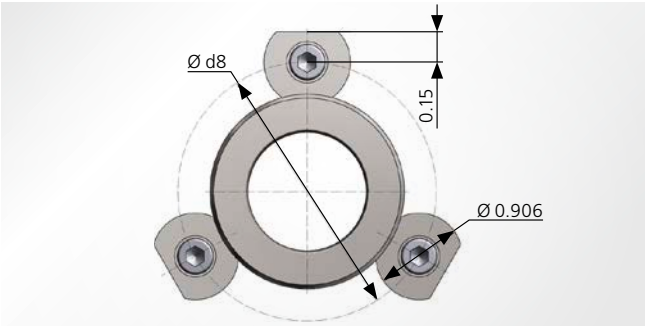
Bore size

Nom Bore Ø	Max. bore	Min. bore
ISO R6		
1"	0.9991"	0.9985"
1.25"	1.2489"	1.2482"
1.5"	1.4989"	1.4982"
1.75"	1.7489"	1.7482"
2"	1.9986"	1.9978"
ISO N6		
1"	0.9996"	0.9991"
1.25"	1.2495"	1.2489"
1.5"	1.4995"	1.4989"
1.75"	1.7495"	1.7489"
2"	1.9994"	1.9987"
3.162"	3.1633"	3.1625"

Nom Bore Ø	Max. bore	Min. bore
ISO H6		
1.717"	1.0005"	1.0000"
2.107"	1.2506"	1.2500"
2.437"	1.5006"	1.5000"
2.747"	1.7506"	1.7500"
3.162"	2.0006"	2.0000"
ISO G6		
1.717"	1.7180"	1.7174"
2.107"	2.1081"	2.1074"
2.437"	2.4381"	2.4374"
2.747"	2.7481"	2.7474"
3.162"	3.1633"	3.1625"

Pitch Circle Diameter





Pillar Ø	Pitch Circle Ø (d8)
1"	1.9813"
1.25"	2.2313"
1.5"	2.5443"
1.75"	2.9193"
2"	3.1693"

Bush Ø	Pitch Circle Ø (d8)
1.717"	2.7013"
2.107"	3.0913"
2.437"	3.4213"
2.747"	3.7313"
3.162"	4.1463"

STEINEL®

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