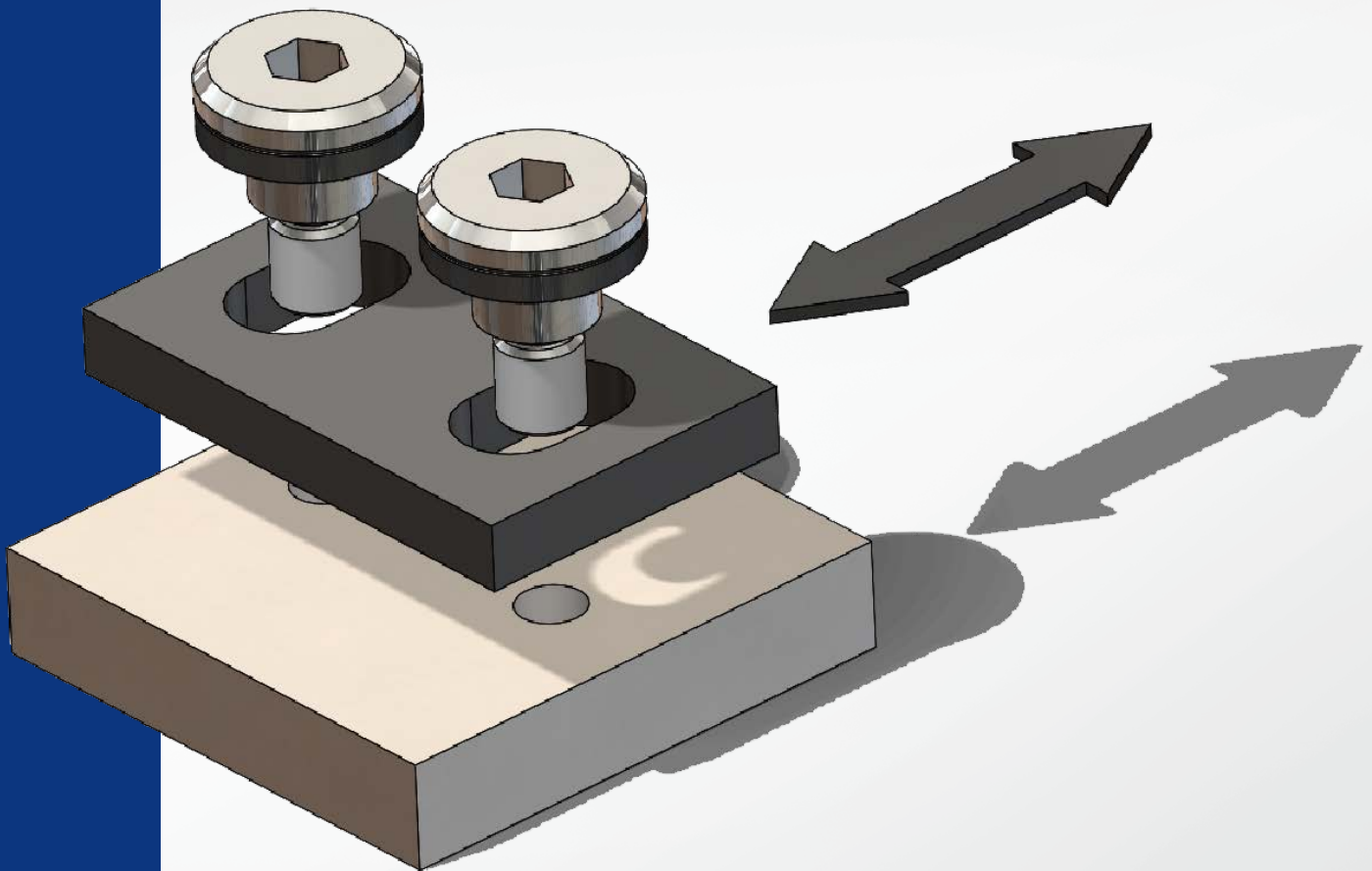

Slide and Fix!

Tension Compensation Screw

The easiest solution ...



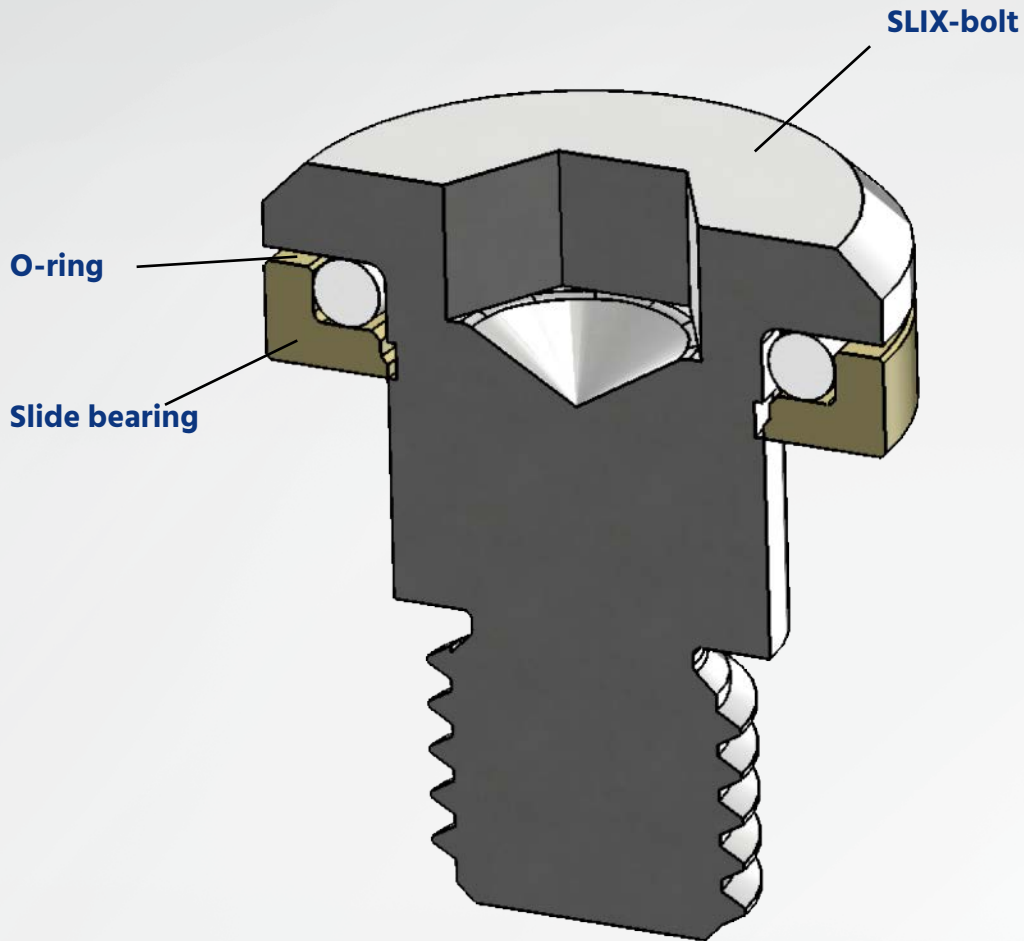
... e.g. at parallel used linear guides:

- **No tensions!**
- **Smooth running!**
 - Immense time savings during assembly!
 - Elimination of high-precision & expensive screw-on/off surface!

Floating Bearing Mountings with Standard Elements

This catalog contains the versions in stock.

Further installation instructions, applications and possible variants
can be found in the SLIX User Manual.



„Our application consultants will also be happy to assist you!“

SLIX?

SLIX means Slide and Fix. It is probably more aptly described by the word stress compensation screw. But SLIX is certainly catchier, so we'll stick with that term.

What are SLIX?

SLIX are bolts that compress two components together, but allow a desired movement of the components relative to each other.

Why are SLIX needed?

In most applications, two or more linear guides are used in parallel.

PGM Motion and its employees have observed similar malfunctions in these applications time and time again over decades. Failures can be attributed predominantly to static overdetermination of the guides. Based on these observations, a solution was sought for this and SLIX was developed.

SLIX are especially necessary when:

- A temperature change alters the dimensions of a component.
- Assembly inaccuracies occur.
- Manufacturing tolerances have to be compensated.
- The position of the components varies due to dynamic loads.

This must be compensated, with SLIX machines remain relaxed.

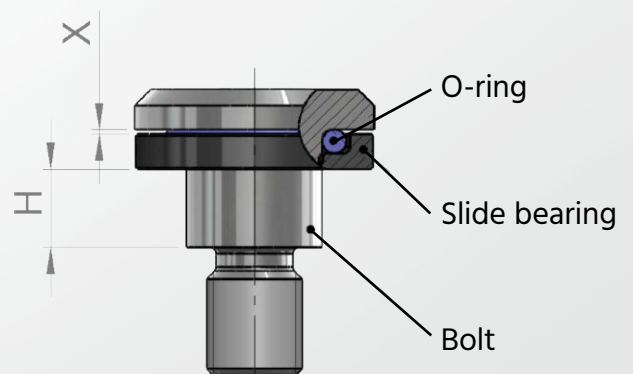
How does it work?

A SLIX consists of 3 components: Bolt, plain bearing and O-ring.

When the bolt is screwed into the bore, the plain bearing compresses the O-ring.

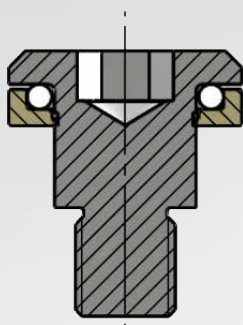
This occurs by a maximum of dimension X, after which the plain bearing sits on the bolt.

The stroke is limited accordingly. The dimension H increases the more the O-ring is compressed.

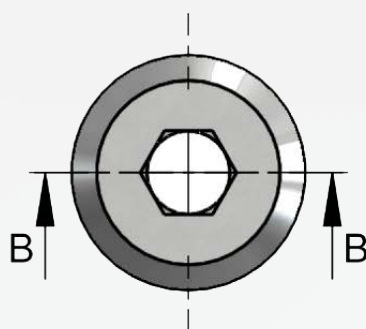
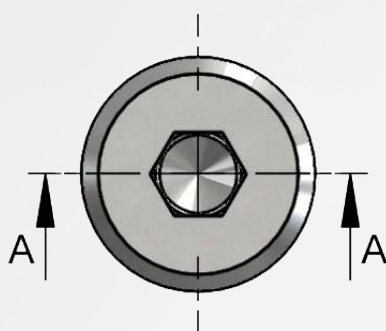
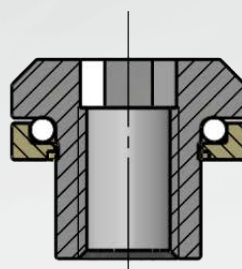


Designs

Form A – with external thread



Form B – with internal thread



Order numbers:

SLIX - A - 06 - 08

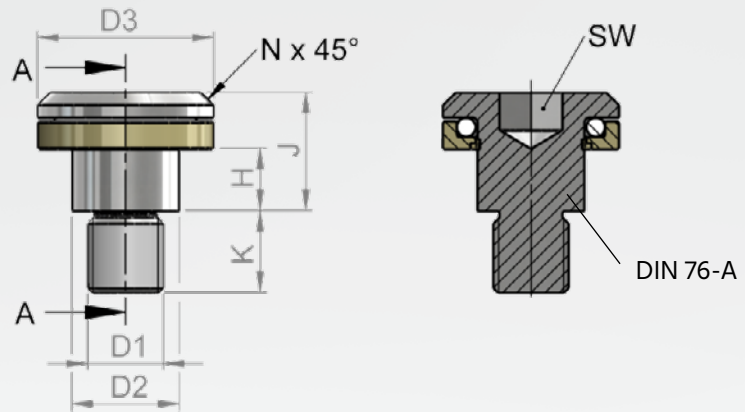
Slide and Fix Form Thread Height of thread

standard sizes

Form	Thread	Height of thread in mm
A	M 4	03, 05
	M 5	05, 08
	M 6	05, 08
	M 8	06, 10

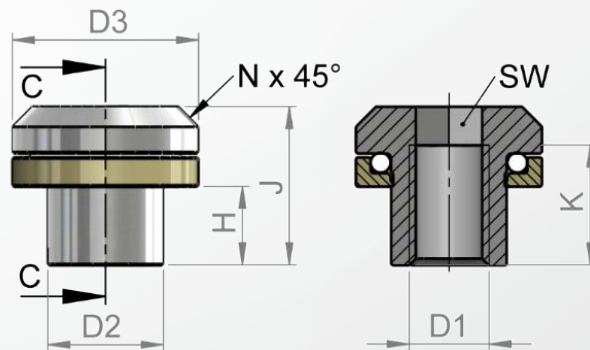
Form	Thread	Height of thread in mm
B	M 4	03, 05
	M 5	05, 08
	M 6	05, 08
	M 8	06, 10

Dimensions Form A



Order No.	D1	D2	D3	H	J	SW	K	N
SLIX-A-0403	M 4	6 h 9	10 h 9	2,9	6,5 -0,1	3	5,5	0,6
SLIX-A-0405				4,9	8,5 -0,1			
SLIX-A-0505	M 5	7 h 9	12 h 9	4,9	9 -0,1	4	6,5	0,8
SLIX-A-0508				7,9	12 -0,1			
SLIX-A-0605	M 6	8,5 h 9	15 h 9	4,9	10 -0,1	5	8	1
SLIX-A-0608				7,9	13 -0,1			
SLIX-A-0806	M 8	10,5 h 9	18 h 9	5,9	12 -0,1	6	10	1
SLIX-A-0810				9,9	16 -0,1			

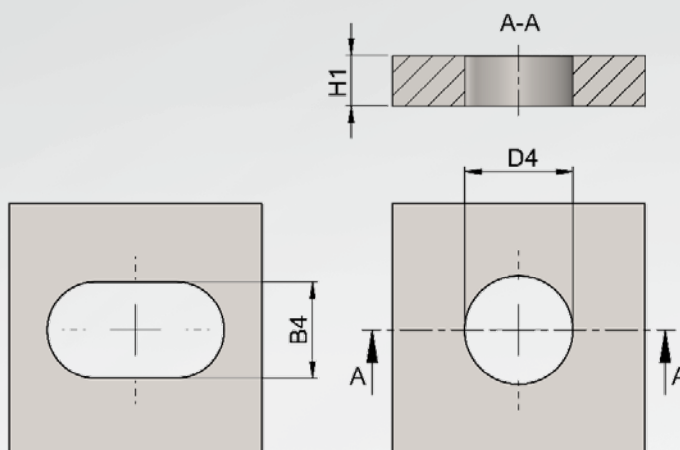
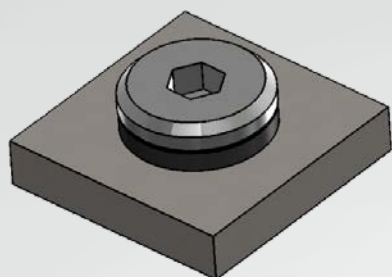
Dimensions Form B



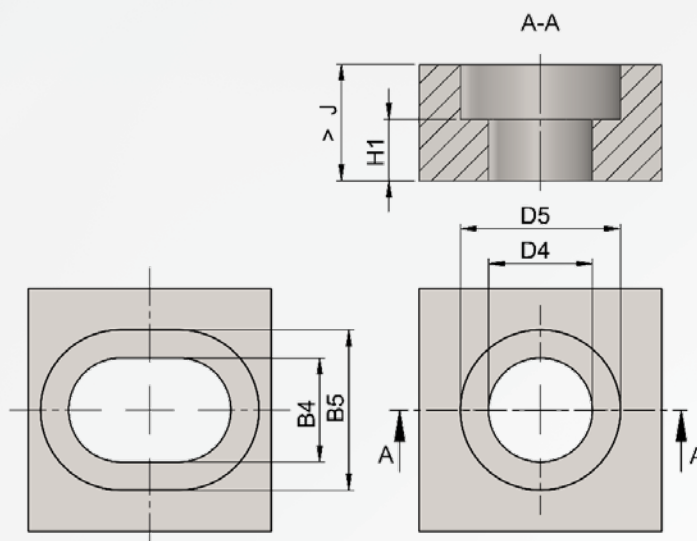
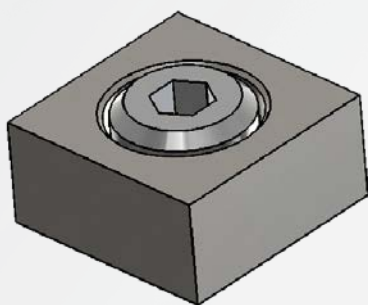
Order No.	D1	D2	D3	H	J	SW	K	N
SLIX-B-0403	M 4	6 h 9	10 h 9	2,9	8 -0,1	4	5	1
SLIX-B-0405				4,9	10 -0,1		7	
SLIX-B-0505	M 5	7 h 9	12 h 9	4,9	10,5 -0,1	5	7	1,2
SLIX-B-0508				7,9	13,5 -0,1		10	
SLIX-B-0605	M 6	8,5 h 9	15 h 9	4,9	12 -0,1	6	8	1,5
SLIX-B-0608				7,9	15 -0,1		11	
SLIX-B-0806	M 8	10,5 h 9	18 h 9	5,9	15 -0,1	8	10	2
SLIX-B-0810				9,9	19 -0,1		14	

Installation dimensions

Installation overhanging



Recessed installation



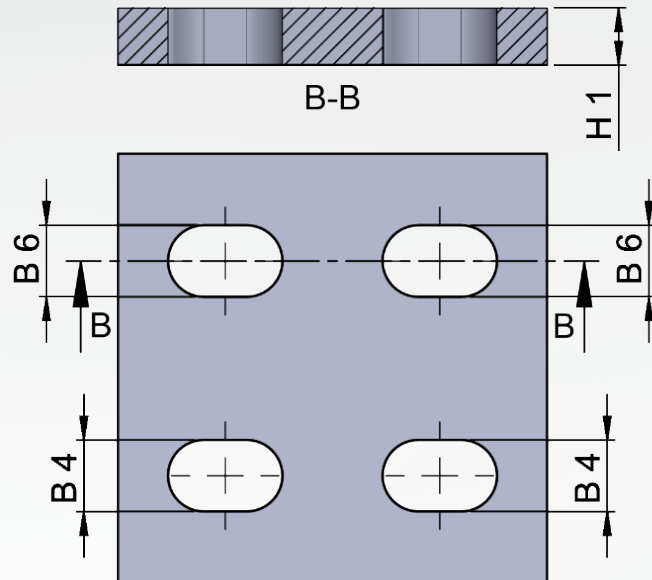
Bores should only be selected if tolerance compensation in two axes is desired. If a compensation movement is only required in one axis, an oblong hole with tolerance H9 should be selected. Additional degrees of freedom increase wear in dynamic applications.

Order No.	H 1	D4 max.	D5	B4	B5
SLIX- _ - 04__	Bolt dimension H + 0,2	8	12,5	6 H9	11
SLIX- _ - 05__	Bolt dimension H + 0,2	9	14,5	7 H9	13
SLIX- _ - 06__	Bolt dimension H + 0,3	11	18	8,5 H9	16
SLIX- _ - 08__	Bolt dimension H + 0,4	13	21	10,5 H9	20

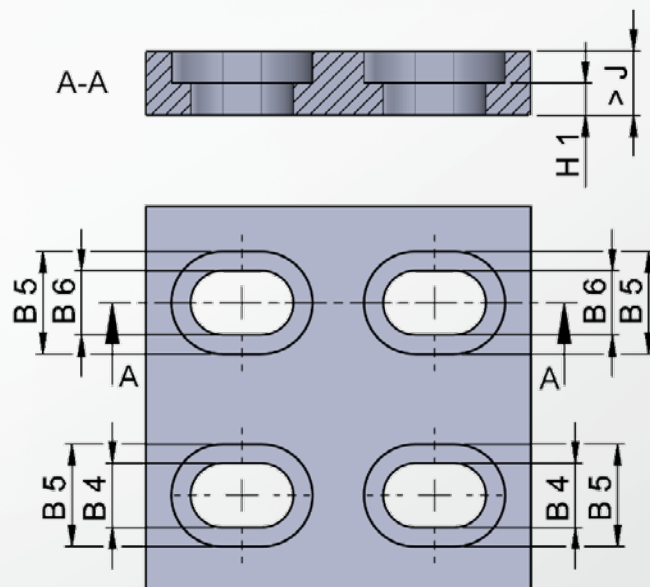
Installation dimensions parallel slots

Due to manufacturing tolerances, the bolts may not fit in all slotted holes. In this case, a combination of narrow and wide slotted holes must be selected.

Installation overhanging



Recessed installation



Alternatively, the structure is possible with one narrow (B4) and three wide (B6) slotted holes.

Order No.	H 1	B4	B5	B6
SLIX- _ - 04__	Bolt dimension H + 0,2	6 H9	11	6,5
SLIX- _ - 05__	Bolt dimension H + 0,2	7 H9	13	7,5
SLIX- _ - 06__	Bolt dimension H + 0,3	8,5 H9	16	9
SLIX- _ - 08__	Bolt dimension H + 0,4	10,5 H9	20	11

A German utility model with the number 20 2020 101 600 has been registered for floating bearing elements.

Tightening torques of the SLIX screws

Size	Torque in Nm
M 4	2 Nm
M 5	4,5 Nm
M 6	7,5 Nm
M 8	18,5 Nm

The torques refer to screwing into steel components. When mounting in softer materials, the indentation (setting) of the shaft diameter D2 must be taken into account. A lower torque must be used here. To prevent the screws from loosening at lower torques, the screws should be glued in place.

Maximum static load capacity in axial direction

SLIX-form A + B	Force in N
M 4	1500
M 5	3000
M 6	4900
M 8	6300

Values of the high-temperature version depend on the operating temperature, data on request.

Temperature range

-20°C ... + 80° C Continuous operating temperature

-40°C ... + 200° C Continuous operating temperature of the high temperature version

Materials

Steel galvanized

NBR (High temperature version Viton)

High performance plain bearing polymer



Other dimensions and materials on request.

Subject to change without notice

Production ▪ **Sales** ▪ **Analysis** ▪ **Repair**