RoHS

Side Clamps

Steel, with Eccentrical Cam Lever

SPECIFICATION

Types
- Type **E**: With serrated clamping jaw
- Type **P**: With prism clamping jaw

Coding
- Version **R**: Clamping by clockwise rotation
- Version **L**: Clamping by anti-clockwise rotation

Clamping mechanisms
Steel
- Case-hardened
- Blackened

Ball knob DIN 319 (see page 538)
Plastic, phenolic resin (PF)
Black, shiny finish

For slot width a = 10 / 14
- T-Nut DIN 508 (see page 977)
- Socket cap screw ISO 4762
  Steel
  - Property class 12.9
  - Blackened

For slot width a = 12
- T-slot bolt DIN 787 (see page 986)
- Hex nut DIN 934
  Steel, blackened

INFORMATION

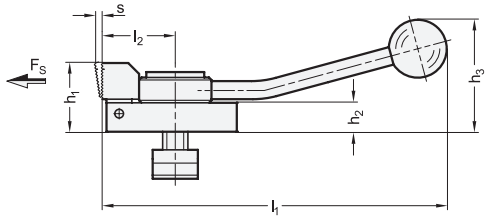
With side clamps GN 9190, workpieces are clamped with a pivoted clamping jaw. The clamping force acts laterally and from above to pull down on the workpiece and clamp it against fixed stops and the supporting surface.
The clamping stroke of the clamping jaw results from the swivel movement of the eccentrical cam lever. When the lever is released, the clamping jaw is returned by spring force. The low overall height of the side clamps allow full-surface machining of the workpiece.
Side clamps can be screwed in directly, e.g. in a mounting plate, or fastened to machine tables with T-slots. In addition, they can be mounted in any position perpendicular to the T-slot using the slotted support blocks GN 9190.3 (see page), which are available as accessory. In this case, the supplied screw must be replaced as per the table.
To ensure easy play and maximum clamping force, the tensioning mechanisms should be lightly greased.

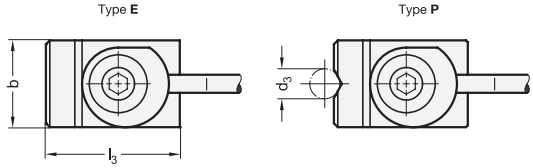
ACCESSORY

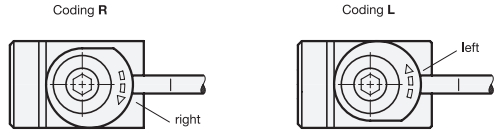
- GN 9190.3 Slotted Support Blocks (see page)

TECHNICAL INFORMATION

- Strength Values of Screws (see page A20)

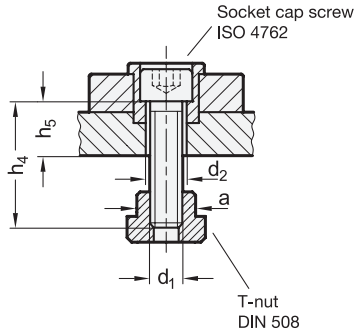




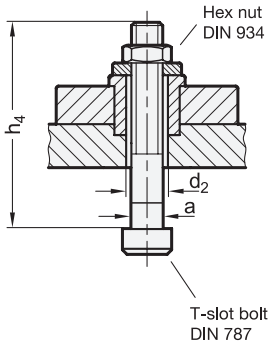


GN 9190 | Side Clamps

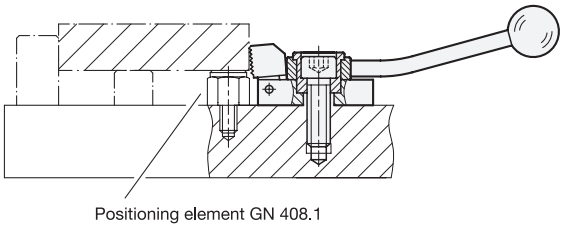
slot width a = 10 / 14

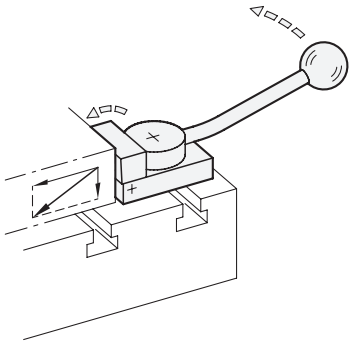


slot width a = 12



Examples of application





GN 9190-E

Description	a Slot width	d1	Fs in kN	b	d2	h1	h2	h3	h4	h5	l1	l2	l3	s Clamping stroke	Recommended screw in combination with GN 9190.3	⚖
GN 9190-10-M8-E-R	10	M 8	3.5	32	8.4	20	8	40	30	12.6	132	32	50	3	ISO 4762-M8x25	262
GN 9190-10-M8-E-L	10	M 8	3.5	32	8.4	20	8	40	30	12.6	132	32	50	3	ISO 4762-M8x25	262
GN 9190-12-M12-E-R	12*	M 12	7	48	12.5	38	16	62	63	-	190	40	72	4	-	870
GN 9190-12-M12-E-L	12*	M 12	7	48	12.5	38	16	62	63	-	190	40	72	4	-	870
GN 9190-14-M12-E-R	14	M 12	7	48	12.5	38	16	62	40	19.1	190	40	72	4	ISO 4762-M12x35	845
GN 9190-14-M12-E-L	14	M 12	7	48	12.5	38	16	62	40	19.1	190	40	72	4	ISO 4762-M12x35	845

GN 9190-P

Description	a Slot width	d1	Fs in kN	b	d2	d3 min.	d3 max.	h1	h2	h3	h4	h5	l1	l2	l3	s Clamping stroke	Recommended screw in combination with GN 9190.3	⚖
GN 9190-10-M8-P-R	10	M 8	3.5	32	8.4	4	26	20	8	40	30	12.6	132	32	50	3	ISO 4762-M8x25	263
GN 9190-10-M8-P-L	10	M 8	3.5	32	8.4	4	26	20	8	40	30	12.6	132	32	50	3	ISO 4762-M8x25	263
GN 9190-12-M12-P-R	12*	M 12	7	48	12.5	4	26	38	16	62	63	-	190	40	72	4	-	893
GN 9190-12-M12-P-L	12*	M 12	7	48	12.5	4	26	38	16	62	63	-	190	40	72	4	-	893
GN 9190-14-M12-P-R	14	M 12	7	48	12.5	4	26	38	16	62	40	19.1	190	40	72	4	ISO 4762-M12x35	838
GN 9190-14-M12-P-L	14	M 12	7	48	12.5	4	26	38	16	62	40	19.1	190	40	72	4	ISO 4762-M12x35	838

* Combination with GN 9190.3 not possible