

Side Clamps

Steel, with Clamping Thread

SPECIFICATION

Types

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

Coding

- **G**: Clamping stroke with ball point screw
- **K**: Clamping stroke with adjustable hand lever

Clamping mechanisms

Steel

- Case-hardened
- Blackened

Fastening set

- Nut for T-slot
 - Heat-treated steel
 - Property class 10
 - Blackened
- Socket cap screw ISO 4762
 - Steel
 - Property class 12.9
 - Blackened

Ball point screw for coding G

Heat-treated steel

- Blackened
- Ball hardened

Adjustable hand lever for coding K

- Handle
 - Zinc die casting
 - Powder coated
 - Black RAL 9005, textured finish
- Insert / Retaining screw
 - Heat-treated steel, blackened
 - Ball hardened

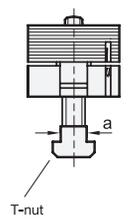
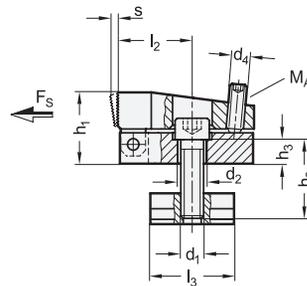


INFORMATION

With side clamps GN 9190.1, 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 screw-in depth of the clamping thread d_4 . When the set screw 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.



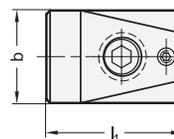
ACCESSORY

- GN 9190.3 Slotted Support Blocks (see page)

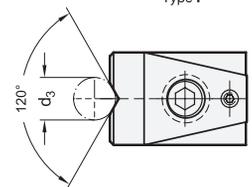
TECHNICAL INFORMATION

- Strength Values of Screws / Nuts (see page A20)

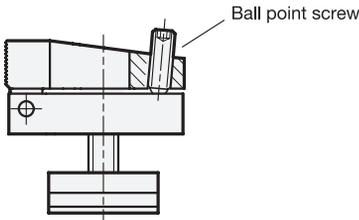
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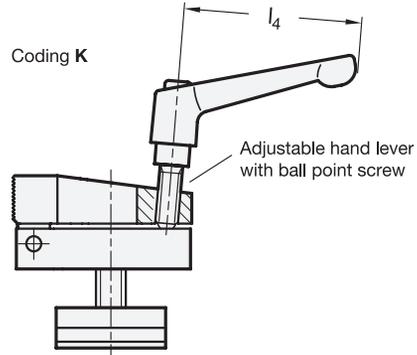
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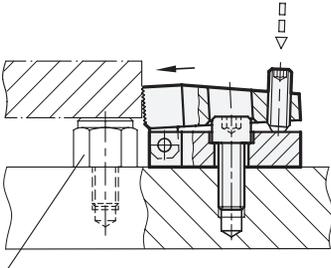
Coding G



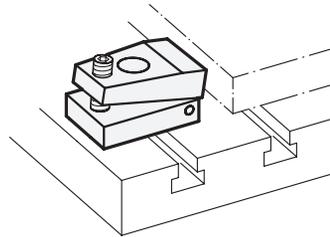
Coding K



Examples of application



Positioning element GN 408.1



GN 9190.1-E

Description	a Slot width	d1	F _s in kN	b	d2	d4	h1	h2	h3	l1	l2	l3	l4	s Clamping stroke	Max. tightening torque MA in Nm	⚖
GN 9190.1-10-M8-E-G	10	M 8	7	32	8.4	M 8	24	20	8	52	28	30	-	3	3	276
GN 9190.1-10-M8-E-K	10	M 8	7	32	8.4	M 8	24	20	8	52	28	30	63	3	3	413
GN 9190.1-14-M12-E-G	14	M 12	15	48	12.5	M 12	37	30	11	72	40	44	-	4	9	831
GN 9190.1-14-M12-E-K	14	M 12	15	48	12.5	M 12	37	30	11	72	40	44	78	4	9	1042
GN 9190.1-18-M16-E-G	18	M 16	21.5	68	16.5	M 16	47	35	13	86	41	56	-	7	20	1749
GN 9190.1-18-M16-E-K	18	M 16	21.5	68	16.5	M 16	47	35	13	86	41	56	108	7	20	2112

GN 9190.1-P

Description	a Slot width	d1	F _s in kN	b	d2	d3 Min.	d3 Max.	d4	h1	h2	h3	l1	l2	l3	l4	s Clamping stroke	Max. tightening torque MA in Nm	⚖
GN 9190.1-10-M8-P-G	10	M 8	7	32	8.4	4	26	M 8	24	20	8	52	28	30	-	3	3	266
GN 9190.1-10-M8-P-K	10	M 8	7	32	8.4	4	26	M 8	24	20	8	52	28	30	63	3	3	403
GN 9190.1-14-M12-P-G	14	M 12	15	48	12.5	4	26	M 12	37	30	11	72	40	44	-	4	9	833
GN 9190.1-14-M12-P-K	14	M 12	15	48	12.5	4	26	M 12	37	30	11	72	40	44	78	4	9	1044
GN 9190.1-18-M16-P-G	18	M 16	21.5	68	16.5	4	26	M 16	47	35	13	86	41	56	-	7	20	1730
GN 9190.1-18-M16-P-K	18	M 16	21.5	68	16.5	4	26	M 16	47	35	13	86	41	56	108	7	20	2093

