

Self-adjusting toggle clamps

Self-adjusting jaw height for rapid clamping



The power to be in position fast

With the new self-adjusting toggle clamps from BESSEY, work pieces of differing heights can be clamped both quickly and securely. This makes them perfectly suited for use in small-scale production situations. However, it wouldn't be a BESSEY toggle lever clamp if our development team hadn't come up with another stand-out feature – true to our company motto "BESSEY. Simply better." – which is the ability to automatically adjust to different work piece heights while also

maintaining constant clamping force. This makes time-consuming manual adjustment of the pressure screw a thing of the past. BESSEY toggle clamps have even more to offer when it comes to their flexibility; the clamping force can be optimized to the demands of the particular workpiece, simply by turning a set screw on the cantilevered joint. Furthermore, the hole pattern on the base plate has been designed to facilitate fast and secure clamping set-up. All this makes it an extremely-flexible clamping tool – give it a try!



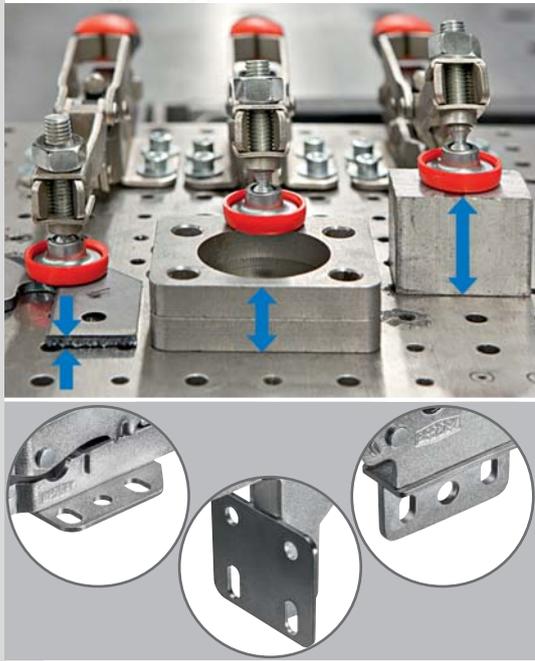
Self-adjusting toggle clamps



Your benefits at a glance:

1 Automatic adjustment of the jaw height
 The BESSEY self adjusting toggle clamp automatically adjusts to the height of the particular work piece. The infinitely variable jaw heights up to 40 mm (1 9/16 In.) on the horizontal and vertical types and 16 mm (5/8 In.) on the push/pull types are achieved with no loss of clamping force. This renders time-consuming manual adjustment of the pressure screw unnecessary.

- 2 Set screw on the cantilevered joint**
 Using the set screw on the cantilevered joint, the clamping force can be adjusted to your particular requirements, up to 2,500 N (550 lbs).
- 3 Hole pattern on the base plate**
 The base plate, which is suitable for both metric and imperial, has been designed to facilitate fast and secure clamping set-up.
- 4 Ergonomic handle**
 The plastic injection moulded and ergonomically designed handle fits well in the hand and has a very good grip.



Self-adjusting toggle clamps



NEW

Vertical toggle clamp with open arm and horizontal base plate STC-VH



N ^o	← a →					VB0003
	mm	"				
STC-VH20	20	13/16	1100	250	0.35	6
STC-VH50	40	1 9/16	2500	550	0.43	6

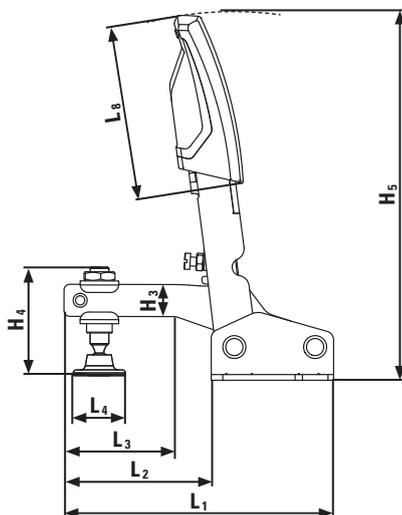


3D CAD data for download at www.bessey.de
STC-VH50 available from quarter 4, 2014

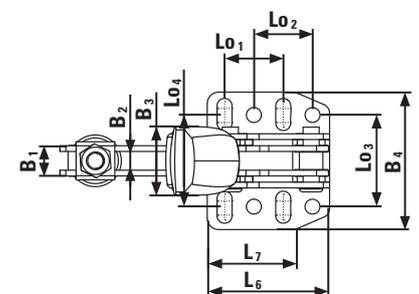
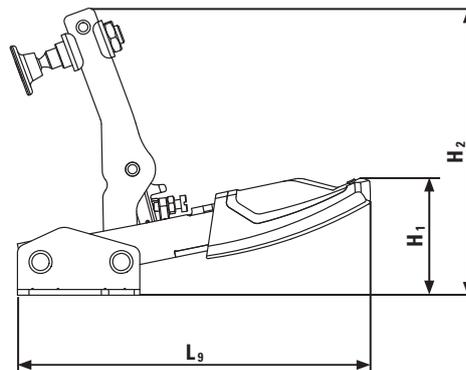
- In the clamped position, the lever is vertical
- Automatic and infinitely variable adjustment of the clamping height up to 40 mm (1 9/16 In.) while clamping force remains unchanged – without having to make manual changes to the position of the pressure screws
- Adjustable clamping force up to 2,500 N (550 lbs.), based on the adjusting screw in the joint
- Sturdy, tempered metal sheets for a long service life
- Base plate hole pattern suitable for millimetres and inches
- High-quality oil-resistant two-component plastic handle

Table of dimensions

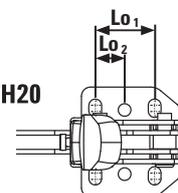
N ^o		Total length	Length of extension arm	Spindle adjustment range	Pressure plate diameter	Length of base	Length of base plate 1	Length of base plate 2	Length of oil free handle	Length of handle (open)	Height of handle (open)	Height cpl. (open)	Height of extension arm	Height of spindle, cpl.	Height of base	Height of centre pressure plate	Width of extension arm (external)	Width of extension arm (internal)	Width of 2-comp. handle	Width of base plate	Length of hole spacing 1	Length of hole spacing 2	Length of hole spacing 3	Width of elongated hole	Diameter of hole
		L1	L2	L3	L4	L5	L6	L7	L8	L9	H1	H2	H3	H4	H5	H6	B1	B2	B3	B4	Lo1	Lo2	Lo3	Lo4	Ø
STC-VH20	mm	92	50	20	16	–	43	35	60	123	41	100	10	42	129	–	10	6	24	48	26	13	28	27-32	5.5
	"	3.62	1.97	0.79	0.63	–	1.69	1.38	2.36	4.84	1.61	3.94	0.39	1.65	5.08	–	0.39	0.24	0.94	1.89	1.00	0.50	1.10	1.06-1.25	0.22
STC-VH50	mm	116	63	40	23	–	53	44	76	154	52	126	14	50	162	–	13.25	8.25	30	60	25.4	25.4	28	33-48	6.5
	"	4.57	2.48	1.57	0.91	–	2.09	1.73	2.99	6.06	2.05	4.96	0.55	1.97	6.38	–	0.52	0.32	1.18	2.36	1.00	1.00	1.10	1.32-1.89	0.26



STC-VH50



STC-VH20



Self-adjusting toggle clamps



**NEW – Carded
hang pack variants**

- In the clamped position, the lever is horizontal
- Automatic and infinitely variable adjustment of the clamping height up to 40 mm (1 9/16 In.) while clamping force remains unchanged – without having to make manual changes to the position of the pressure screws
- Adjustable clamping force up to 2,500 N (550 lbs.), based on the adjusting screw in the joint
- Sturdy, tempered metal sheets for a long service life
- Base plate hole pattern suitable for millimetres and inches
- High-quality oil resistant two-component plastic handle (STC-HH20 with slip protection)

Horizontal toggle clamp with open arm and horizontal base plate STC-HH

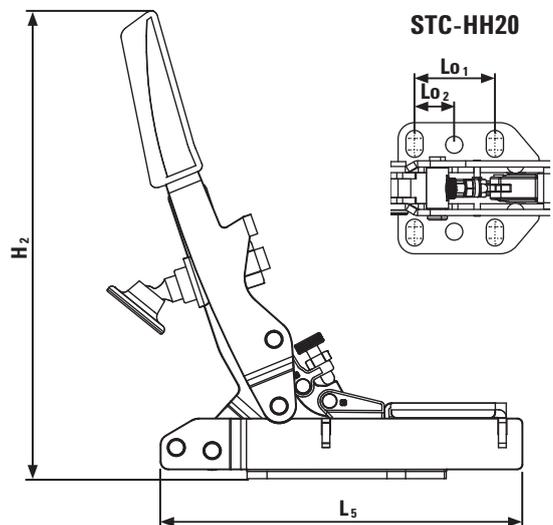
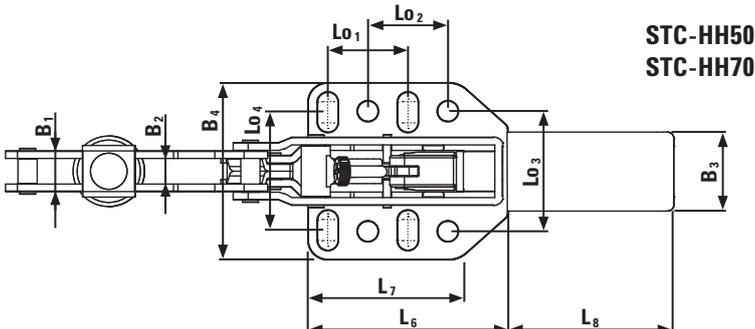
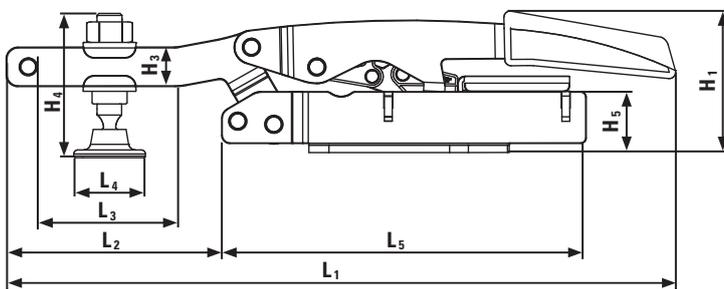
No	← a →		appr. N	lbs.	kg	qty.	VB0003
	mm	"					
STC-HH20	20	13/16	1100	250	0.20	6	
STC-HH20SB	20	13/16	1100	250	0.20	6	
STC-HH50	40	1 9/16	2500	550	0.38	6	
STC-HH50SB	40	1 9/16	2500	550	0.38	6	
STC-HH70	60	2 3/8	2500	550	0.42	6	
STC-HH70SB	60	2 3/8	2500	550	0.42	6	



3D CAD data for download at www.bessey.de

Table of dimensions

No		Total length	Length of extension arm	Spindle adjustment range	Pressure plate diameter	Length of base	Length of base plate 1	Length of base plate 2	Length of oil free handle	Length of handle (open)	Height of handle (closed)	Height of handle (open)	Height of extension arm	Height of spindle, cpl.	Height of base	Height of centre pressure plate	Width of extension arm (external)	Width of extension arm (internal)	Width of 2-comp. handle	Width of base plate	Length of hole spacing 1	Length of hole spacing 2	Length of hole spacing 3	Width of elongated hole	Diameter of hole
		L1	L2	L3	L4	L5	L6	L7	L8	L9	H1	H2	H3	H4	H5	H6	B1	B2	B3	B4	Lo1	Lo2	Lo3	Lo4	Ø
STC-HH20	mm	167	45	20	16	83	45	35	46	-	44	142	10	42	25	-	10	6	20	42	26	13	28	26-31.75	5.5
	"	6.57	1.77	0.79	0.63	3.27	1.77	1.38	1.81	-	1.73	5.59	0.39	1.65	0.98	-	0.39	0.24	0.79	1.65	1.00	0.50	1.10	1-1.25	0.22
STC-HH50	mm	210	66	40	23	115	64	50	53	-	46	155	13	50	20	-	13	8	26	57	25.4	25.4	38	32.44	6.3
	"	8.27	2.60	1.57	0.91	4.53	2.52	1.97	2.09	-	1.81	6.10	0.51	1.97	0.79	-	0.51	0.31	1.02	2.24	1.00	1.00	1.50	1.26-1.73	0.25
STC-HH70	mm	210	66	40	23	115	64	50	53	-	64	175	13	68	38	-	13	8	26	57	25.4	25.4	38	32.44	6.3
	"	8.27	2.60	1.57	0.91	4.53	2.52	1.97	2.09	-	2.52	6.89	0.51	2.68	1.50	-	0.51	0.31	1.02	2.24	1.00	1.00	1.50	1.26-1.73	0.25



Self-adjusting toggle clamps



Horizontal toggle clamp with open arm and vertical base plate STC-HV

No	← a →		appr. N	lbs.	kg	qty.	VB0003
	mm	"					
STC-HV20	20	13/16	1100	250	0.21	6	

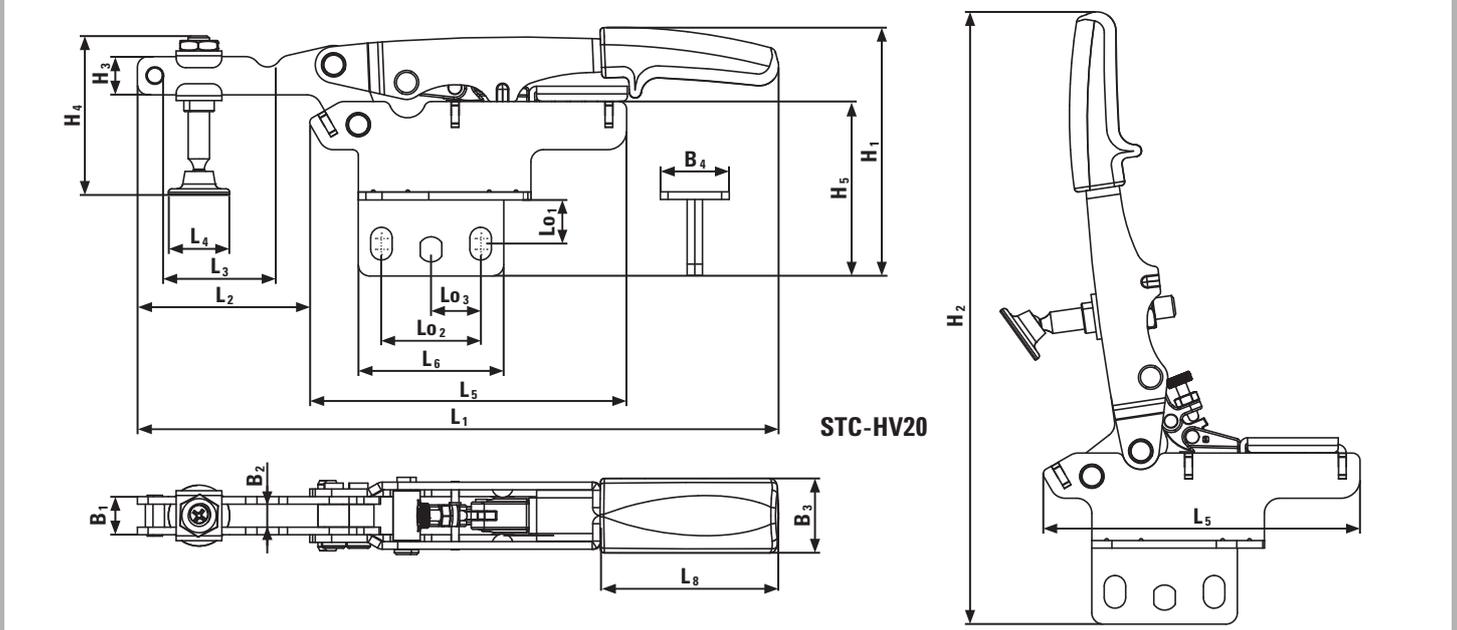


3D CAD data for download at www.bessey.de

- In the clamped position, the lever is horizontal
- Automatic and infinitely variable adjustment of the clamping height up to 20 mm (13/16 In.) while clamping force remains unchanged – without having to make manual changes to the position of the pressure screws
- Adjustable clamping force up to 1,100 N (250 lbs), based on the adjusting screw in the joint
- Sturdy, tempered metal sheets for a long service life
- Base plate hole pattern suitable for millimetres and inches
- High-quality oil resistant two-component plastic handle with slip protection

Table of dimensions

No	mm	Total length		Length of extension arm		Spindle adjustment range		Pressure plate diameter		Length of base		Length of base plate 1		Length of base plate 2		Length of oil free handle		Length of handle (open)		Height of handle (closed)		Height of handle (open)		Height of extension arm		Height of spindle, cpl.		Height of base		Height of centre pressure plate		Width of extension arm (external)		Width of extension arm (internal)		Width of 2-comp. handle		Width of base plate		Length of hole spacing 1		Length of hole spacing 2		Length of hole spacing 3		Width of elongated hole		Diameter of hole	
		L1	L2	L3	L4	L5	L6	L7	L8	L9	H1	H2	H3	H4	H5	H6	B1	B2	B3	B4	Lo1	Lo2	Lo3	Lo4	Ø																								
STC-HV20		167	45	20	16	83	38	-	46	-	65	162	10	42	45	-	10	6	20	18	10-13	26	13	-	5.6																								
	"	6.57	1.77	0.79	0.63	3.27	1.50	-	1.81	-	2.56	6.38	0.39	1.65	1.77	-	0.39	0.24	0.79	0.71	0.39-0.51	1	0.50	-	0.22																								



Self-adjusting toggle clamps



Horizontal toggle clamp with open arm and angled base plate STC-HA

N ^o	← a →					VB0003
	mm	"				
STC-HA20	20	13/16	1100	250	0.23	6

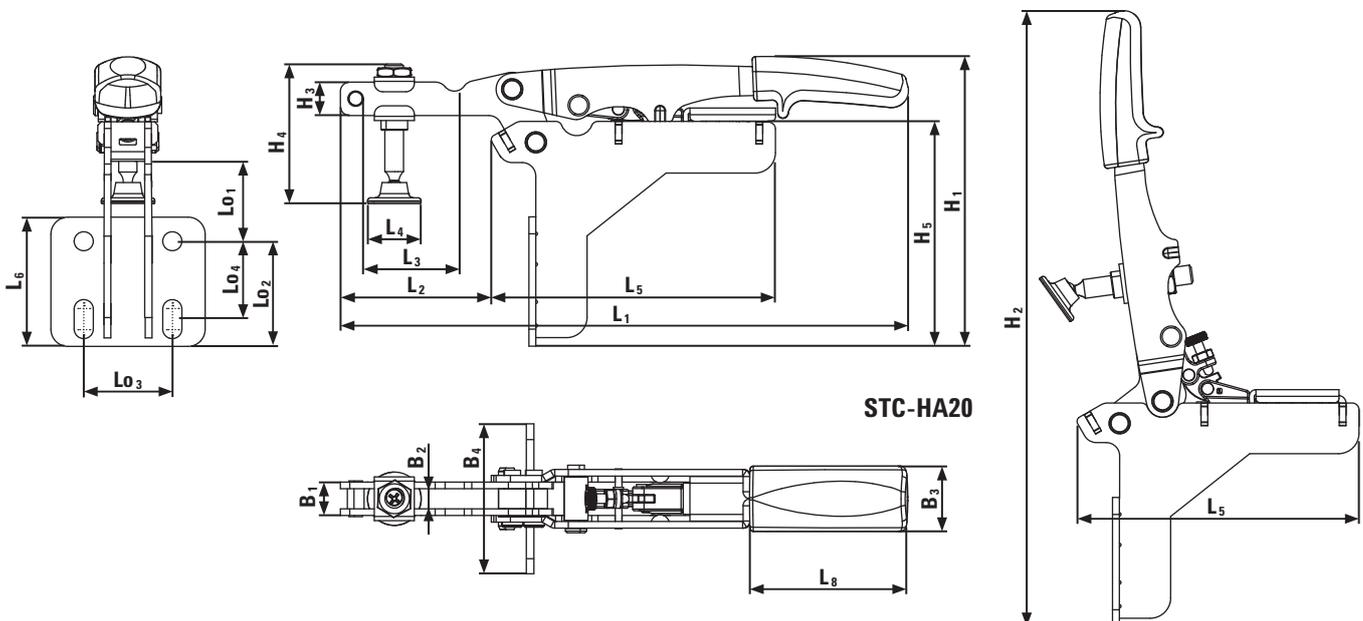


3D CAD data for download at www.bessey.de

- In the clamped position, the lever is horizontal
- Automatic and infinitely variable adjustment of the clamping height up to 20 mm (13/16 In.) while clamping force remains unchanged – without having to make manual changes to the position of the pressure screws
- Adjustable clamping force up to 1,100 N (250 lbs), based on the adjusting screw in the joint
- Sturdy, tempered metal sheets for a long service life
- Base plate hole pattern suitable for millimetres and inches
- High-quality oil resistant two-component plastic handle with slip protection

Table of dimensions

N ^o		Total length		Length of extension arm	Spindle adjustment range	Pressure plate diameter	Length of base	Length of base plate 1	Length of base plate 2	Length of oil free handle	Length of handle (open)	Height of handle (closed)	Height of handle (open)	Height of extension arm	Height of spindle, cpl.	Height of base	Height of centre pressure plate	Width of extension arm (external)	Width of extension arm (internal)	Width of 2-comp. handle	Width of base plate	Length of hole spacing 1	Length of hole spacing 2	Length of hole spacing 3	Width of elongated hole	Diameter of hole
		L1	L2	L3	L4	L5	L6	L7	L8	L9	H1	H2	H3	H4	H5	H6	B1	B2	B3	B4	Lo1	Lo2	Lo3	Lo4	Ø	
STC-HA20	mm	167	45	20	16	83	38	-	46	-	85	181	10	42	66	-	10	6	20	45	10-30	20-26	26	-	5.6	
	"	6.57	1.77	0.79	0.63	3.27	1.50	-	1.81	-	3.35	7.13	0.39	1.65	2.60	-	0.39	0.24	0.79	1.77	0.39-1.18	0.79-1.00	1.00	-	0.22	



Self-adjusting toggle clamps



Push/pull clamp with horizontal base plate STC-IHH



NEW – Carded hang pack variant

No	← a →						VB0003
	mm	"					
STC-IHH15	10	3/8	1100	250	0.19	6	
STC-IHH25	16	5/8	2500	550	0.20	6	
STC-IHH25SB	16	5/8	2500	550	0.21	6	

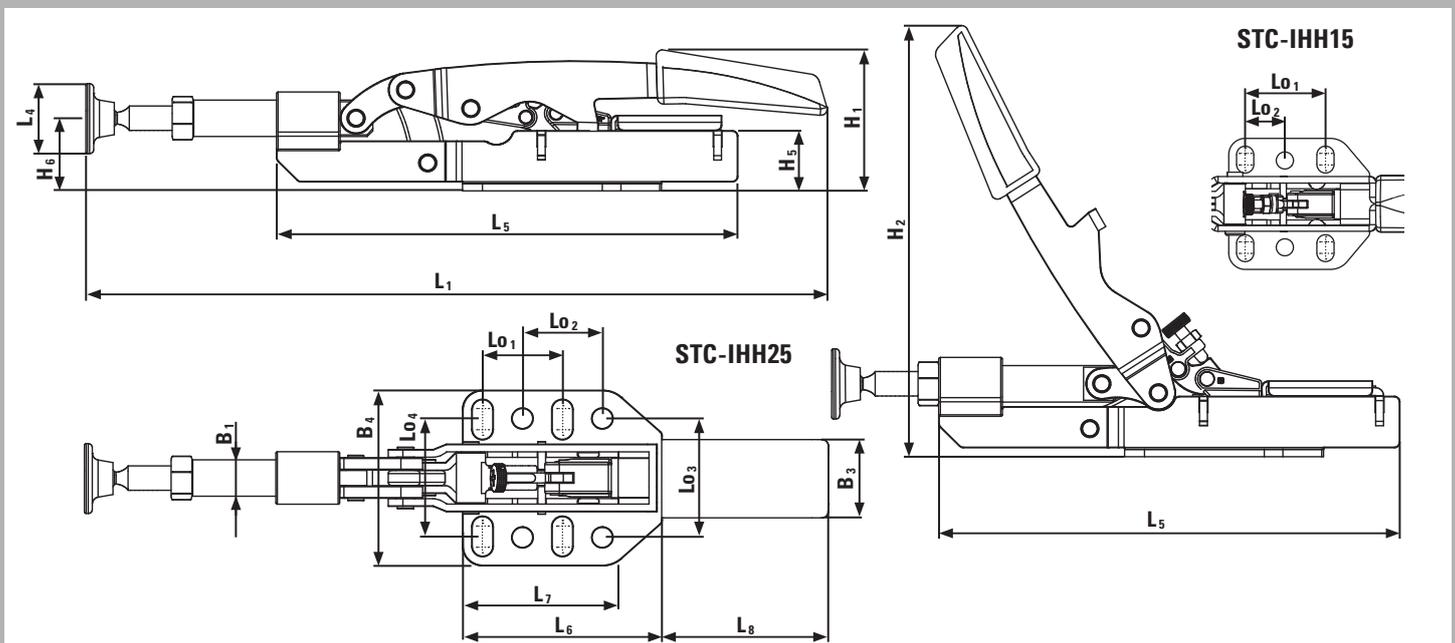


3D CAD data for download at www.bessey.de

- Moving the handle moves the push-pull rod
- Automatic and infinitely variable adjustment of the clamping height up to 16 mm (5/8 in.) while clamping force remains unchanged – without having to make manual changes to the position of the pressure screws
- Adjustable clamping force up to 2,500 N (550 lbs.), based on the adjusting screw in the joint
- Sturdy, tempered metal sheets for a long service life
- Base plate hole pattern suitable for millimetres and inches
- High-quality oil resistant two-component plastic handle (STC-IHH15 with slip protection)

Table of dimensions

No		Total length	Length of extension arm	Spindle adjustment range	Pressure plate diameter	Length of base	Length of base plate 1	Length of base plate 2	Length of oil free handle	Length of handle (open)	Height of handle (closed)	Height of handle (open)	Height of extension arm	Height of spindle, cpl.	Height of base	Height of centre pressure plate	Width of extension arm (external)	Width of extension arm (internal)	Width of 2-comp. handle	Width of base plate	Length of hole spacing 1	Length of hole spacing 2	Length of hole spacing 3	Width of elongated hole	Diameter of hole
		L1	L2	L3	L4	L5	L6	L7	L8	L9	H1	H2	H3	H4	H5	H6	B1	B2	B3	B4	Lo1	Lo2	Lo3	Lo4	Ø
STC-IHH15	mm	181	-	-	16	105	45	35	46	-	32	107	-	-	13	16	8.5	-	20	42	26	13	28	26-31.75	5.5
	"	7.13	-	-	0.63	4.13	1.77	1.38	1.81	-	1.26	4.21	-	-	0.51	0.63	0.33	-	0.79	1.65	1.00	0.50	1.10	1.00-1.25	0.22
STC-IHH25	mm	225	-	-	23	148	64	50	53	-	46	160	-	-	20	23.5	12	-	26	57	25.4	25.4	38	32-44	6.3
	"	8.86	-	-	0.91	5.83	2.52	1.97	2.09	-	1.81	6.30	-	-	0.79	0.93	0.47	-	1.02	2.24	1.00	1.00	1.50	1.26-1.73	0.25



Self-adjusting toggle clamps



Push/pull clamp with angled base plate STC-IHA

- Moving the handle moves the push-pull rod
- Automatic and infinitely variable adjustment of the clamping height up to 10 mm (3/8 in.) while clamping force remains unchanged – without having to make manual changes to the position of the pressure screws
- Adjustable clamping force up to 1,100 N (250 lbs), based on the adjusting screw in the joint
- Sturdy, tempered metal sheets for a long service life
- Base plate hole pattern suitable for millimetres and inches
- High-quality oil resistant two-component plastic handle with slip protection



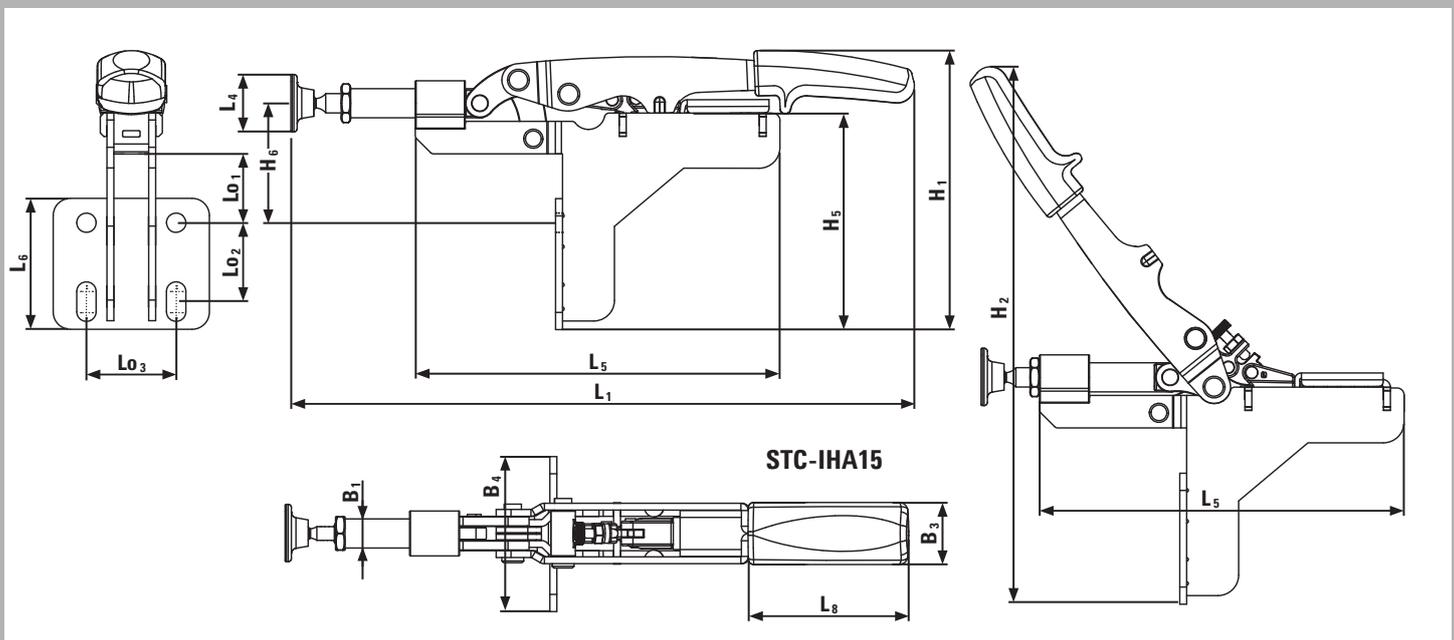
N ^o	← a →		appr. N	lbs.	kg	qty.	VB0003
	mm	"					
STC-IHA15	10	3/8	1100	250	0.23	6	



3D CAD data for download at www.bessey.de

Table of dimensions

N ^o		Total length	Length of extension arm	Spindle adjustment range	Pressure plate diameter	Length of base	Length of base plate 1	Length of base plate 2	Length of oil free handle	Length of handle (open)	Height of handle (closed)	Height of handle (open)	Height of extension arm	Height of spindle, cpl.	Height of base	Height of centre pressure plate	Width of extension arm (external)	Width of extension arm (internal)	Width of 2-comp. handle	Width of base plate	Length of hole spacing 1	Length of hole spacing 2	Length of hole spacing 3	Width of elongated hole	Diameter of hole
		L1	L2	L3	L4	L5	L6	L7	L8	L9	H1	H2	H3	H4	H5	H6	B1	B2	B3	B4	Lo1	Lo2	Lo3	Lo4	Ø
STC-IHA15	mm	181	-	-	16	105	-	-	46	-	81	149	-	-	63	34.8	8.5	-	20	45	26	20-26	26	-	5.6
	"	7.13	-	-	0.63	4.13	-	-	1.81	-	3.19	5.87	-	-	2.48	1.37	0.33	-	0.79	1.77	1.00	0.79-1.00	1.10	-	0.22



Self-adjusting toggle clamps



NEW

Counter display toggle clamp STC-D

N ^o	Contents / pc.			VB0003
		kg	qty.	
STC-D	per 3 x STC-HH20SB STC-HH50SB STC-HH70SB STC-IHH25SB	8,10	1	



- Professional sales display with 4 perforated-panel hooks
- Optimum presentation of the toggle clamp
- Comes equipped with 12 toggle clamps mounted on hanging cards and 1 toggle clamp for demonstration purposes
- The display can be refilled at any time