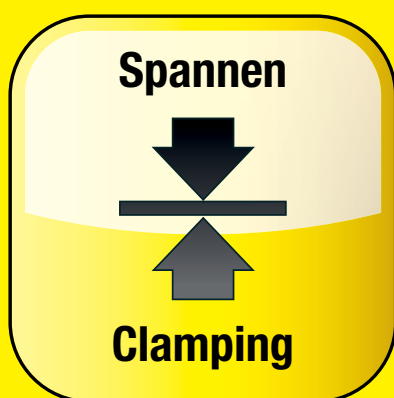


MANUAL CLAMPS



**PRODUCT
PORTFOLIO**



TÜNKERS®
Ingenuity in series.

Nomenclature	4
1. Vertical action heavy duty toggle clamp.....	1 – 1
2. Vertical action	2 – 1
3. Horizontal action	3 – 1
4. Plunger action	4 – 1
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7. Plier action	7 – 1
General accessories	8 – 1

TS – V – 270 – xxx

Type – Series – Holding force – Specification

Type: TS – TÜNKERS standard

Series:

- V-HD – vertical heavy-duty
- V – vertical
- H – horizontal
- P – plunger
- HC – hook clamp
- L – locators
- G – gripper (or squeeze)

Holding Force: daN

Specification:

- S – Solid bar with lateral mounting
- SB – Solid bar with base mounting
- UB – U-bar with base mounting
- WB – Weldable bush with base mounting
- U – U-bar with lateral mounting
- SL – Safety lever
- Lxxx – Length of the bar
- M8 – M8-70 spindle supplied
- TM – Template mounting
- FM – Flexible mounting
- H – Horizontal (for hook clamps)
- V – Vertical (for hook clamps)
- 90L – 90 degrees lever
- CJ – Customized jaw
- JW – Jaw width for Squeeze type clamps
- BWxx.1 – Bar width with 0° clamp arm
- BWxx.2 – Bar width with 90° clamp arm
- NM – Nose mounted

Product Description

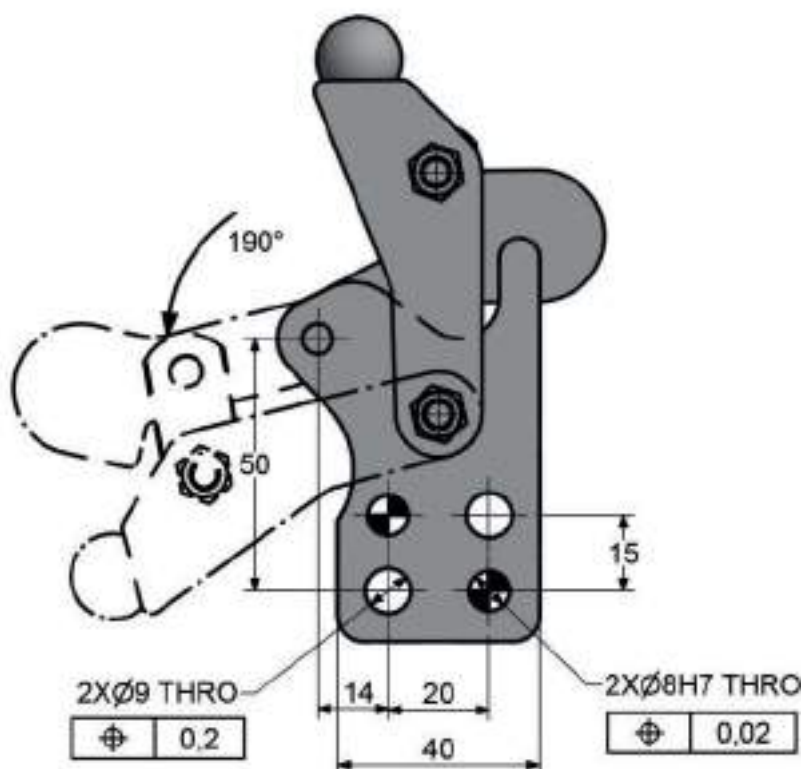
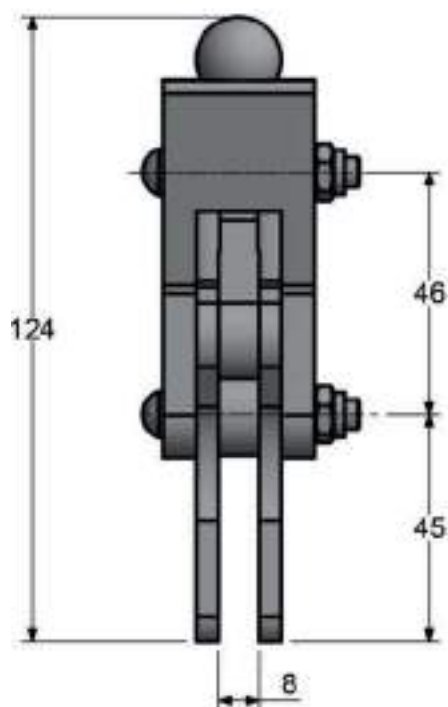
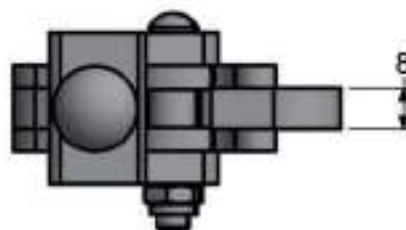
The TÜNKERS TS-V-HD series of automotive toggle clamps are designed to withstand heavy duty applications in the manufacturing ensuring high clamping forces and long service life.

Modular and durable design with straight or angulated base, possibility of welding the handles/arms in different angles a.o. with holding forces from 600 to 2.500 daN enables design engineers to find flexible solutions for each application.

Chapter Overview

TS – V – HD – 600 – 00	1 – 2
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TS – V – HD – 800 – SB – L125	1 – 13
TS – V – HD – 1300 – S	1 – 14
TS – V – HD – 1300 – SB	1 – 15
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TS – V – HD – 2500 – BW16.1 – 181	1 – 24
TS – V – HD – 2500 – BW16.2 – 51	1 – 25
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Accessories	1 – 29

Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	–
Max holding force	800 daN
Weight	0.75 Kgs
Stroke	–
Clamping Pressure	190 daN

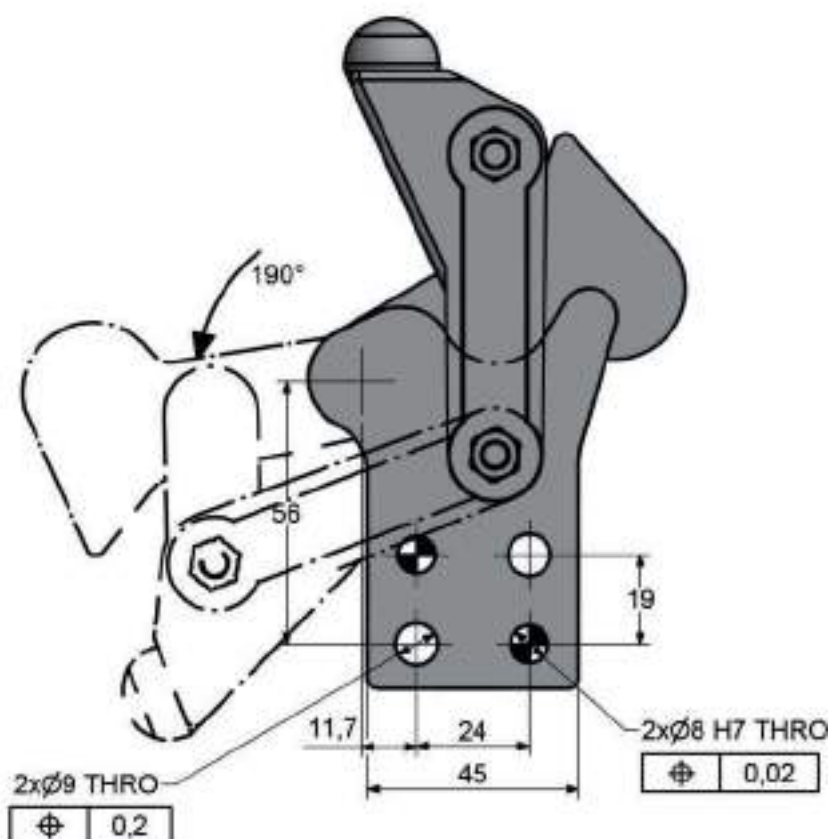
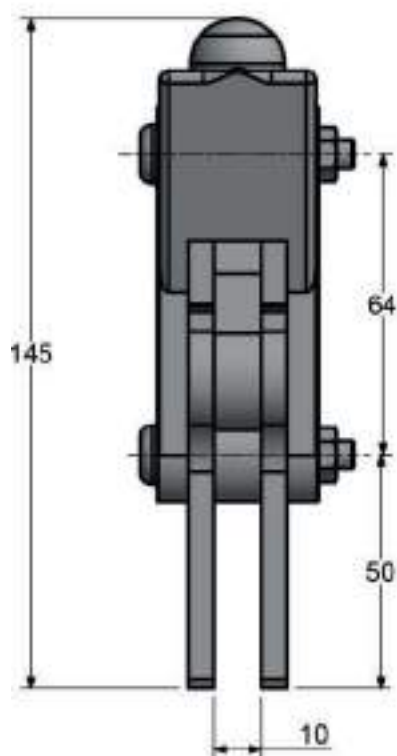
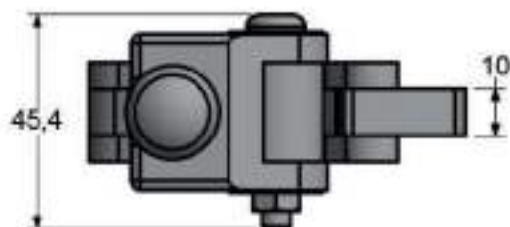
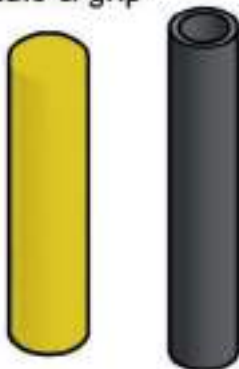


Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	–
Max holding force	800 daN
Weight	0.75 Kgs
Stroke	–
Clamping Pressure	190 daN

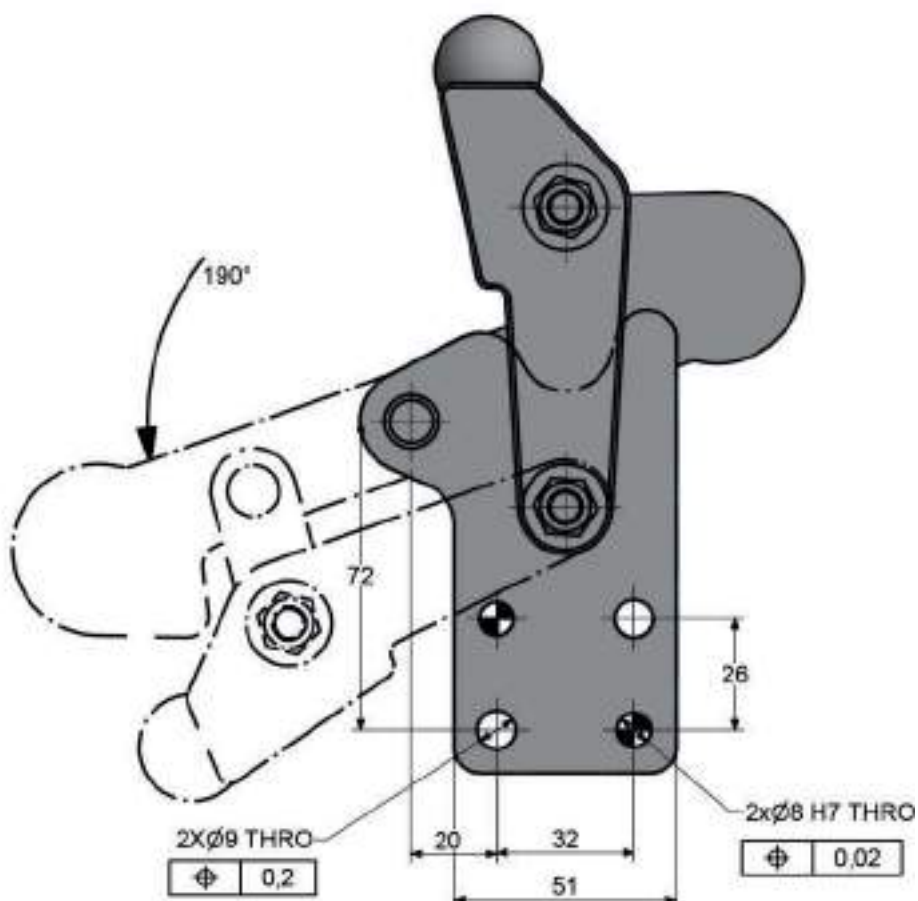
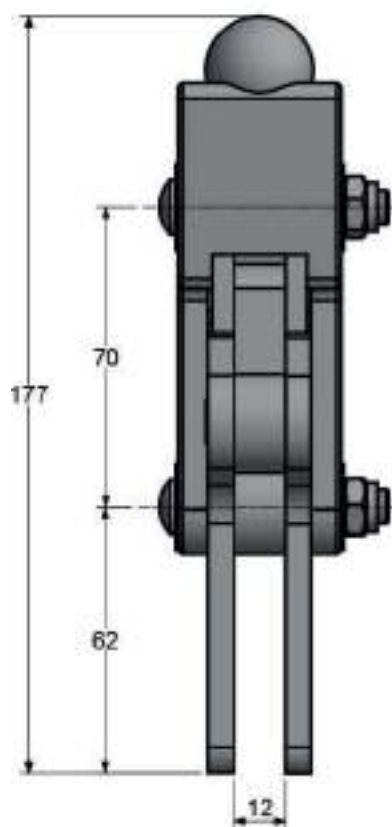
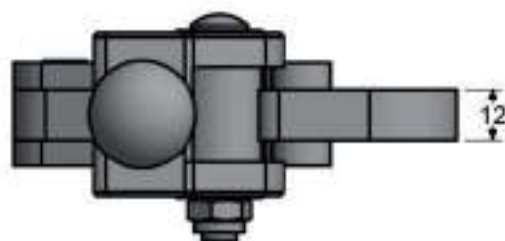
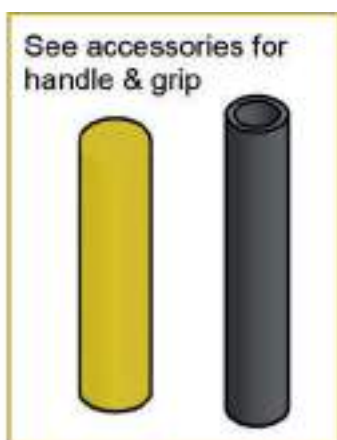


VERTICAL ACTION HEAVY
DUTY TOGGLE CLAMP

See accessories for
handle & grip

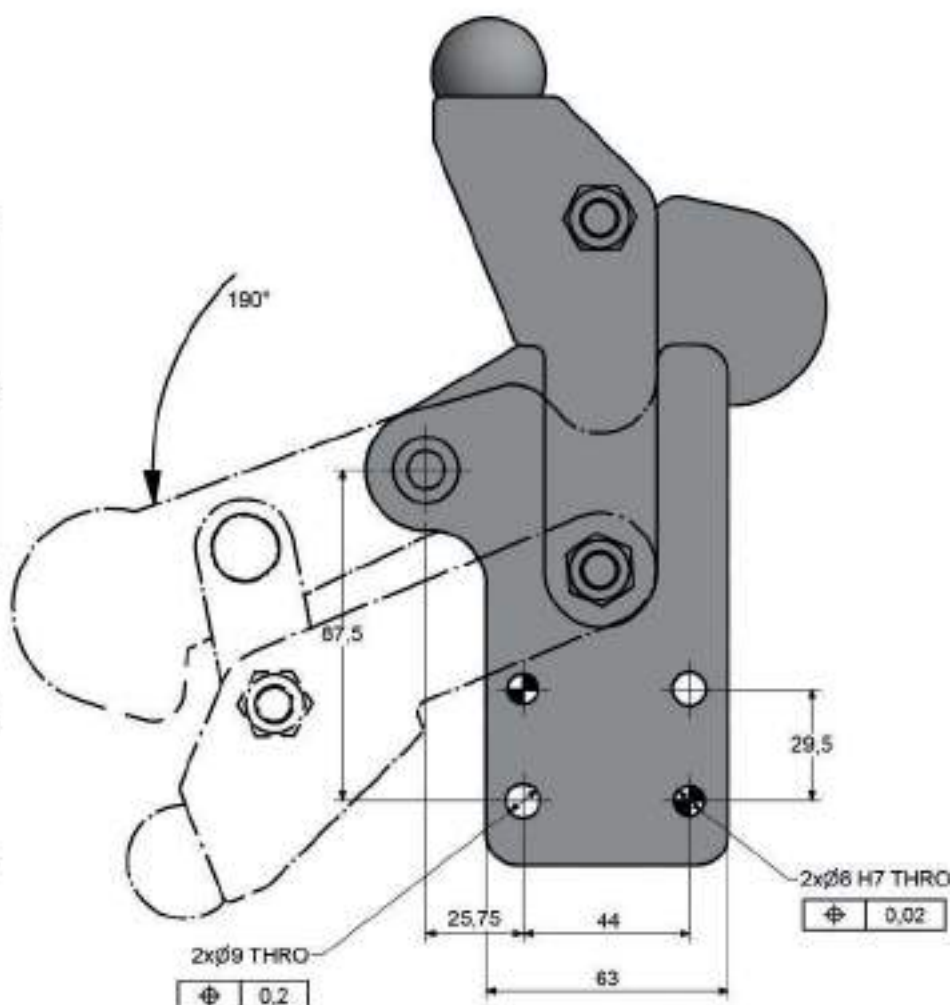
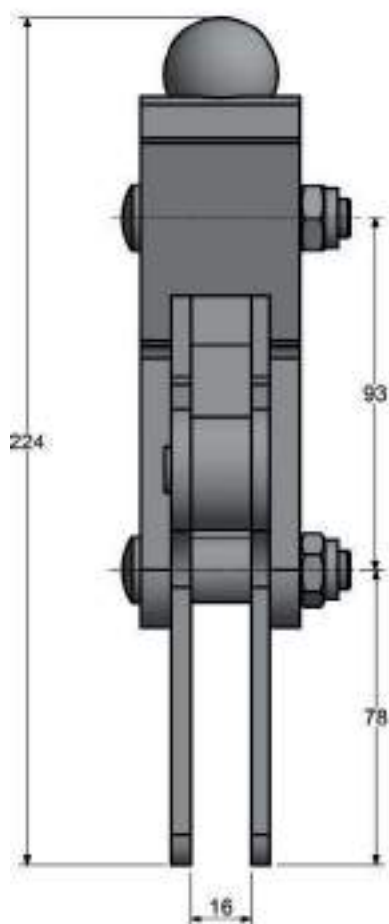
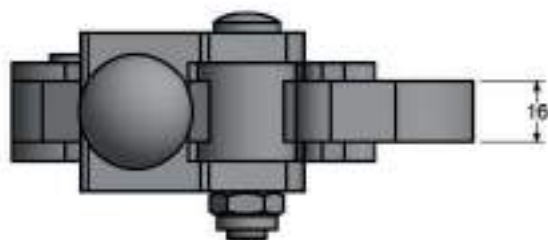
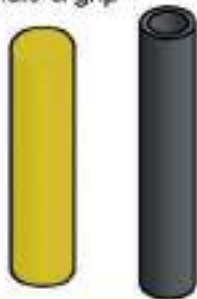


Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	–
Max holding force	1300 daN
Weight	1.5 Kgs
Stroke	–
Clamping Pressure	280 daN



Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	–
Max holding force	2500 daN close to body
Weight	2.3 Kgs
Stroke	–
Clamping Pressure	380 daN close to body

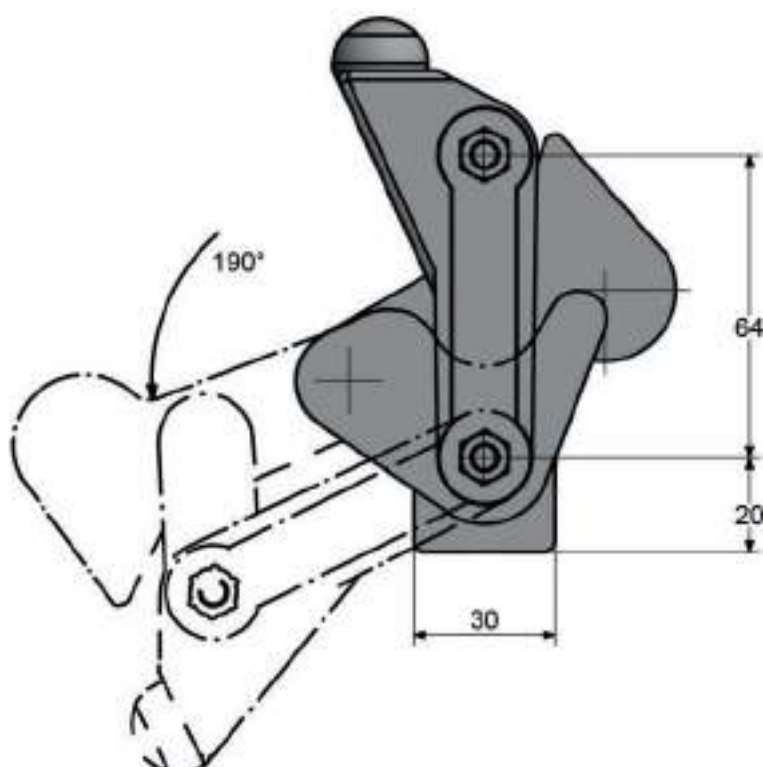
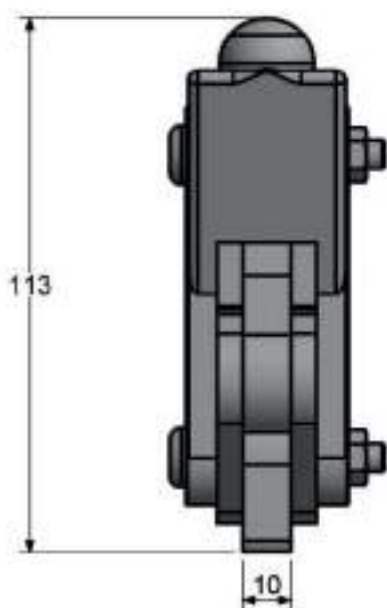
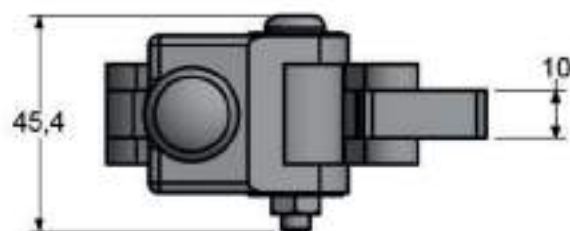
See accessories for
handle & grip



Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	–
Max holding force	800 daN
Weight	0.75 Kgs
Stroke	–
Clamping Pressure	190 daN

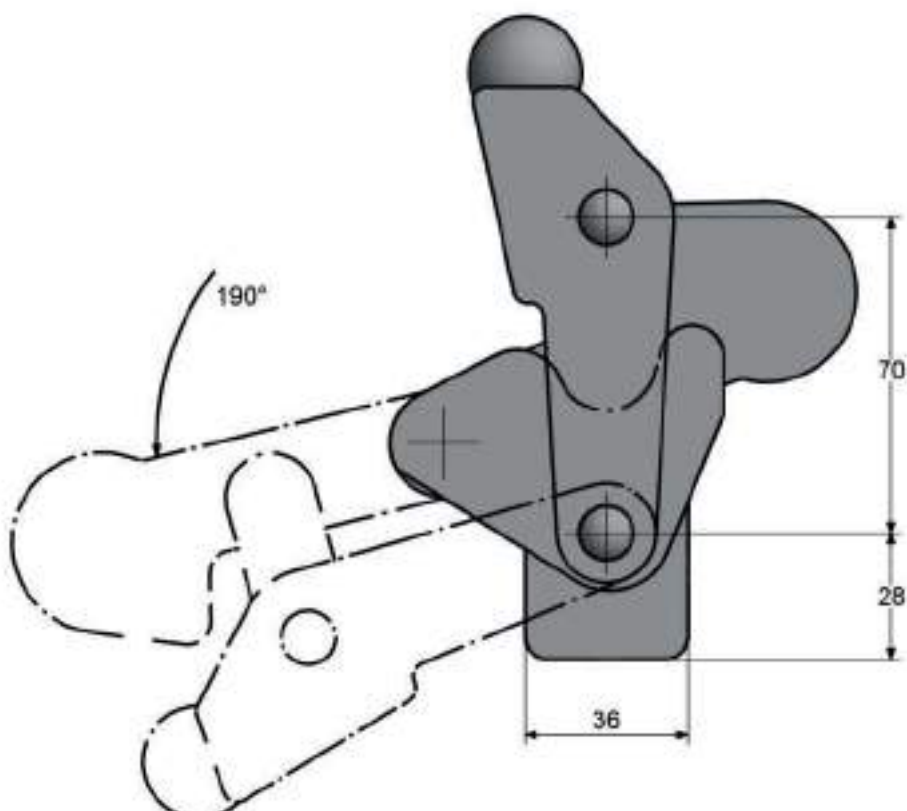
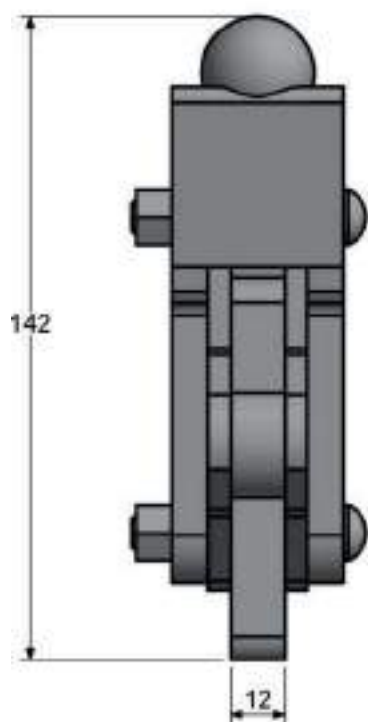
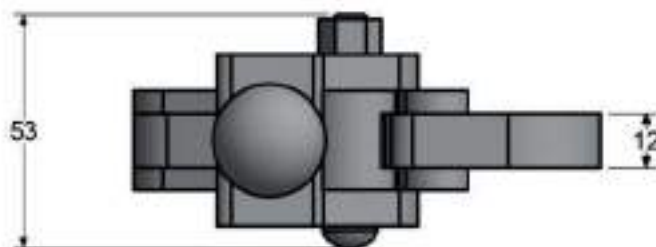
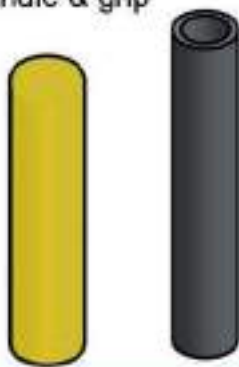


VERTICAL ACTION HEAVY
DUTY TOGGLE CLAMP



Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	–
Max holding force	1300 daN
Weight	1.5 Kgs
Stroke	–
Clamping Pressure	280 daN

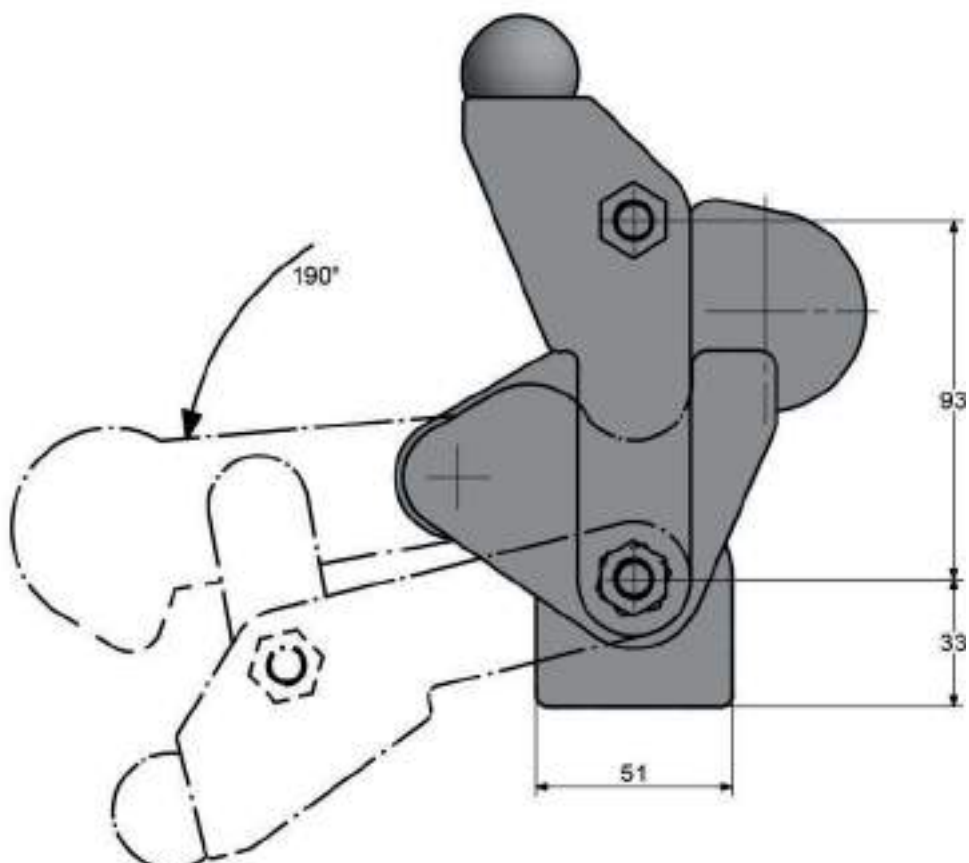
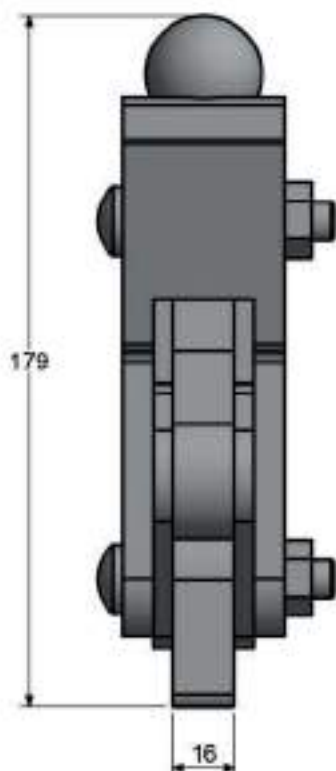
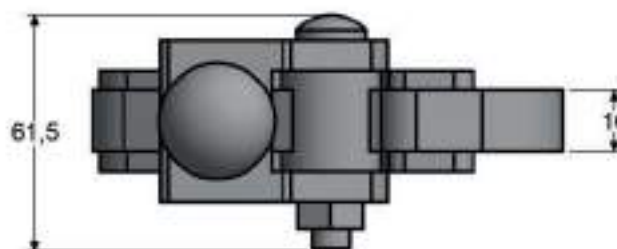
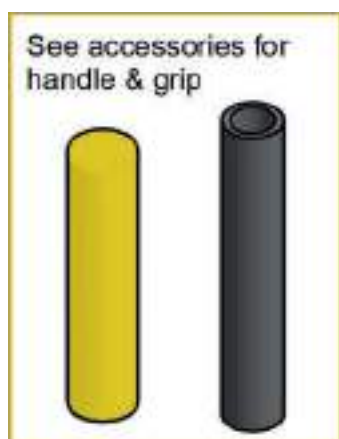
See accessories for
handle & grip



Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blacked
Supplied with	–
Max holding force	2500 daN
Weight	2.3 Kgs
Stroke	–
Clamping Pressure	380 daN



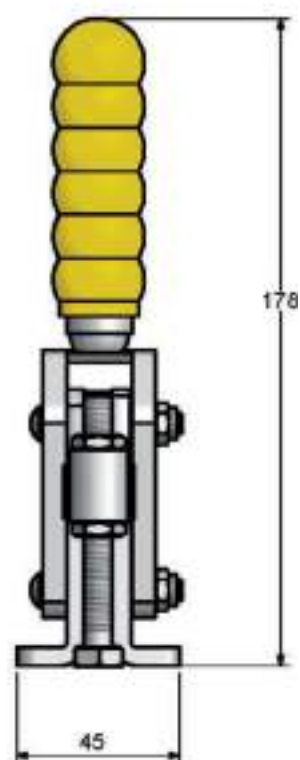
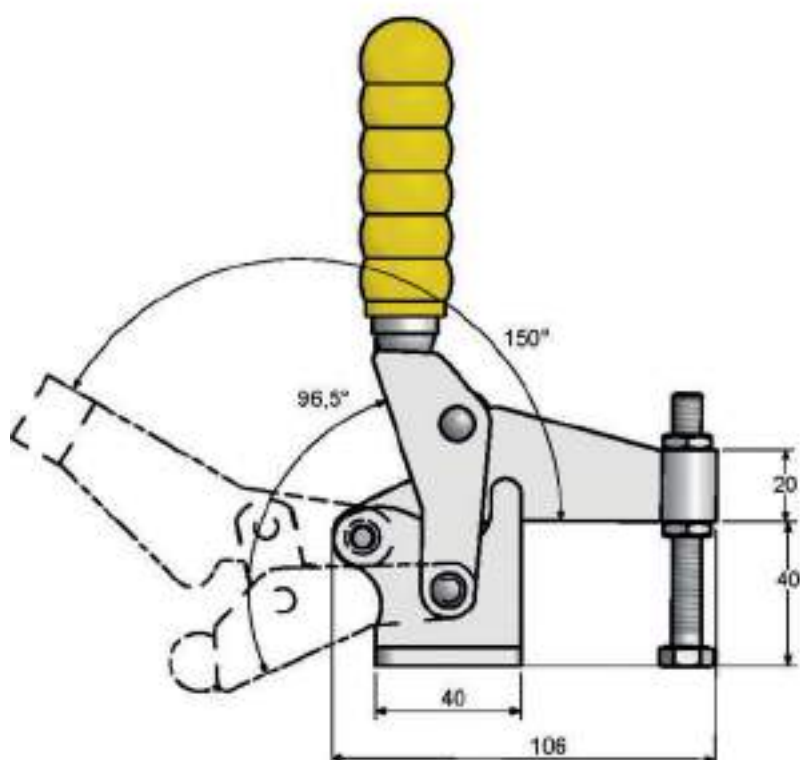
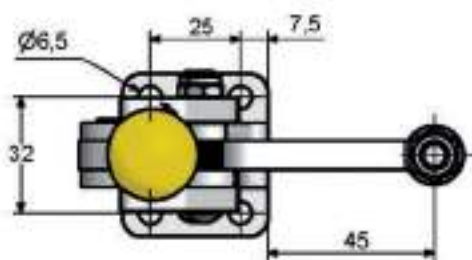
VERTICAL ACTION HEAVY
DUTY TOGGLE CLAMP



Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blacked
Supplied with	8x70 mm spindles
Max holding force	600 daN close to body
Weight	1.0 Kgs
Stroke	–
Clamping Pressure	100 daN/140 daN



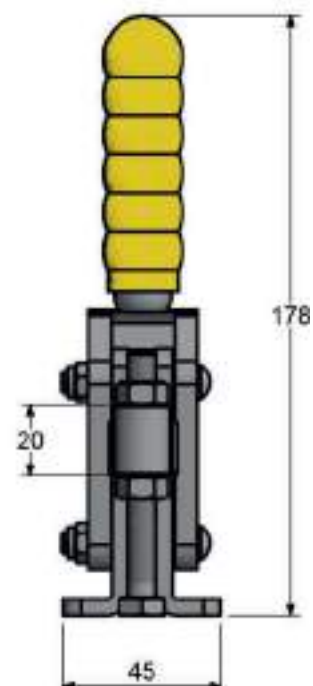
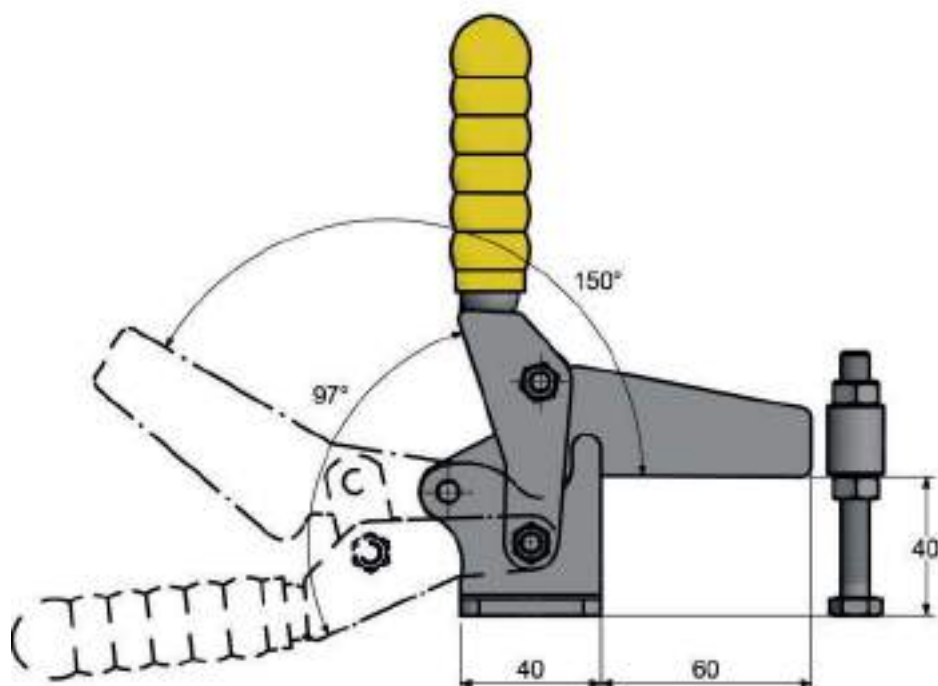
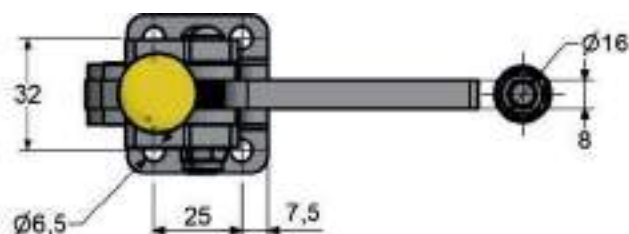
**VERTICAL ACTION HEAVY
DUTY TOGGLE CLAMP**



Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	8x70 mm spindles
Max holding force	600 daN close to body
Weight	1.0 Kgs
Stroke	–
Clamping Pressure	100 daN/140 daN



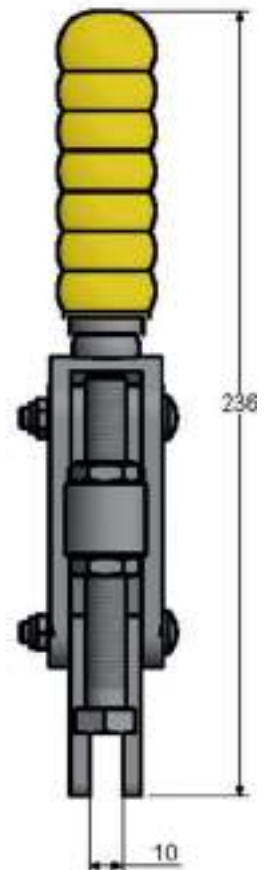
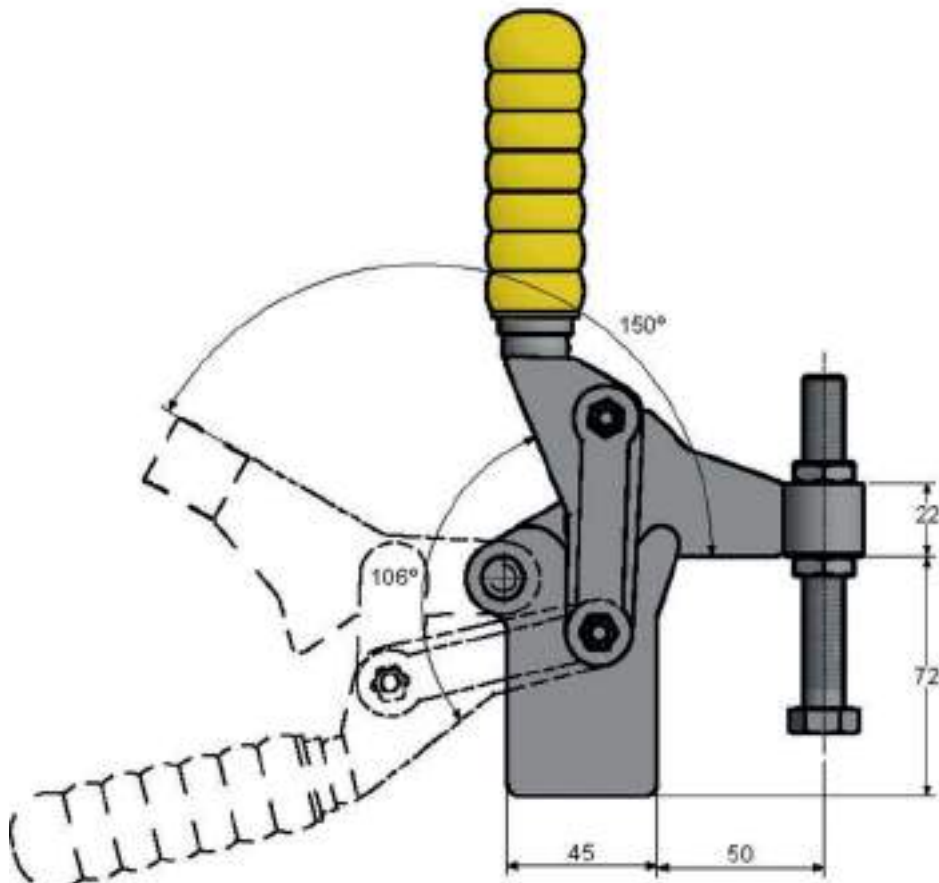
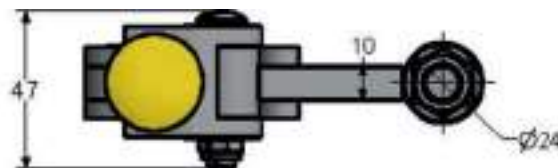
**VERTICAL ACTION HEAVY
DUTY TOGGLE CLAMP**



Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	12x100 mm spindles
Max holding force	800 daN close to body
Weight	1.5 Kgs
Stroke	–
Clamping Pressure	130 daN/190 daN



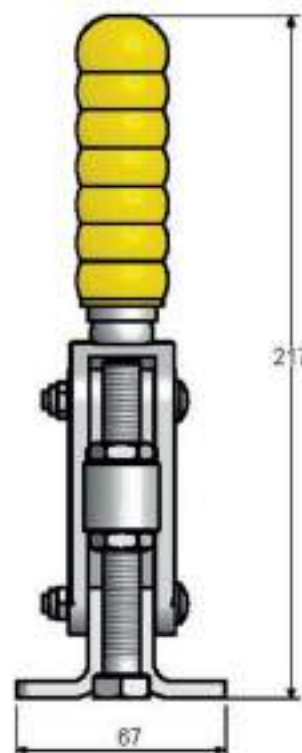
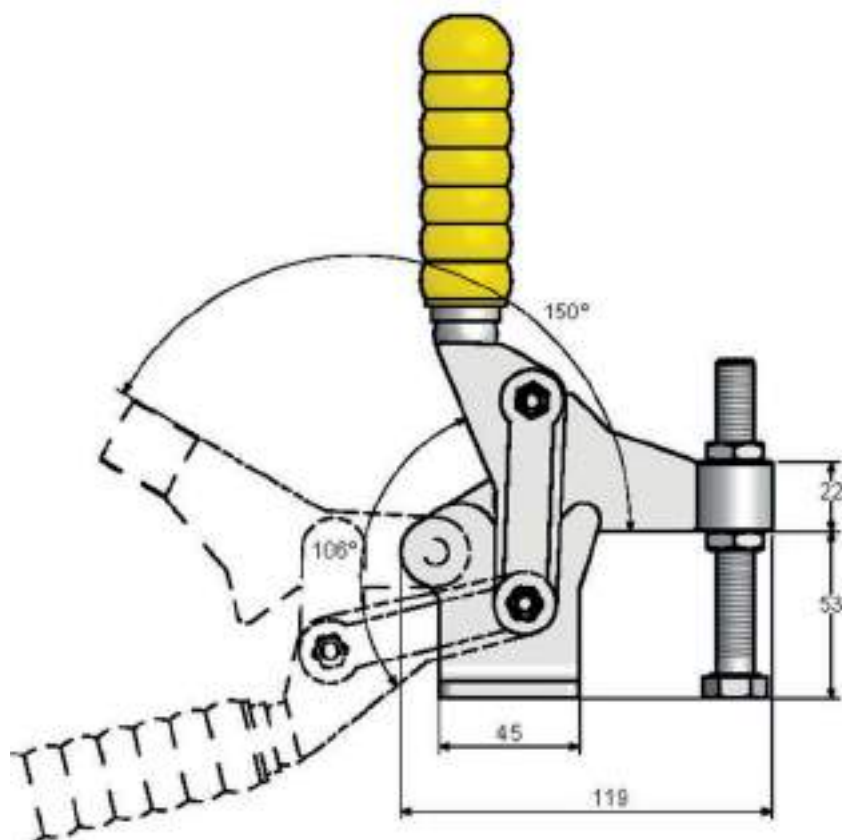
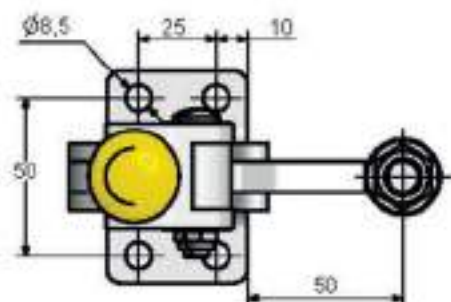
**VERTICAL ACTION HEAVY
DUTY TOGGLE CLAMP**



Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	12x100 mm spindles
Max holding force	800 daN close to body
Weight	1.5 Kgs
Stroke	–
Clamping Pressure	130 daN/190 daN



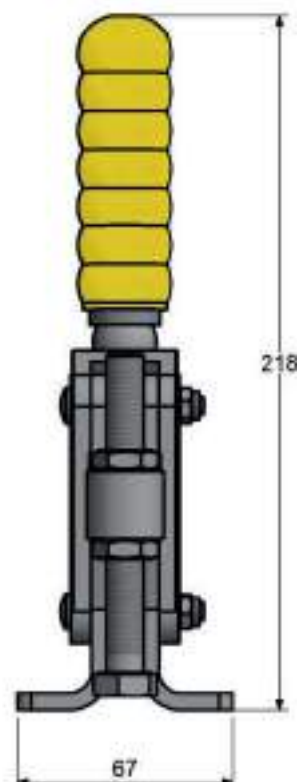
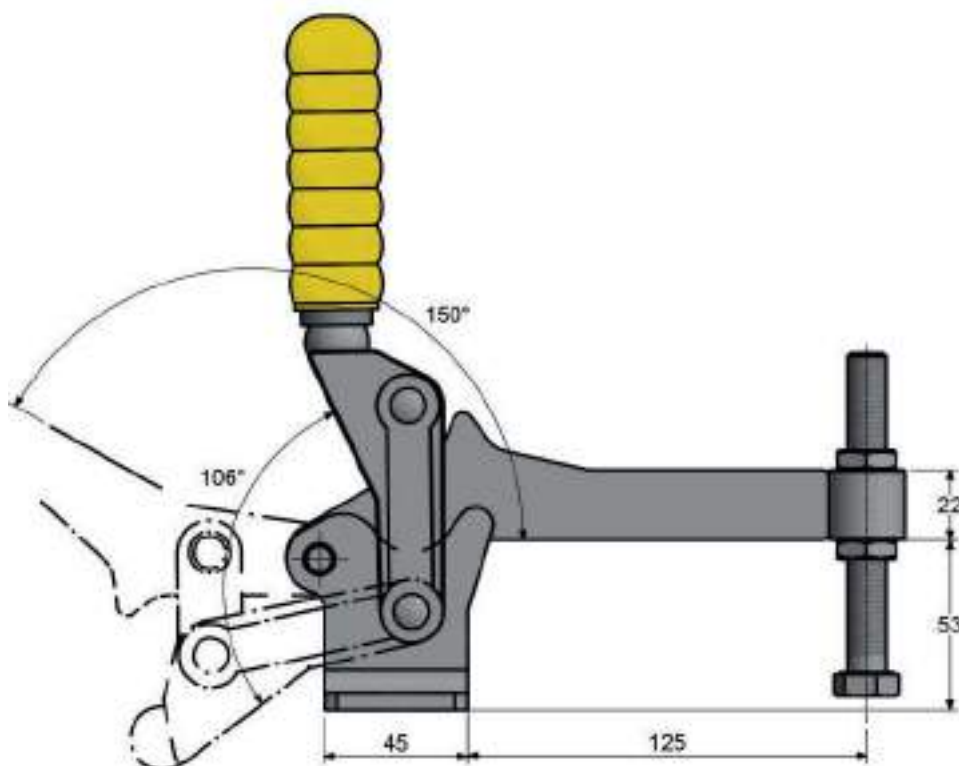
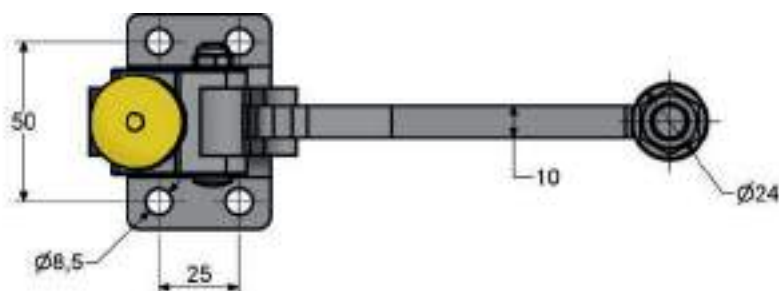
**VERTICAL ACTION HEAVY
DUTY TOGGLE CLAMP**



Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	12x100 mm spindles
Max holding force	800 daN close to body
Weight	1.5 Kgs
Stroke	–
Clamping Pressure	130 daN/190 daN



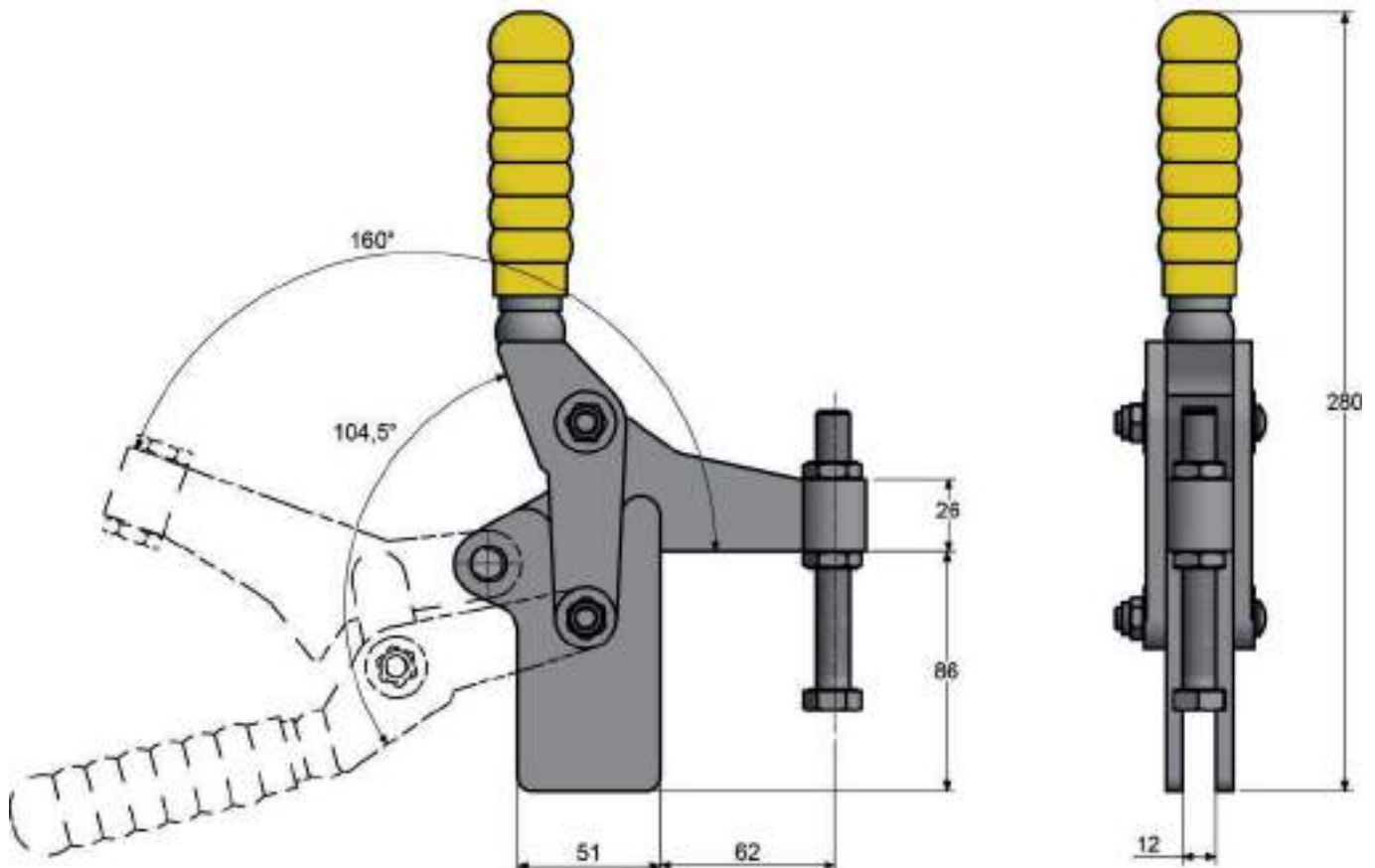
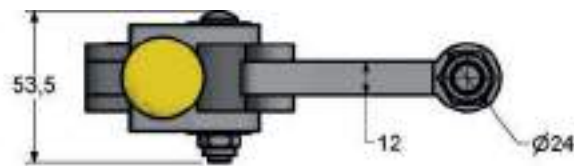
VERTICAL ACTION HEAVY
DUTY TOGGLE CLAMP



Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	12x100 mm spindles
Max holding force	1300 daN close to body
Weight	2.0 Kgs
Stroke	–
Clamping Pressure	200 daN/280 daN



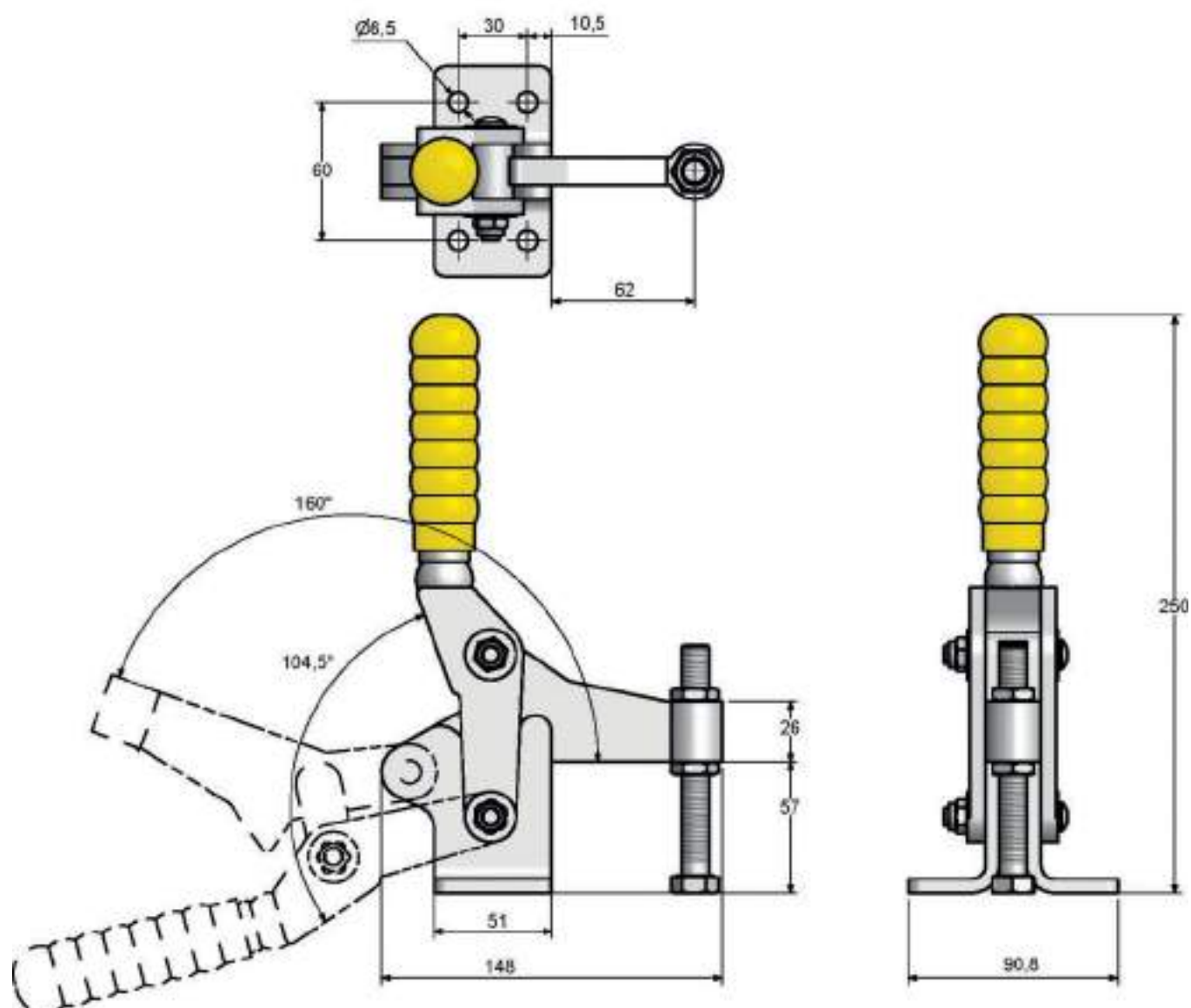
**VERTICAL ACTION HEAVY
DUTY TOGGLE CLAMP**



Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	12x100 mm spindles
Max holding force	1300 daN close to body
Weight	2.0 Kgs
Stroke	–
Clamping Pressure	200 daN/280 daN



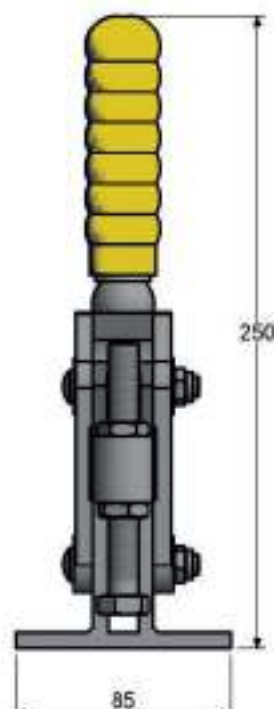
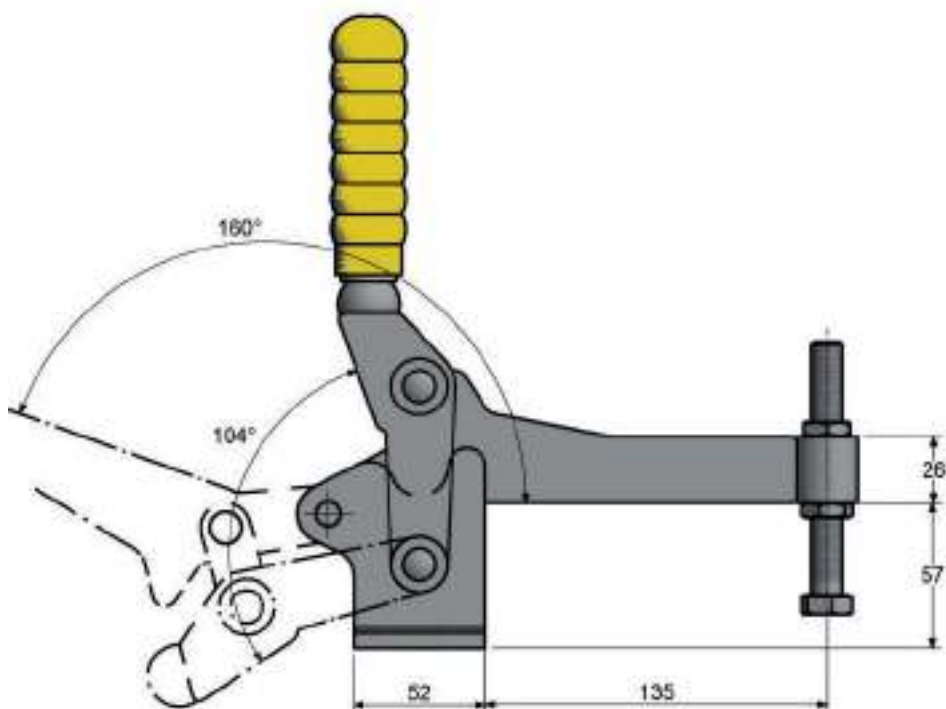
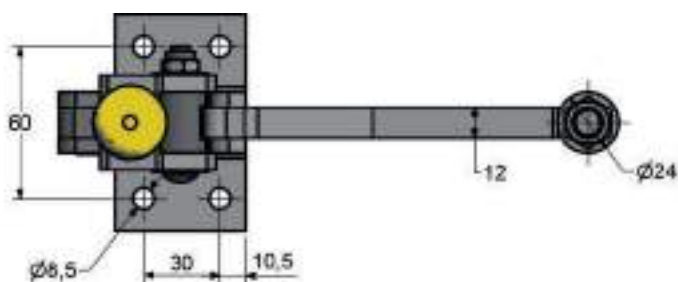
**VERTICAL ACTION HEAVY
DUTY TOGGLE CLAMP**



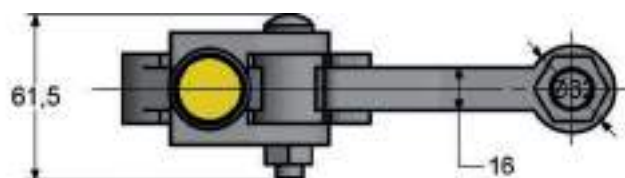
Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	12x100 mm spindles
Max holding force	1300 daN close to body
Weight	2.0 Kgs
Stroke	-
Clamping Pressure	200 daN/280 daN



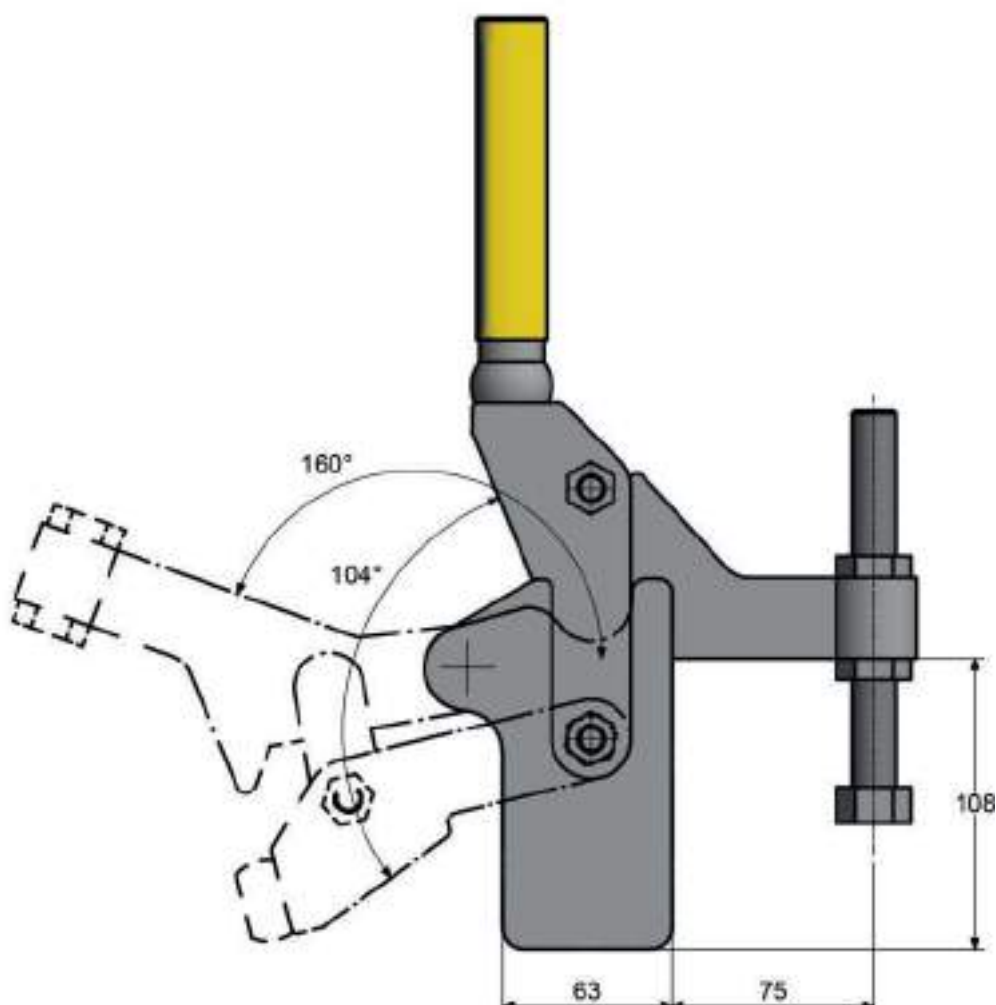
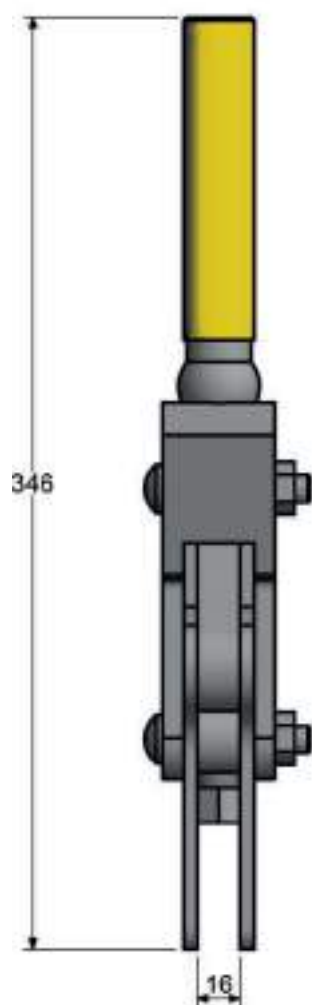
VERTICAL ACTION HEAVY
DUTY TOGGLE CLAMP



Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	16x140 mm spindles
Max holding force	2500 daN close to body
Weight	3.2 Kgs
Stroke	–
Clamping Pressure	280 daN/380 daN



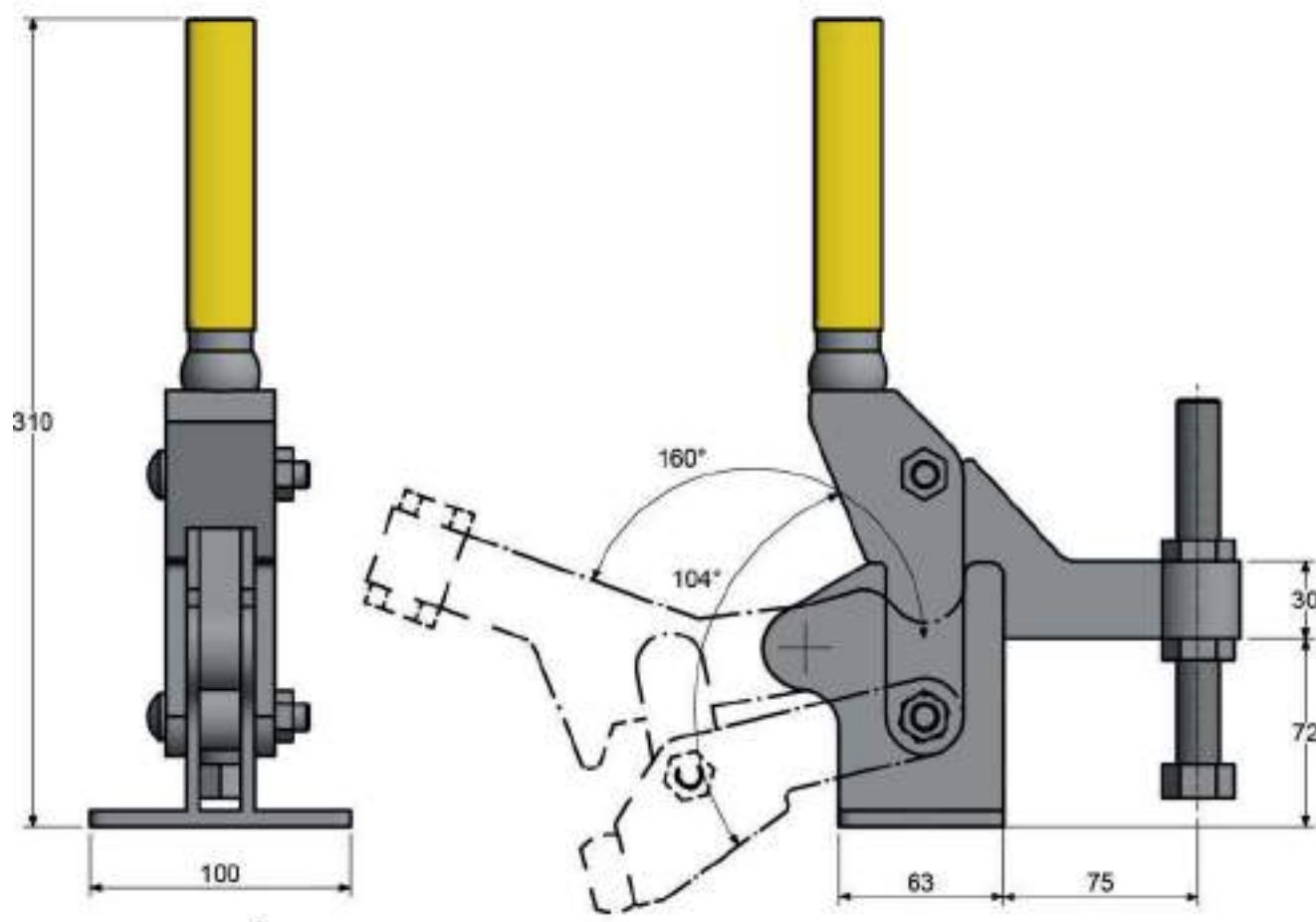
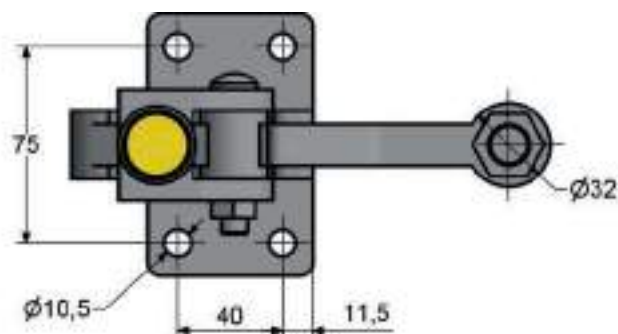
VERTICAL ACTION HEAVY
DUTY TOGGLE CLAMP



Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	16x140 mm spindles
Max holding force	2500 daN close to body
Weight	3.2 Kgs
Stroke	–
Clamping Pressure	280 daN/380 daN



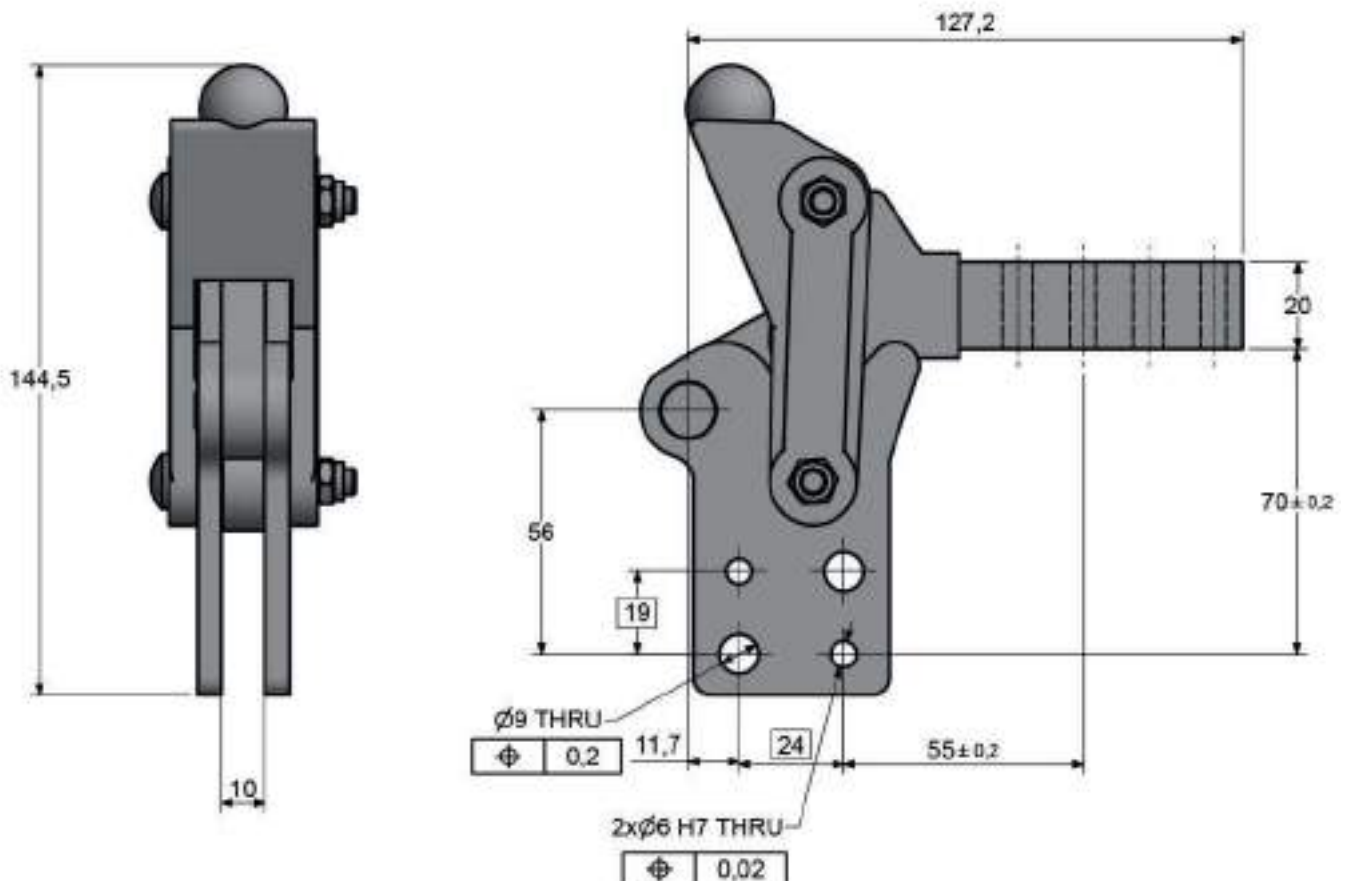
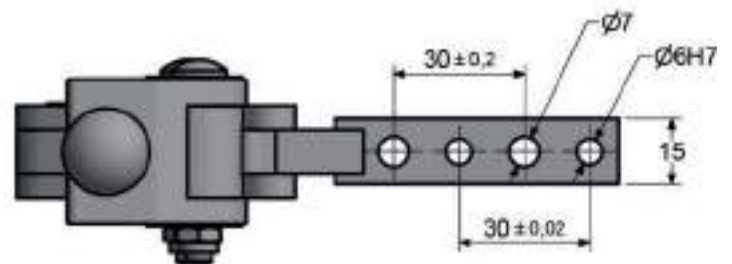
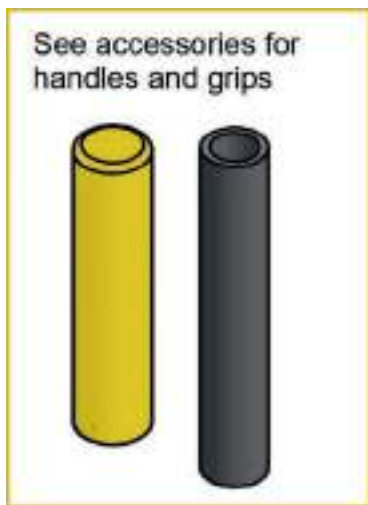
**VERTICAL ACTION HEAVY
DUTY TOGGLE CLAMP**



Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	–
Max holding force	800 daN
Weight	1.5 Kgs
Stroke	–
Clamping Pressure	190 daN



**VERTICAL ACTION HEAVY
DUTY TOGGLE CLAMP**

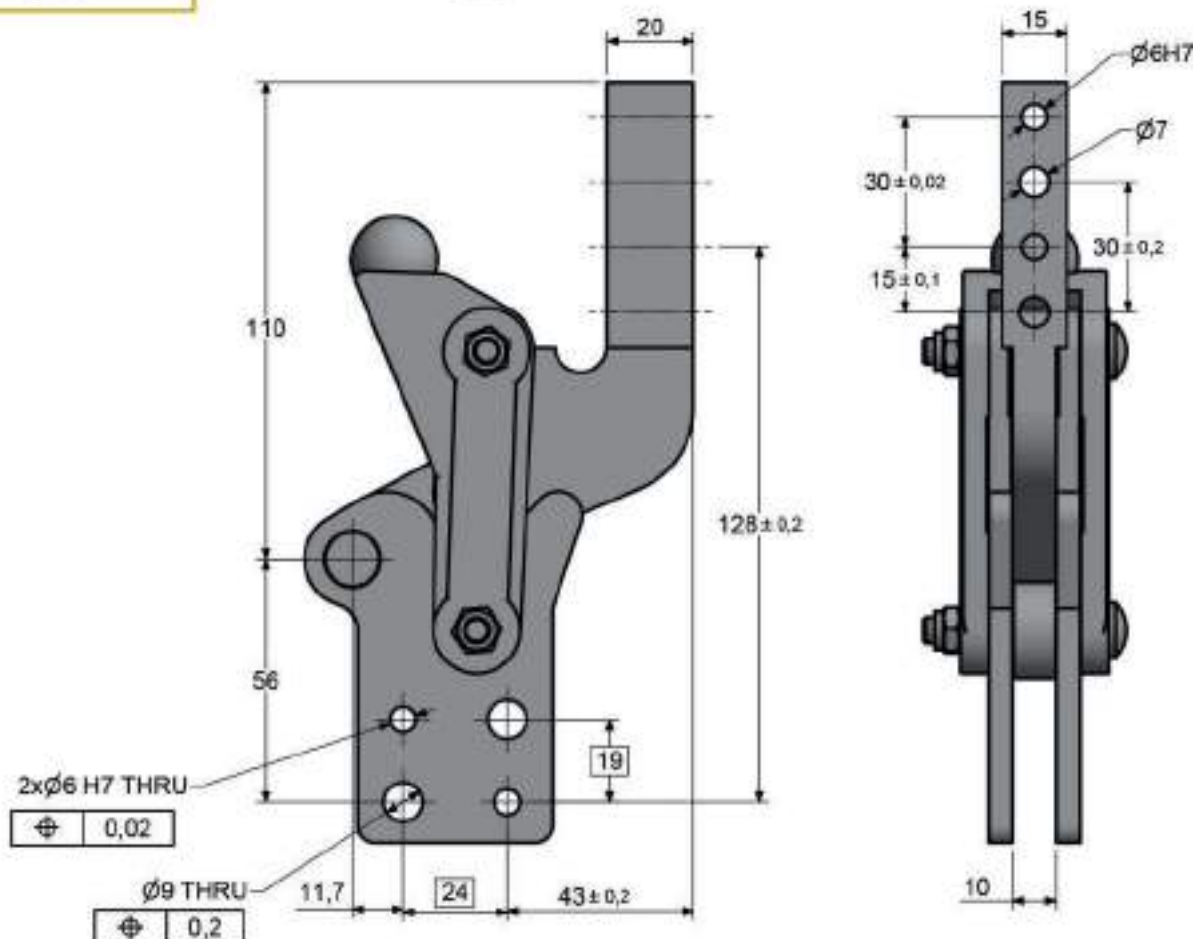
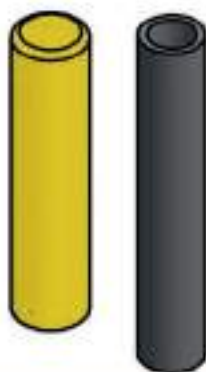


Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blacked
Supplied with	–
Max holding force	800 daN
Weight	1.5 Kgs
Stroke	–
Clamping Pressure	190 daN



**VERTICAL ACTION HEAVY
DUTY TOGGLE CLAMP**

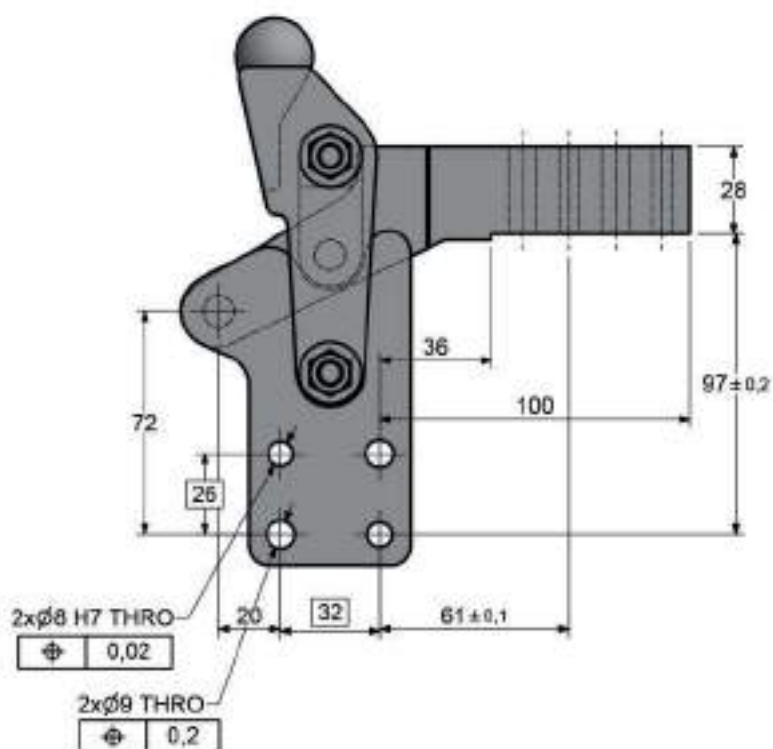
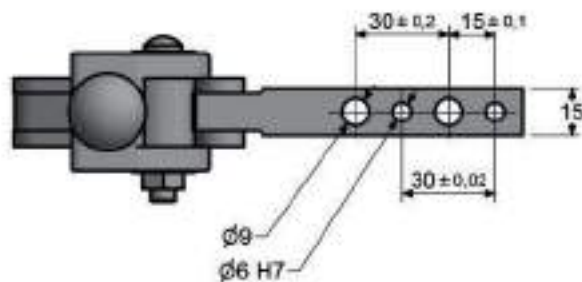
See accessories for
handles and grips



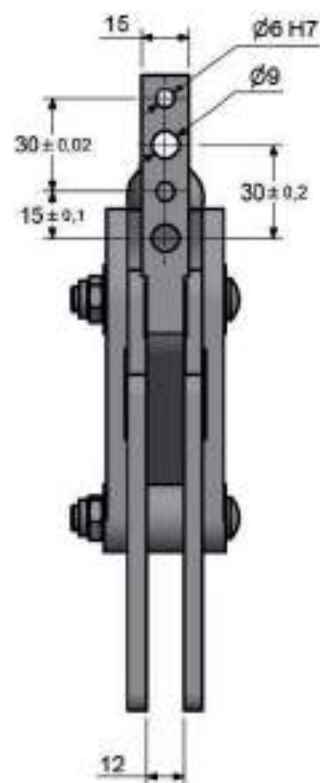
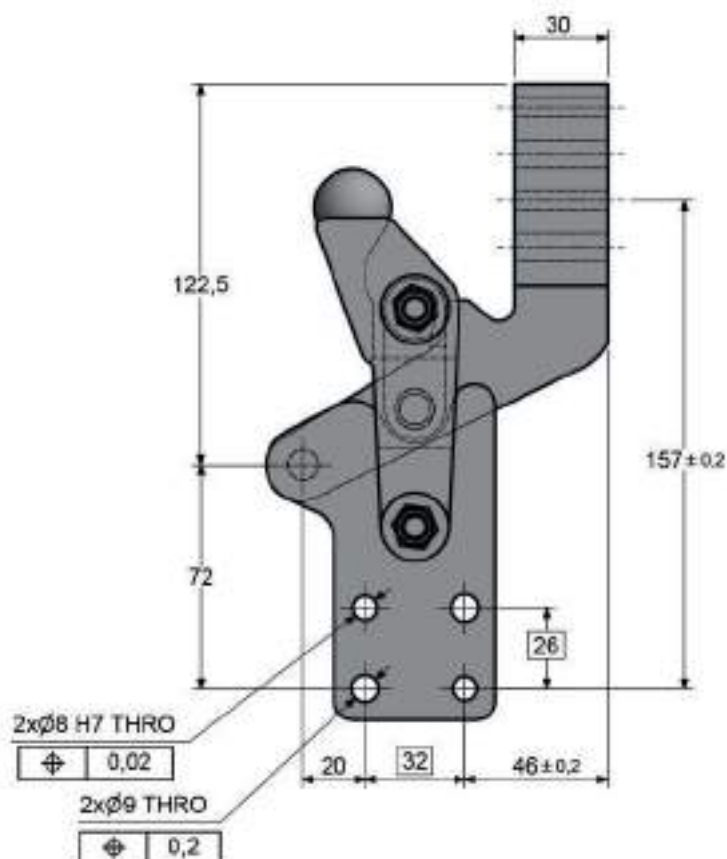
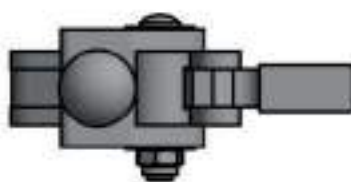
Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	–
Max holding force	1300 daN close to body
Weight	1.8 Kgs
Stroke	–
Clamping Pressure	280 daN



**VERTICAL ACTION HEAVY
DUTY TOGGLE CLAMP**



All basic dimensions
TS - V - HD - 1300 - 00

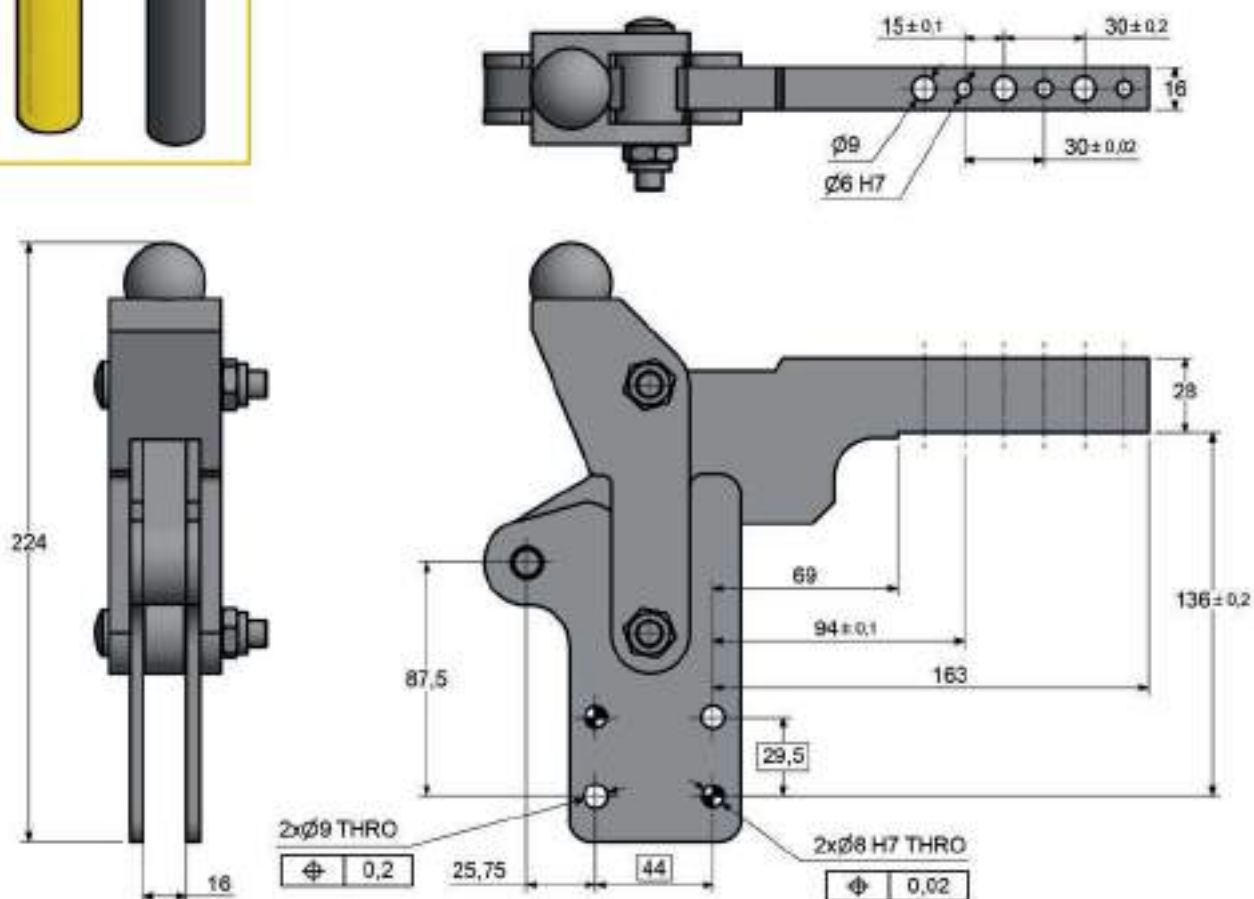


| 1 - 22

Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackd
Supplied with	–
Max holding force	2500 daN
Weight	2.8 Kgs
Stroke	–
Clamping Pressure	380 daN

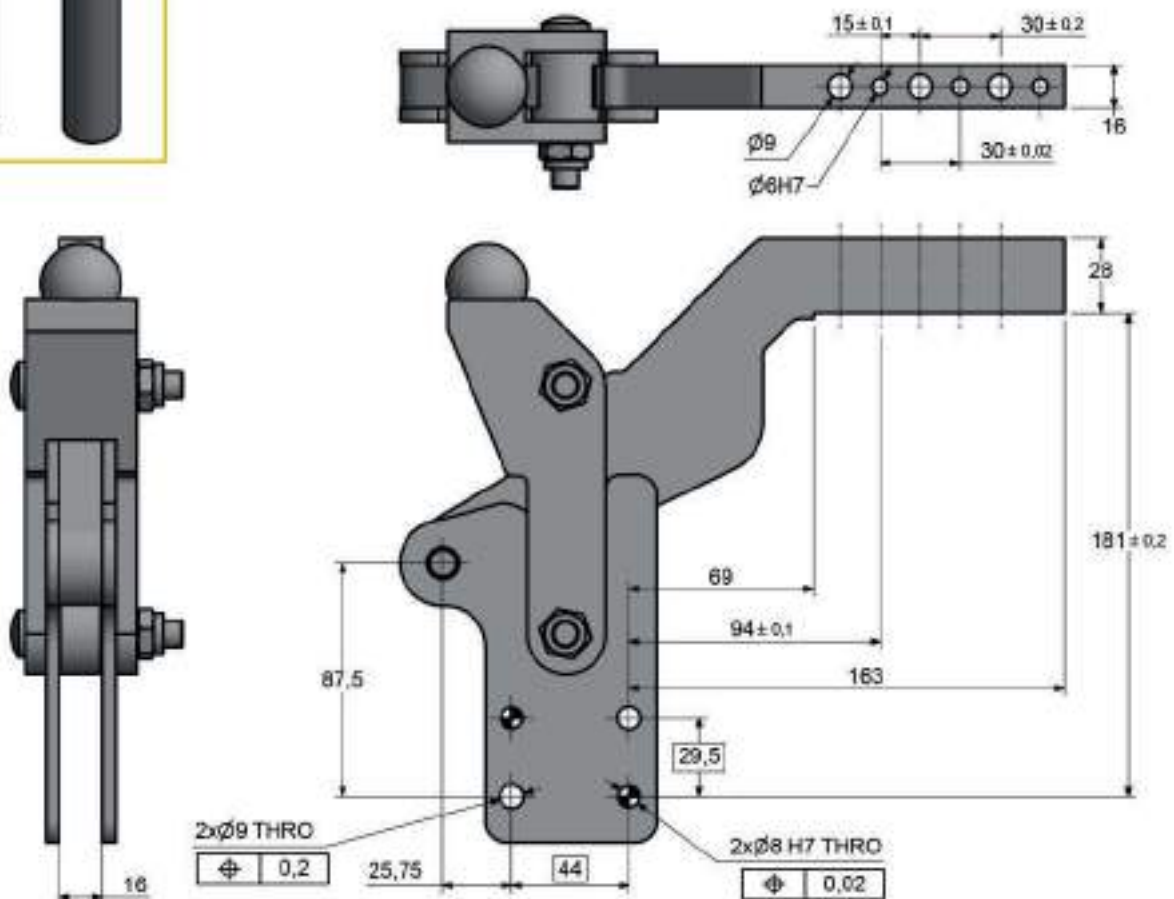


VERTICAL ACTION HEAVY DUTY TOGGLE CLAMP



All basic dimensions
TS - V - HD - 1300 - 00

Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	–
Max holding force	2500 daN close to body
Weight	2.7 Kgs
Stroke	–
Clamping Pressure	380 daN close to body

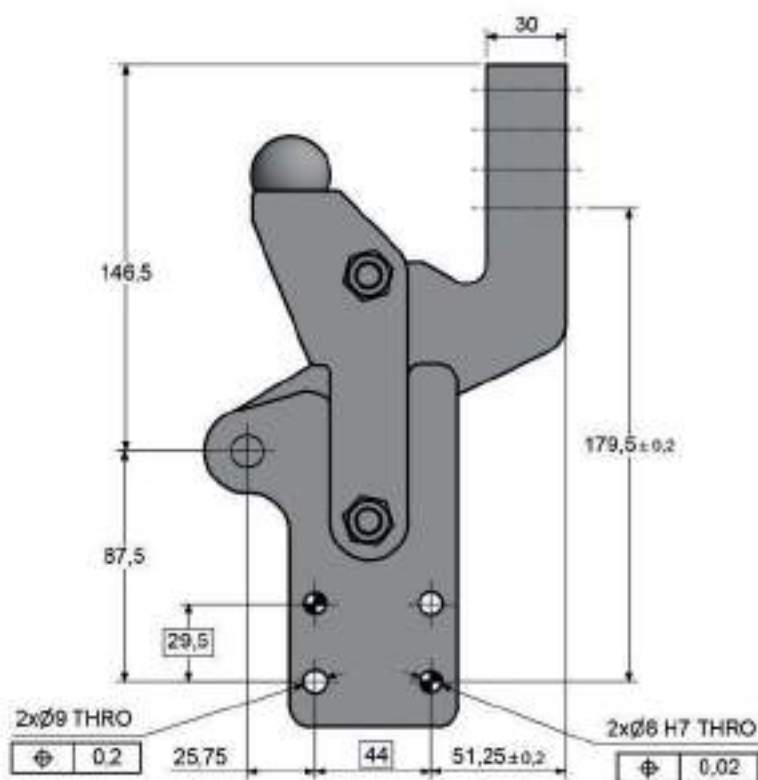
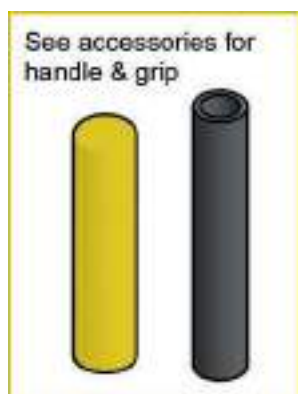


All basic dimensions
TS - V - HD - 1300 - 00

Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	–
Max holding force	2500 daN
Weight	2.7 Kgs
Stroke	–
Clamping Pressure	380 daN close to body

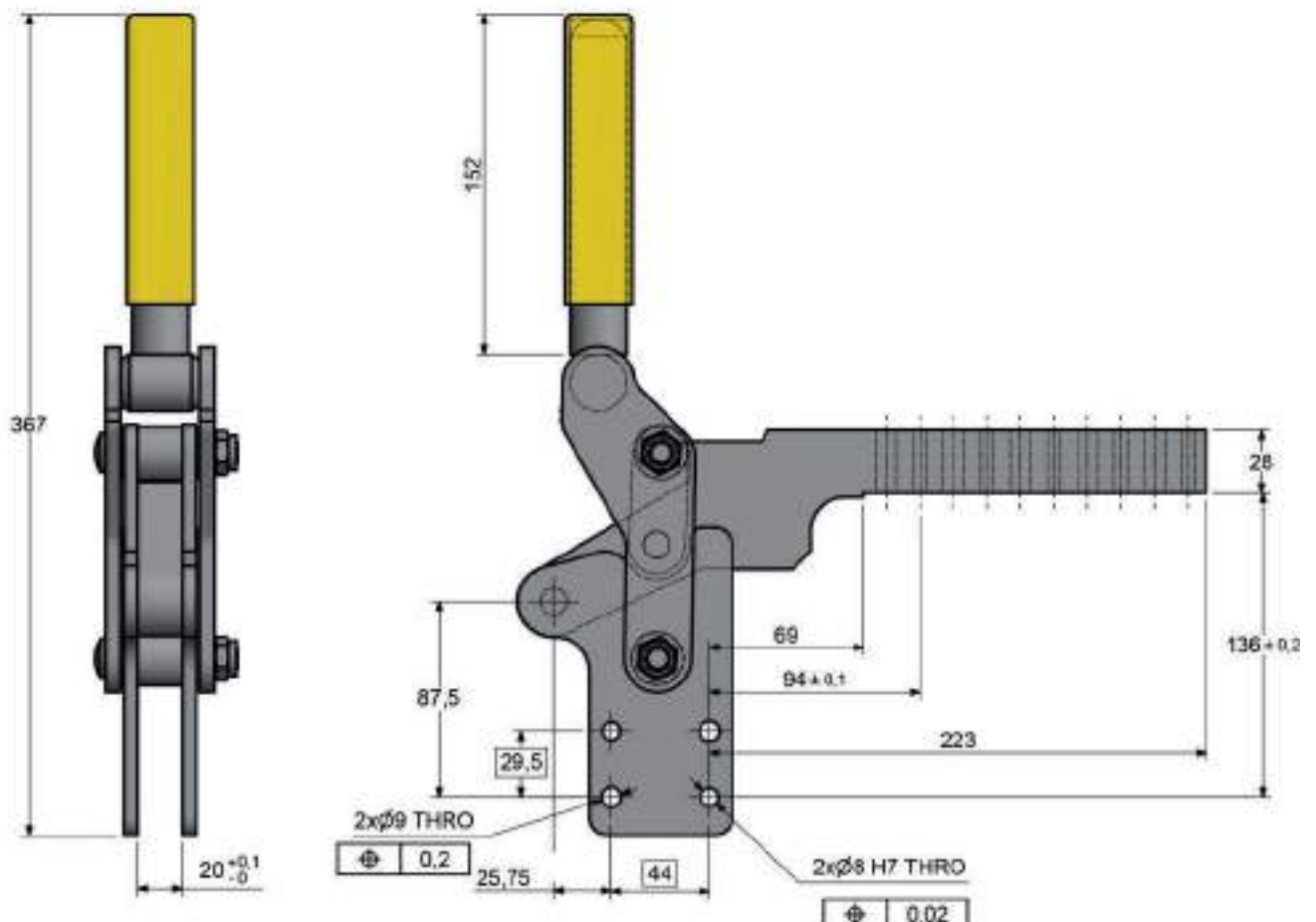
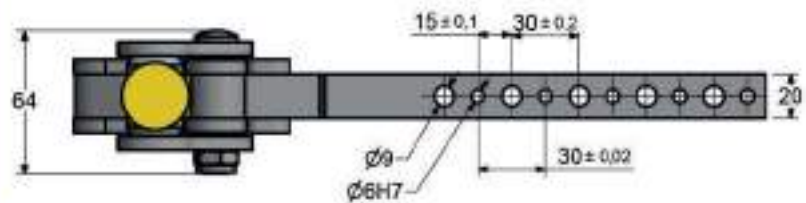
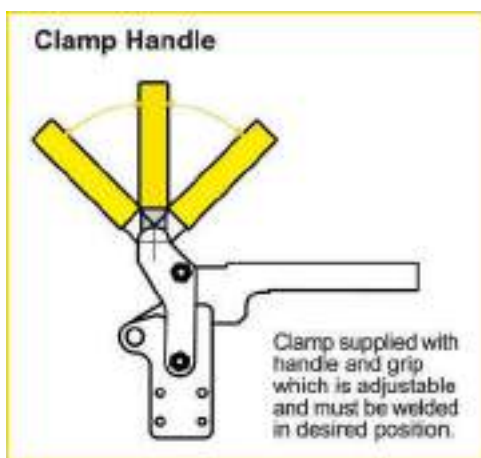


**VERTICAL ACTION HEAVY
DUTY TOGGLE CLAMP**

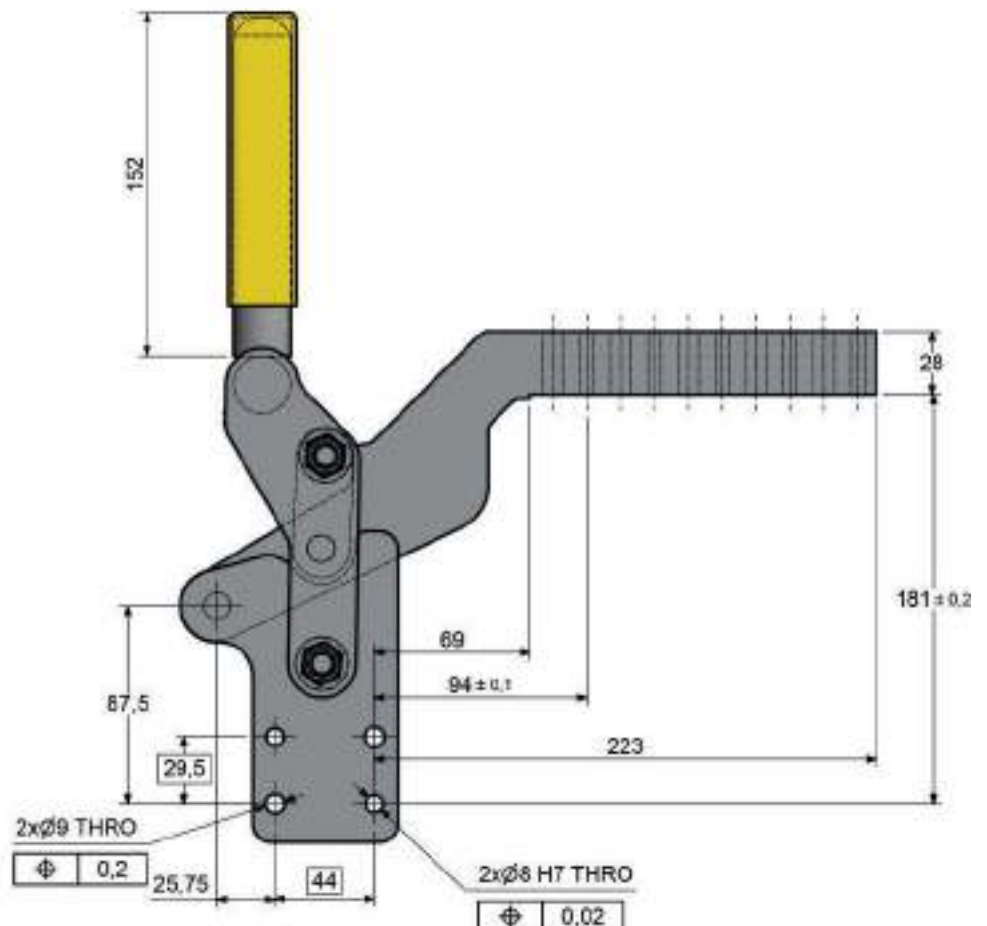
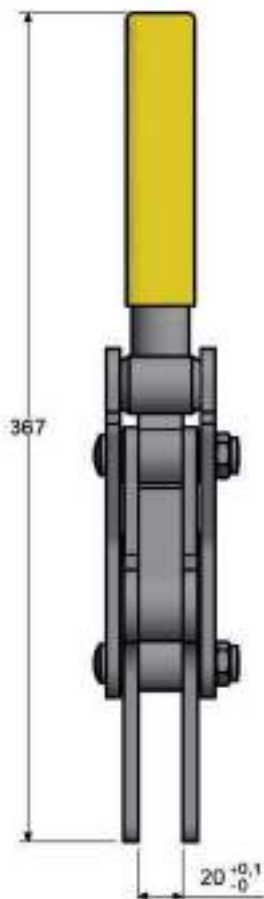
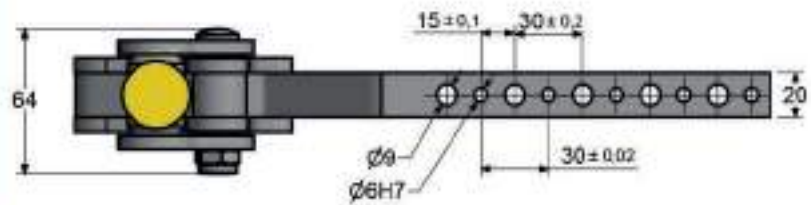
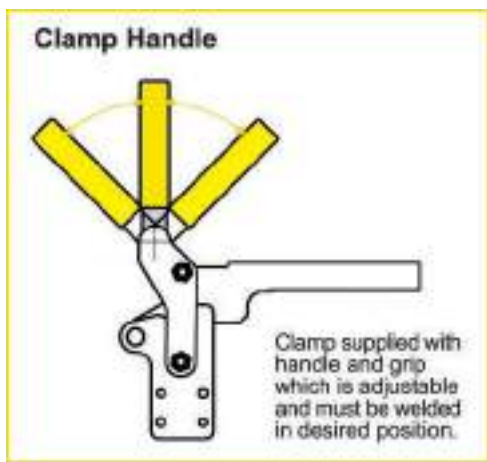


All basic dimensions
TS – V – HD – 1300 – 00

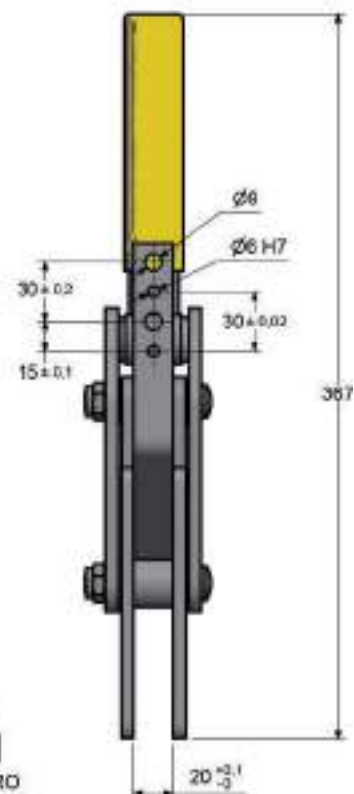
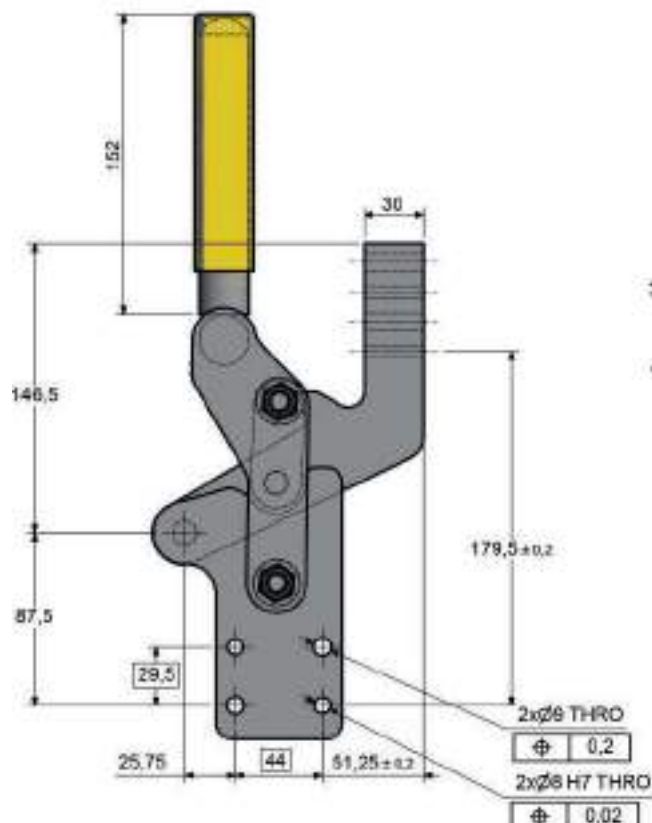
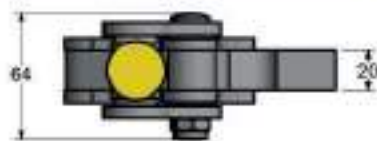
Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	handles and grips
Max holding force	1300 daN close to body
Weight	4.1 Kgs
Stroke	–
Clamping Pressure	380 daN close to body



Material	Heavy gauge steel Hardened pins and bushes
Finish	–
Supplied with	handles and grips
Max holding force	1300 daN close to body
Weight	4.1 Kgs
Stroke	–
Clamping Pressure	380 daN



Material	Heavy gauge steel Hardened pins and bushes
Finish	–
Supplied with	handles and grips
Max holding force	1300 daN close to body
Weight	4.1 Kgs
Stroke	–
Clamping Pressure	380 daN





Tube handles and grips

Part NO	Available on Pt Nos	A	L
BG	TS-V-HD-600...	16	75
BG	TS-V-HD-800...	24	90
BG	TS-V-HD-1200...	24	100
BG	TS-V-HD-2500...	27	150

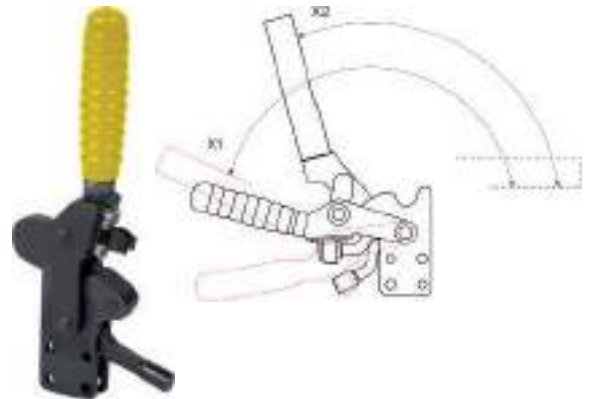


Internal stop

Part NO	Available on Pt Nos
IS	TS-V-HD-800-BW15.1-70
IS	TS-V-HD-800-BW15.2-70
IS	TS-V-HD-1300-BW15.1-97-A
IS	TS-V-HD-1300-BW15.2-97-A
IS	TS-V-HD-2500-BW16.1-136
IS	TS-V-HD-2500-BW16.1-181
IS	TS-V-HD-2500-BW16.2-51
IS	TS-V-HD-2500-BW20.1-136
IS	TS-V-HD-2500-BW20.1-181
IS	TS-V-HD-2500-BW20.2-51

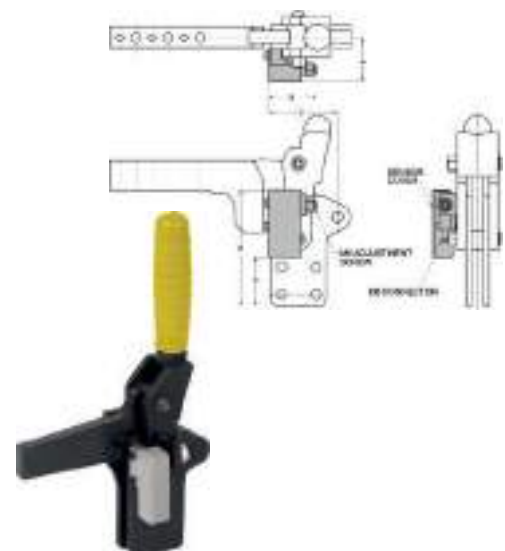
External stop ** Smaller opening angles available on request

Part NO	Opening Angle (Deg)	Available on Pt Nos
RM	93-140	TS-V-HD-800 .00
RM	105-155	TS-V-HD-1300-00
RM	115-170	TS-V-HD-2500-00
RM	93-140	TS-V-HD-800-BW15.1-70
RM	93-140	TS-V-HD-800-BW15.2-70
RM	105-155	TS-V-HD-1300-BW15.1-97-A
RM	105-155	TS-V-HD-1300-BW15.2-97-A
RM	115-170	TS-V-HD-2500-BW16.1-136
RM	115-170	TS-V-HD-2500-BW16.1-181
RM	115-170	TS-V-HD-2500-BW16.2-51
RM	55-125	TS-V-HD-2500-BW20.1-136
RM	55-125	TS-V-HD-2500-BW20.1-181
RM	55-125	TS-V-HD-2500-BW20.2-51



Clamp sensors

Part NO	Available on Pt Nos	A	B	C	D	E
CS	TS-V-HD-1300 - 00	44	48	68	112	45
CS	TS-V-HD-2500 - 00	46	48	81	130	67
CS	TS-V-HD-1300 - S	44	48	68	112	45
CS	TS-V-HD-2500 - S	46	48	81	130	67
CS	TS-V-HD-1300-BW15.1-97-A	44	48	68	112	45
CS	TS-V-HD-1300-BW15.2-97-A	44	48	68	112	45
CS	TS-V-HD-2500-BW16.1-136	46	48	81	130	67
CS	TS-V-HD-2500-BW16.1-181	46	48	81	130	67
CS	TS-V-HD-2500-BW16.2-51	46	48	81	130	67



Product Description

The TÜNKERS TS-V vertical hold down action clamps hold down the work-piece with a downward clamping action with maximum clamping forces up to 700daN.

The clamping arm can be solid bar, U-bar or with a weldable bush, while the base design can be straight or angulated.

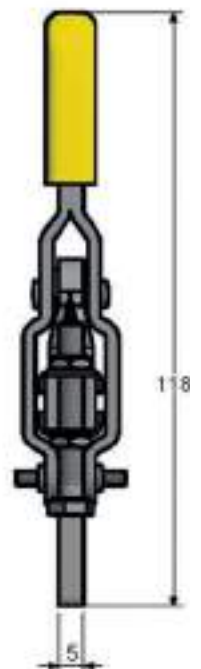
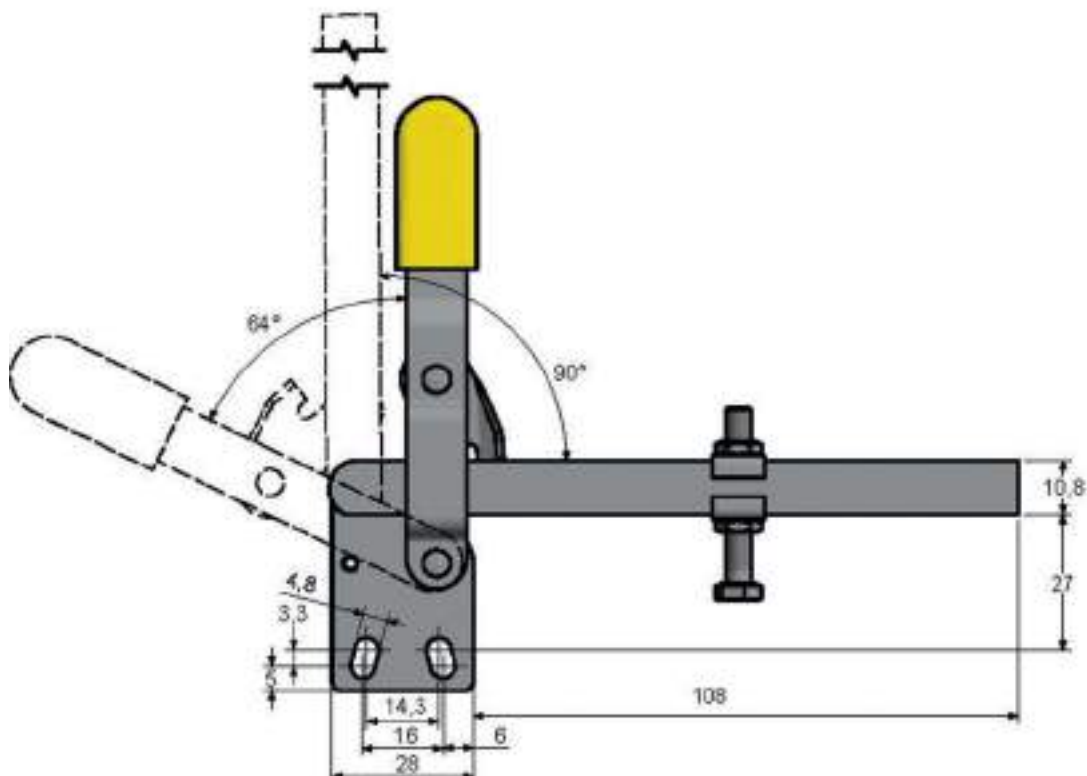
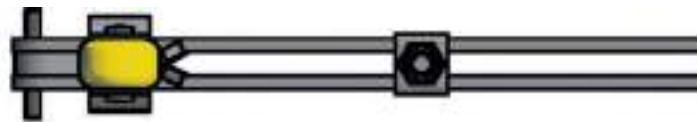
Chapter Overview

TS – V – 113 – U – L100	2 – 2
TS – V – 113 – UB – L100	2 – 3
TS – V – 113 – U	2 – 4
TS – V – 113 – UB	2 – 5
TS – V – 113 – UB – SL	2 – 6
TS – V – 113 – WB	2 – 7
TS – V – 113 – WB – SL	2 – 8
TS – V – 230 – U – L100	2 – 9
TS – V – 230 – UB – L100	2 – 10
TS – V – 245 – U	2 – 11
TS – V – 245 – UB	2 – 12
TS – V – 245 – UB – SL	2 – 13
TS – V – 290 – U – M8	2 – 14
TS – V – 290 – U – L75	2 – 15
TS – V – 290 – U – L125	2 – 16
TS – V – 290 – UB – L75	2 – 17
TS – V – 290 – UB – L125	2 – 18
TS – V – 290 – UB – L175	2 – 19
TS – V – 290 – UB – SL	2 – 20
TS – V – 290 – WB – L150	2 – 21
TS – V – 360 – U	2 – 22
TS – V – 360 – UB	2 – 23
TS – V – 360 – UB – SL	2 – 24
TS – V – 360 – WB – SL	2 – 25
TS – V – 545 – UB	2 – 26
TS – V – 600 – UB	2 – 27

Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	M5x35 mm spindles
Max holding force	113 daN close to body
Weight	0.15 Kgs
Stroke	–
Clamping Pressure	100 daN - 65 daN



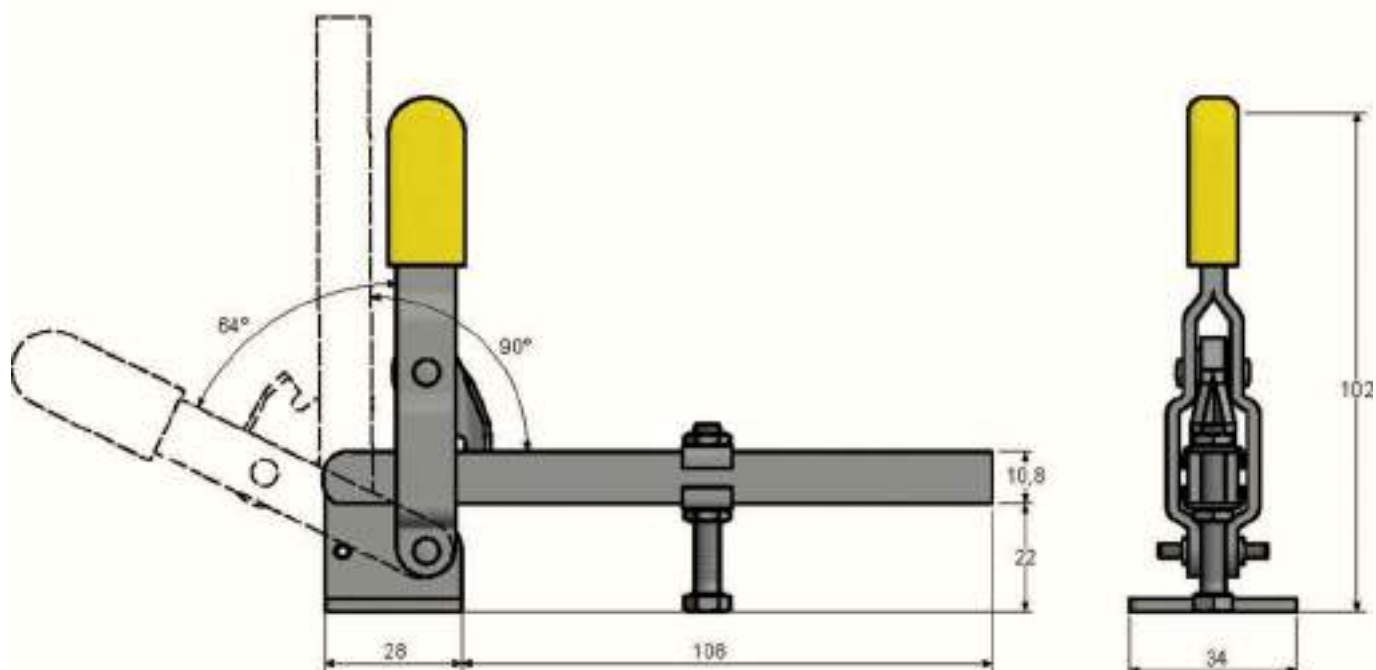
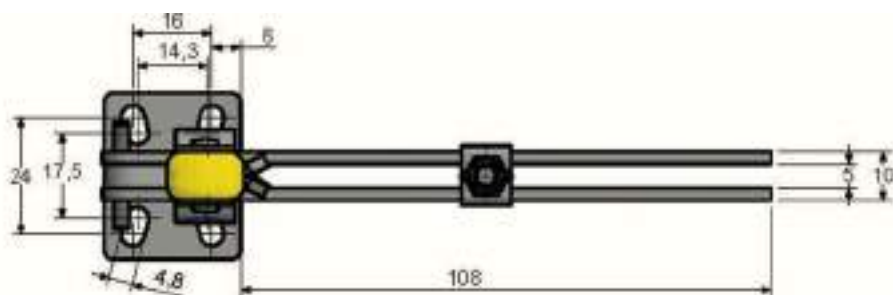
VERTICAL ACTION



Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	M5x35 mm spindles
Max holding force	113 daN close to body
Weight	0.15 Kgs
Stroke	–
Clamping Pressure	100 daN - 65 daN



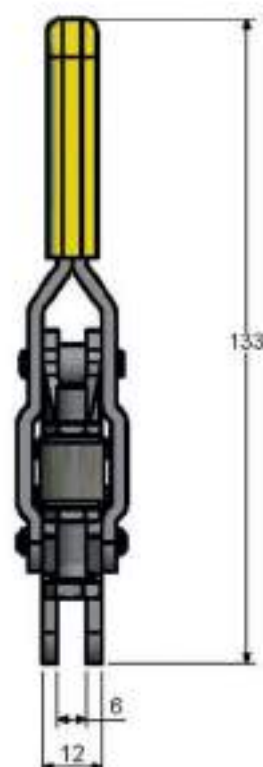
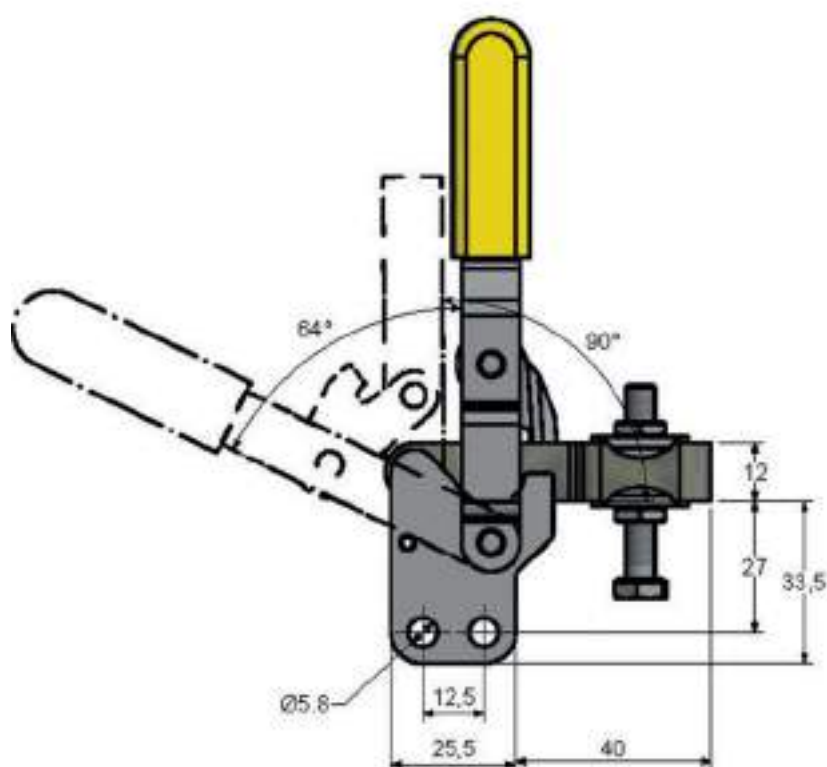
VERTICAL ACTION



Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	6x40 mm spindles
Max holding force	113 daN close to body
Weight	0.2 Kgs
Stroke	–
Clamping Pressure	75 daN/100 daN



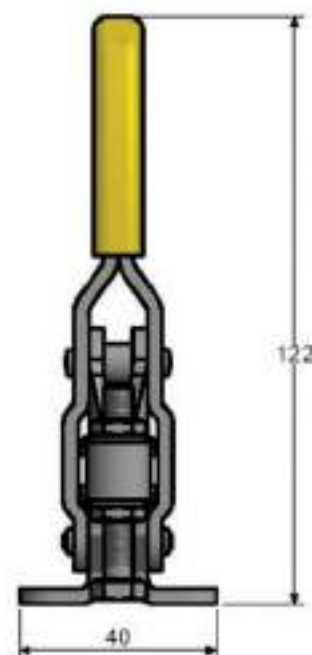
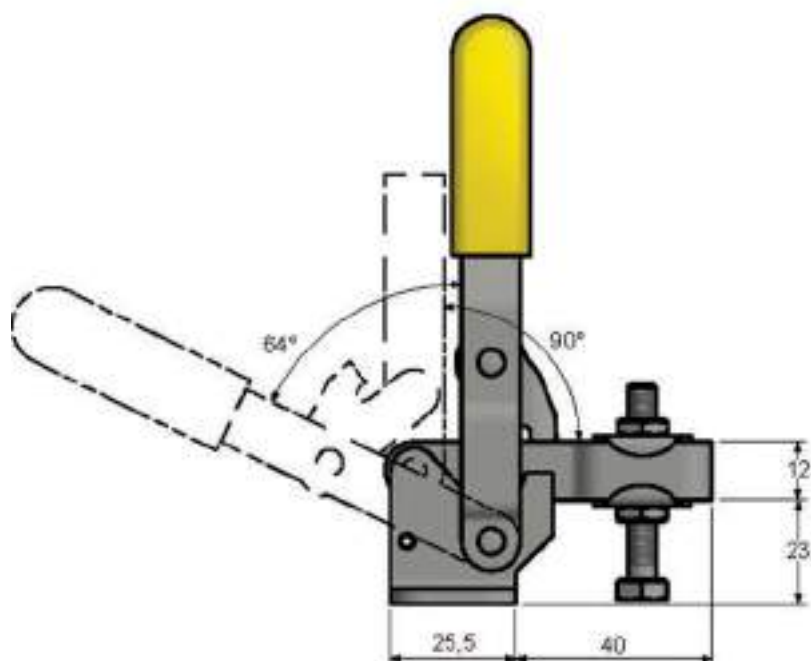
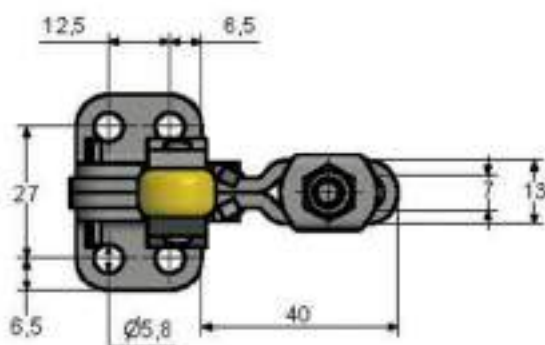
VERTICAL ACTION



Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	6x40 mm spindles
Max holding force	113 daN close to body
Weight	0.2 Kgs
Stroke	–
Clamping Pressure	75 daN/100 daN



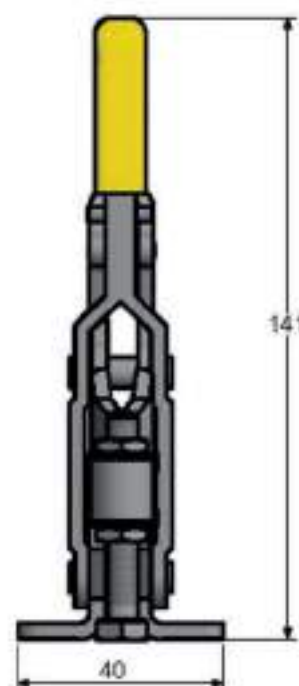
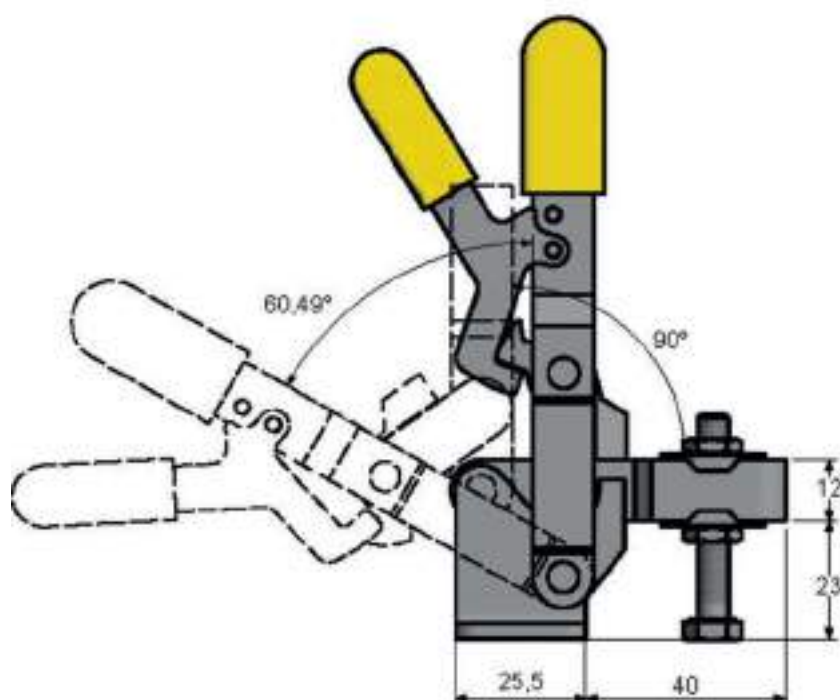
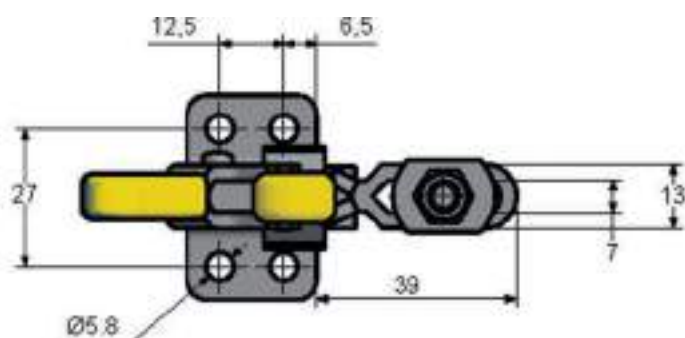
VERTICAL ACTION



Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	6x40 mm spindles
Max holding force	113 daN close to body
Weight	0.2 Kgs
Stroke	–
Clamping Pressure	75 daN/100 daN



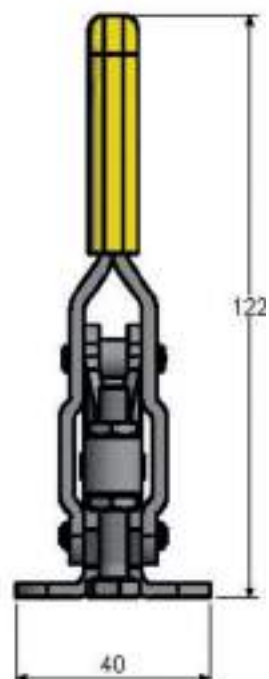
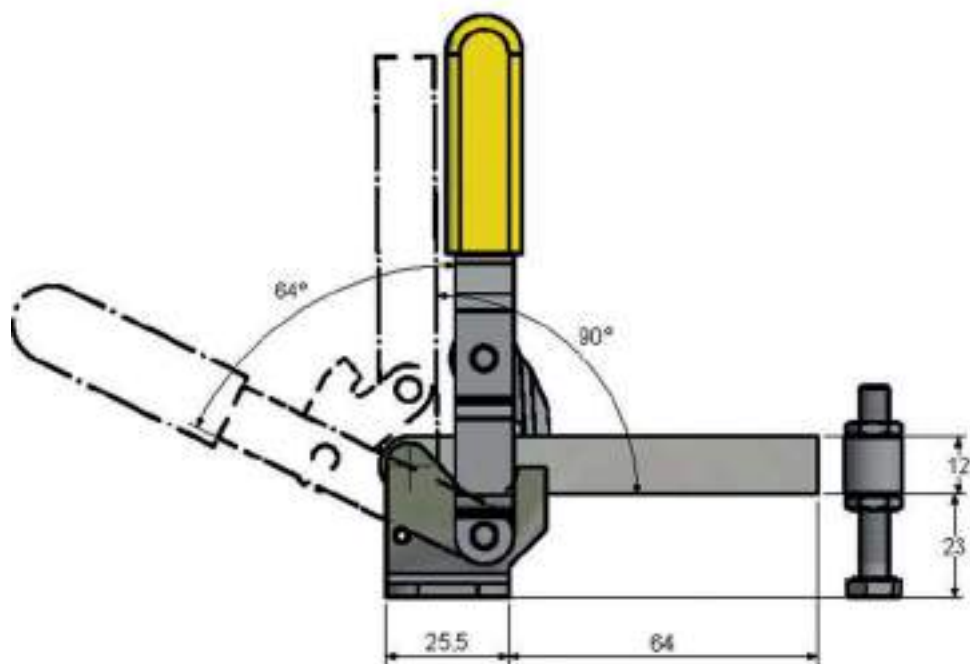
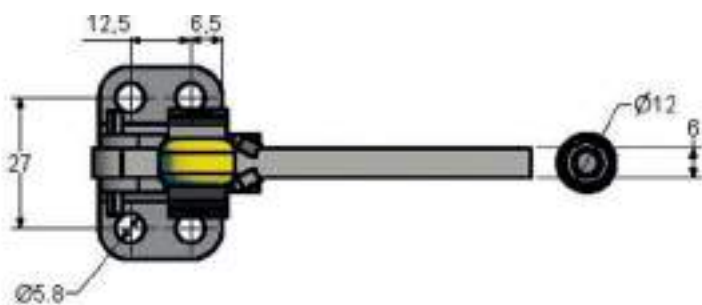
VERTICAL ACTION



Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	6x40 mm spindles
Max holding force	113 daN close to body
Weight	0.2 Kgs
Stroke	–
Clamping Pressure	75 daN/100 daN



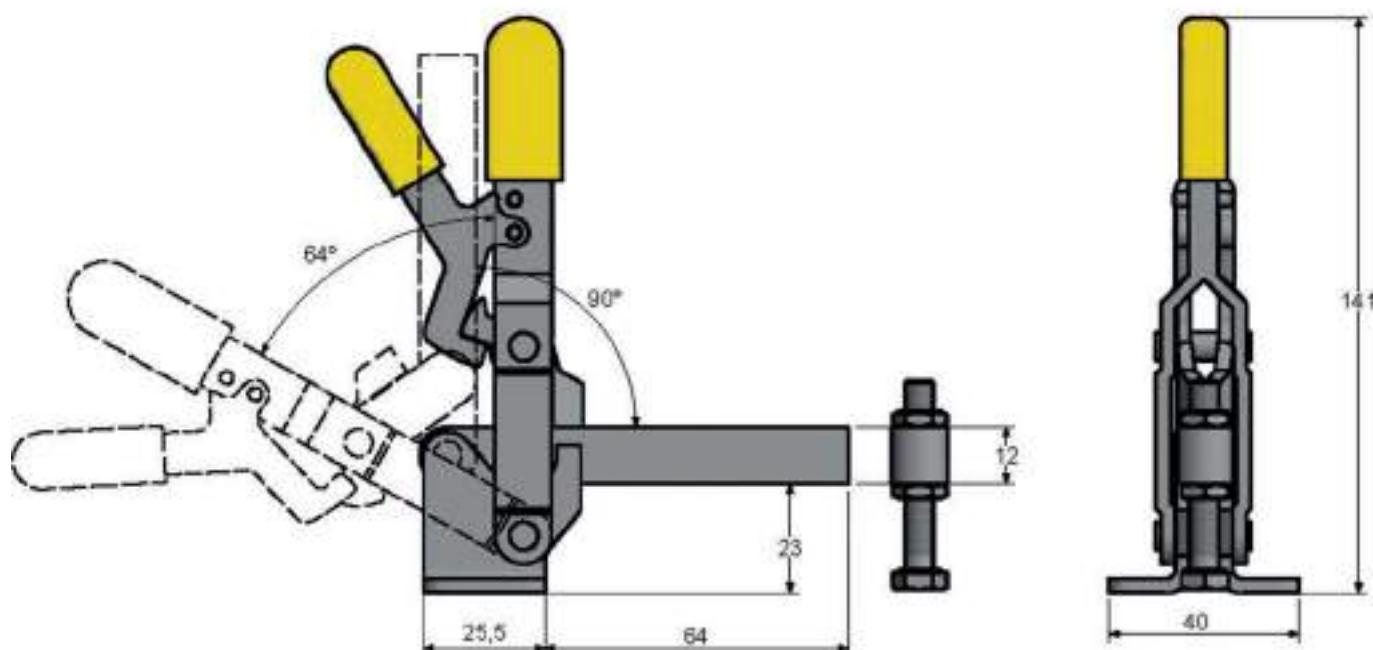
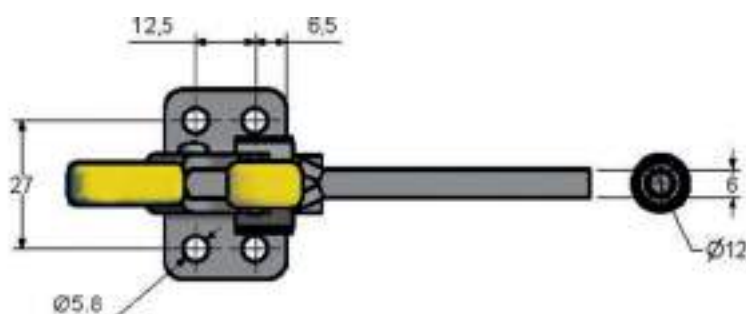
VERTICAL ACTION



Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	6x40 mm spindles
Max holding force	113 daN close to body
Weight	0.2 Kgs
Stroke	–
Clamping Pressure	75 daN/100 daN



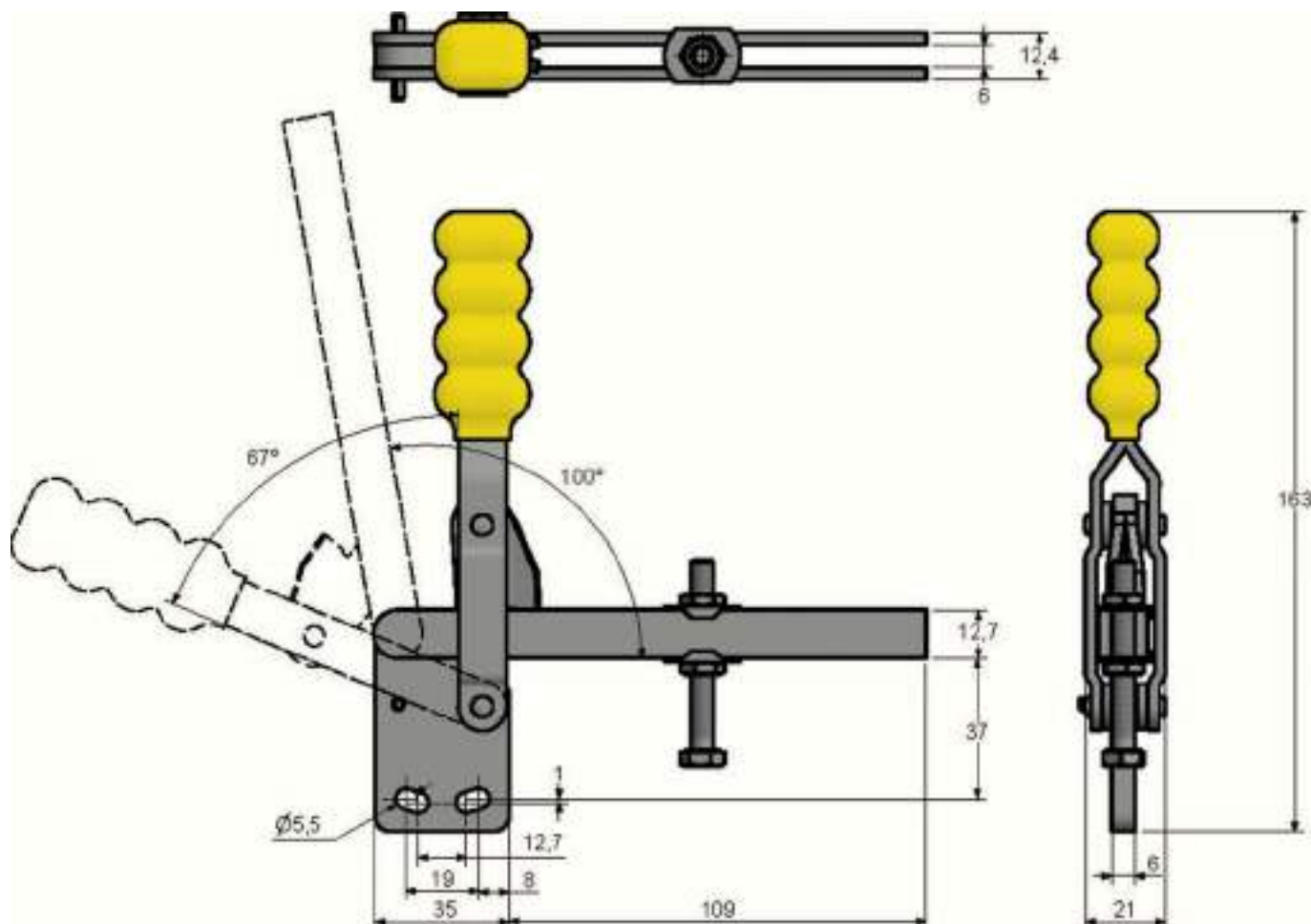
VERTICAL ACTION



Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	M6x50 mm spindles
Max holding force	230 daN
Weight	0.23 Kgs
Stroke	-
Clamping Pressure	138 daN - 85 daN



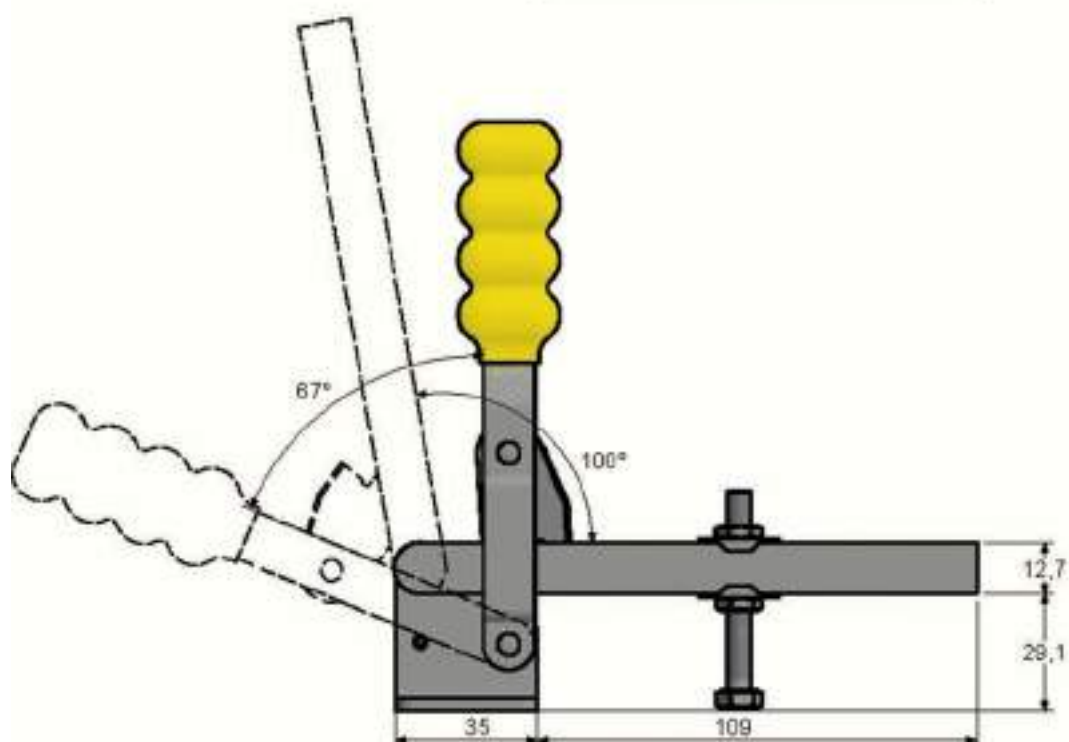
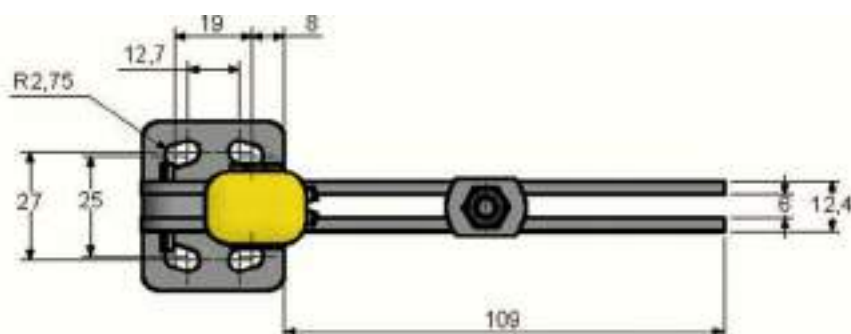
VERTICAL ACTION



Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	M6x50 mm spindles
Max holding force	230 daN
Weight	0.27 Kgs
Stroke	–
Clamping Pressure	138 daN



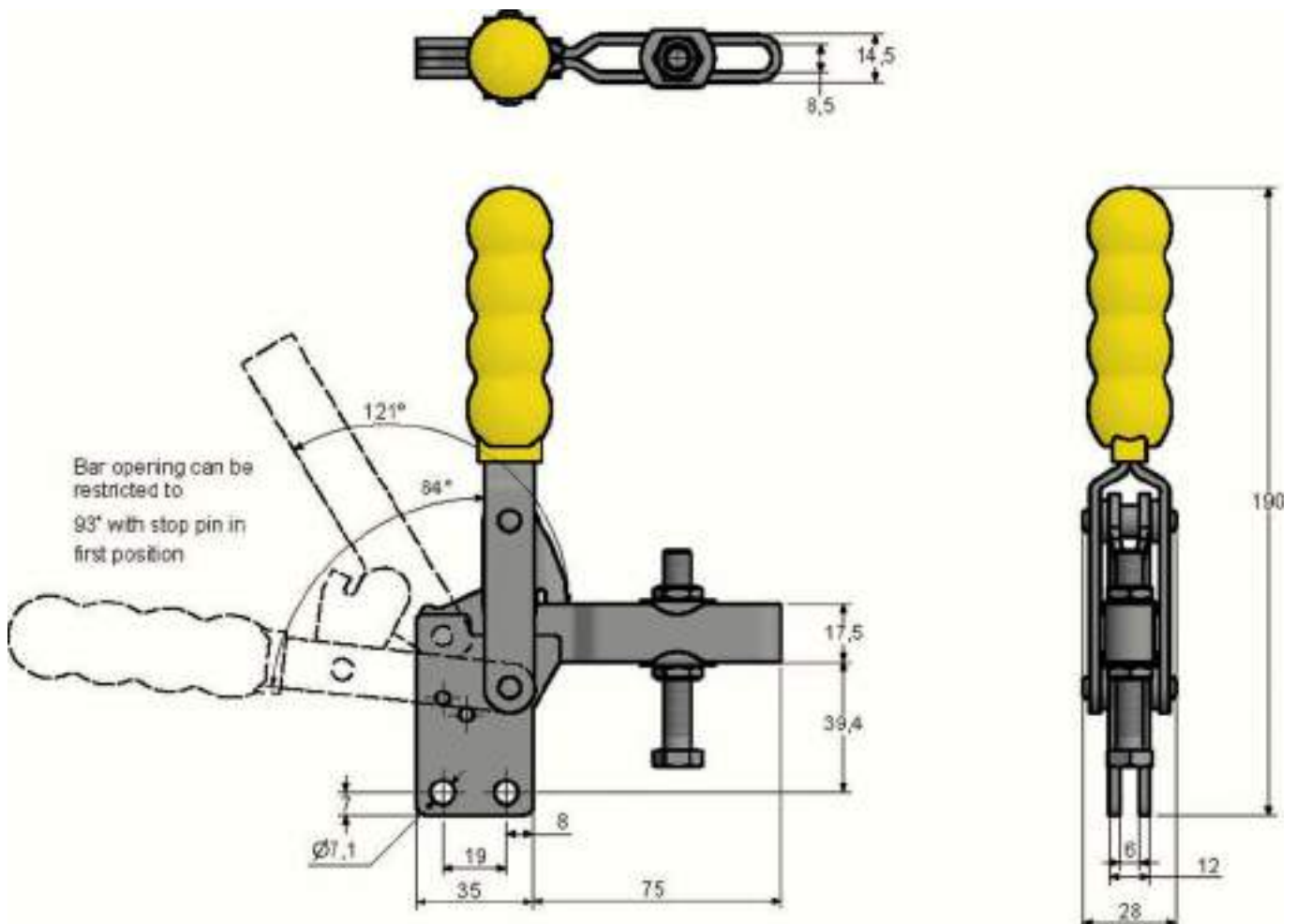
VERTICAL ACTION



Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	M8x60 mm spindles
Max holding force	245 daN
Weight	0.38 Kgs
Stroke	–
Clamping Pressure	165 daN/85 daN



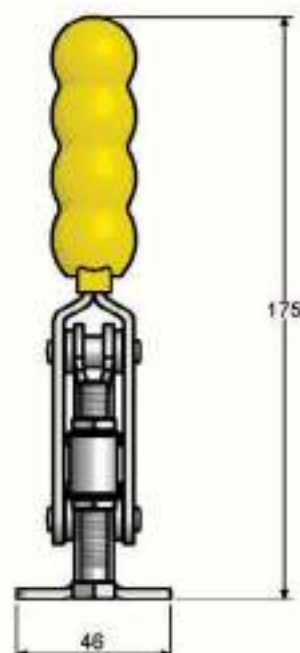
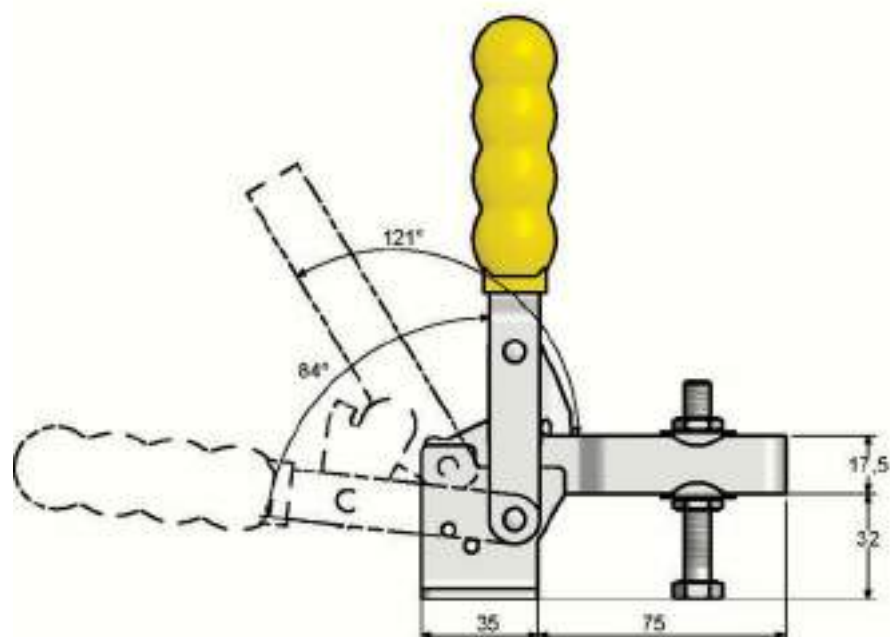
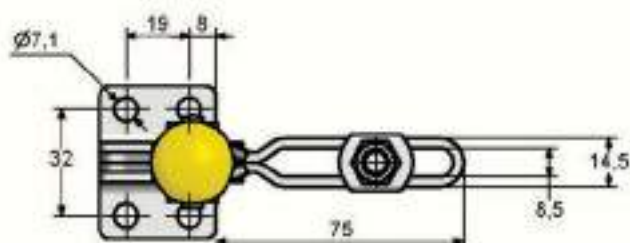
VERTICAL ACTION



Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	M8x60 mm spindles
Max holding force	245 daN
Weight	0.38 Kgs
Stroke	–
Clamping Pressure	65 daN/85 daN



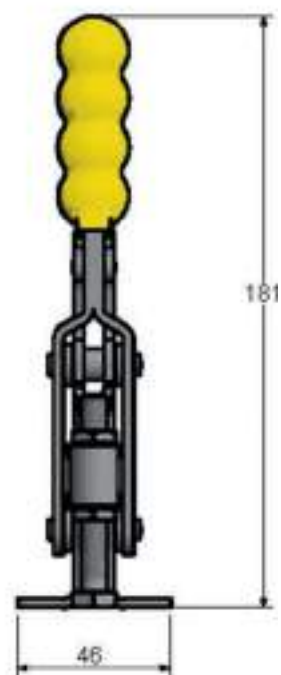
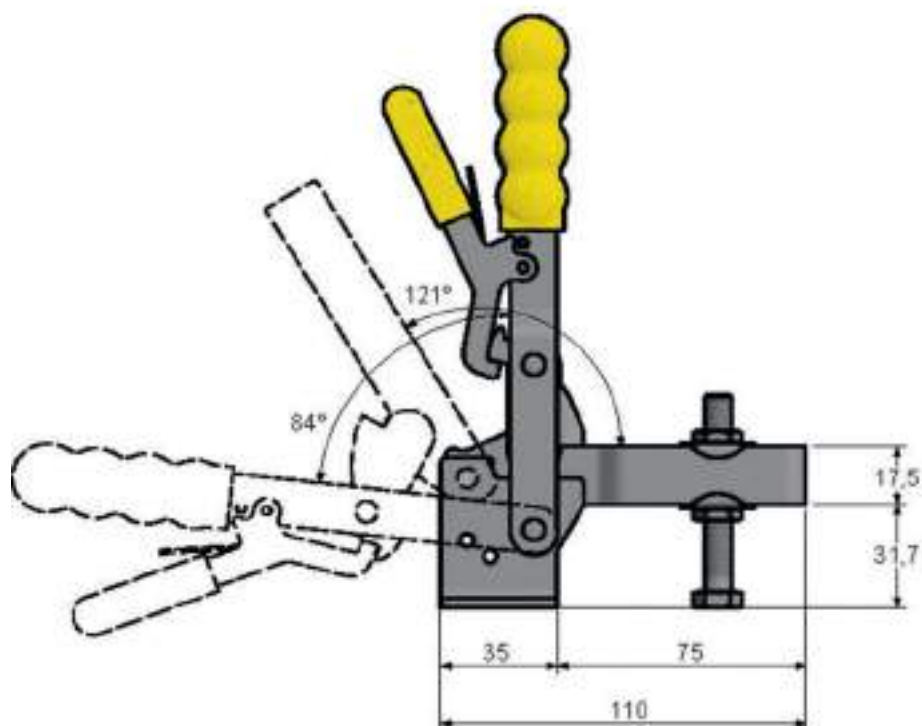
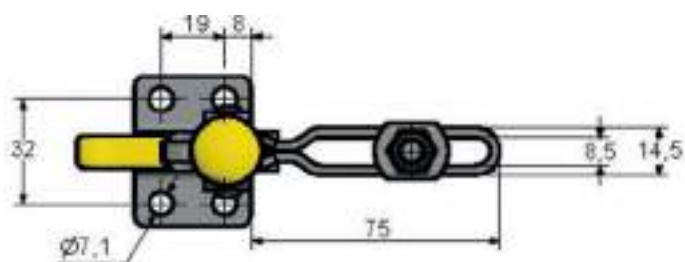
VERTICAL ACTION



Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	M8x60 mm spindles
Max holding force	245 daN
Weight	0.38 Kgs
Stroke	–
Clamping Pressure	165 daN/85 daN



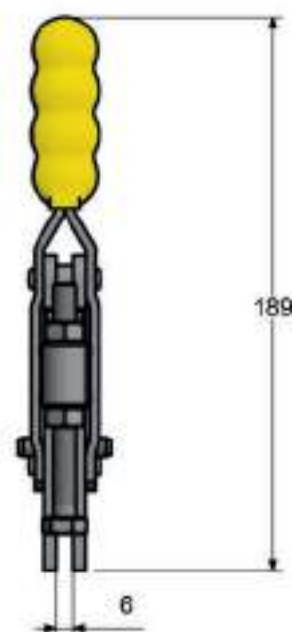
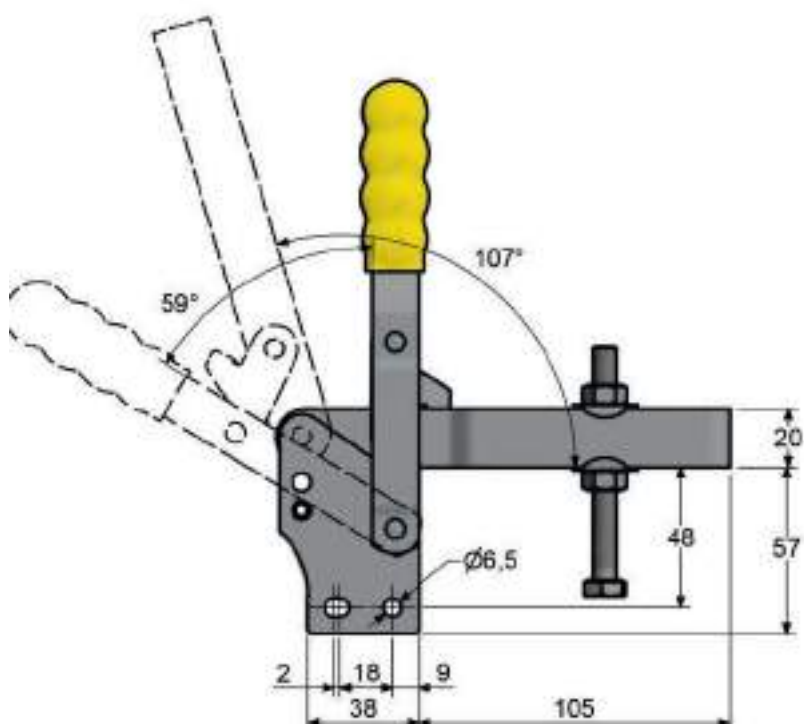
VERTICAL ACTION



Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	M8x80 mm spindles
Max holding force	290 daN
Weight	0.6 Kgs
Stroke	–
Clamping Pressure	165 daN



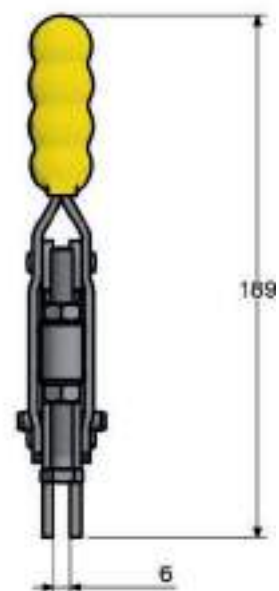
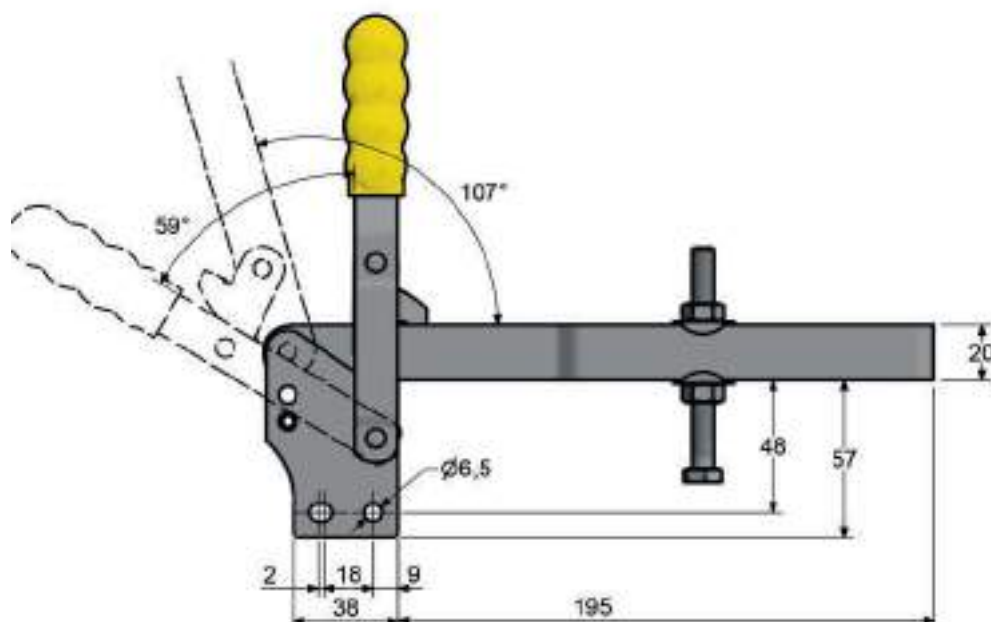
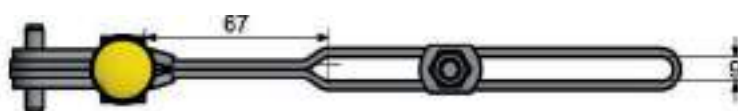
VERTICAL ACTION



Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	M8x80 mm spindles
Max holding force	290 daN
Weight	0.6 Kgs
Stroke	–
Clamping Pressure	165 daN



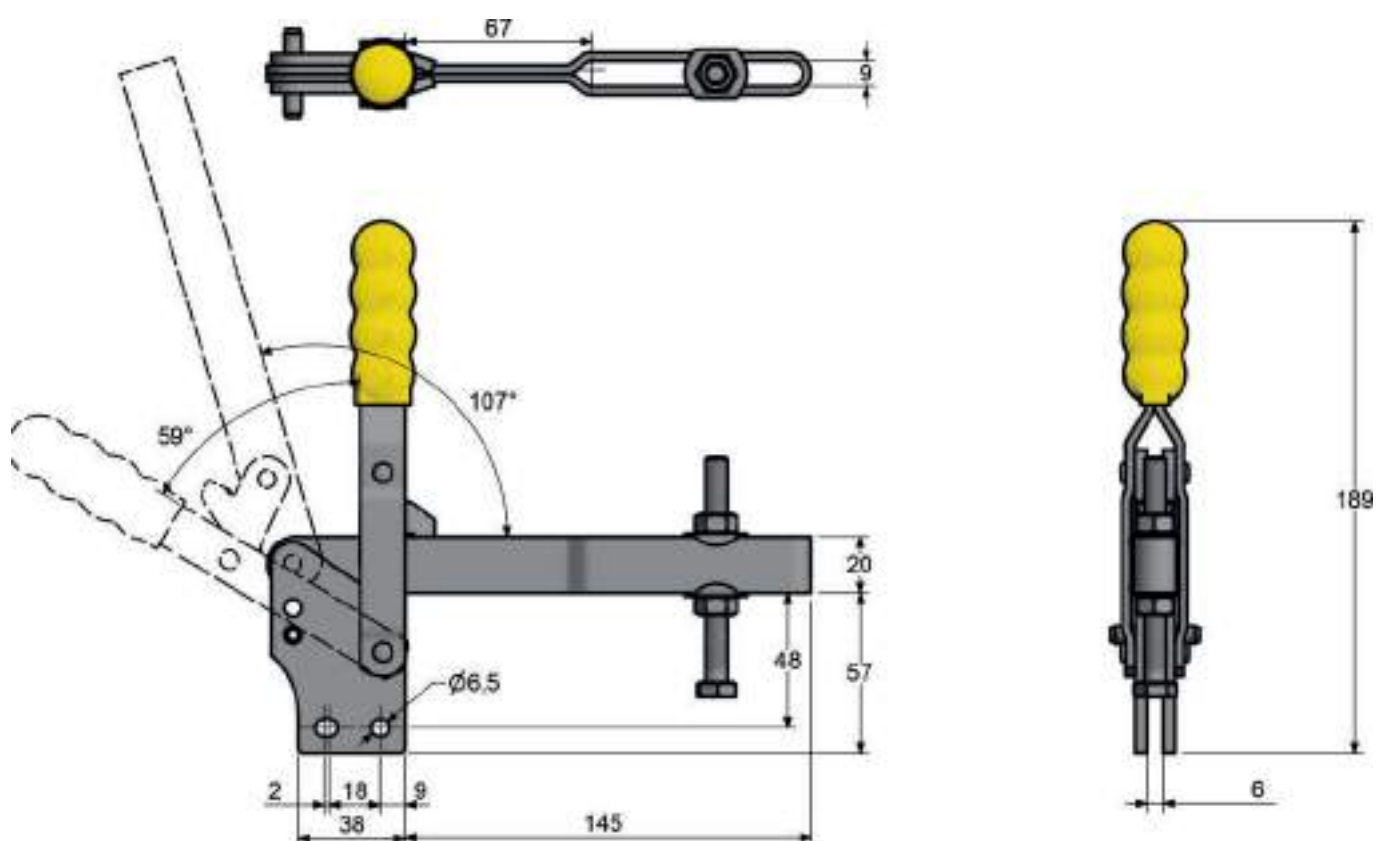
VERTICAL ACTION



Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	M8x80 mm spindles
Max holding force	290 daN
Weight	0.6 Kgs
Stroke	–
Clamping Pressure	165 daN



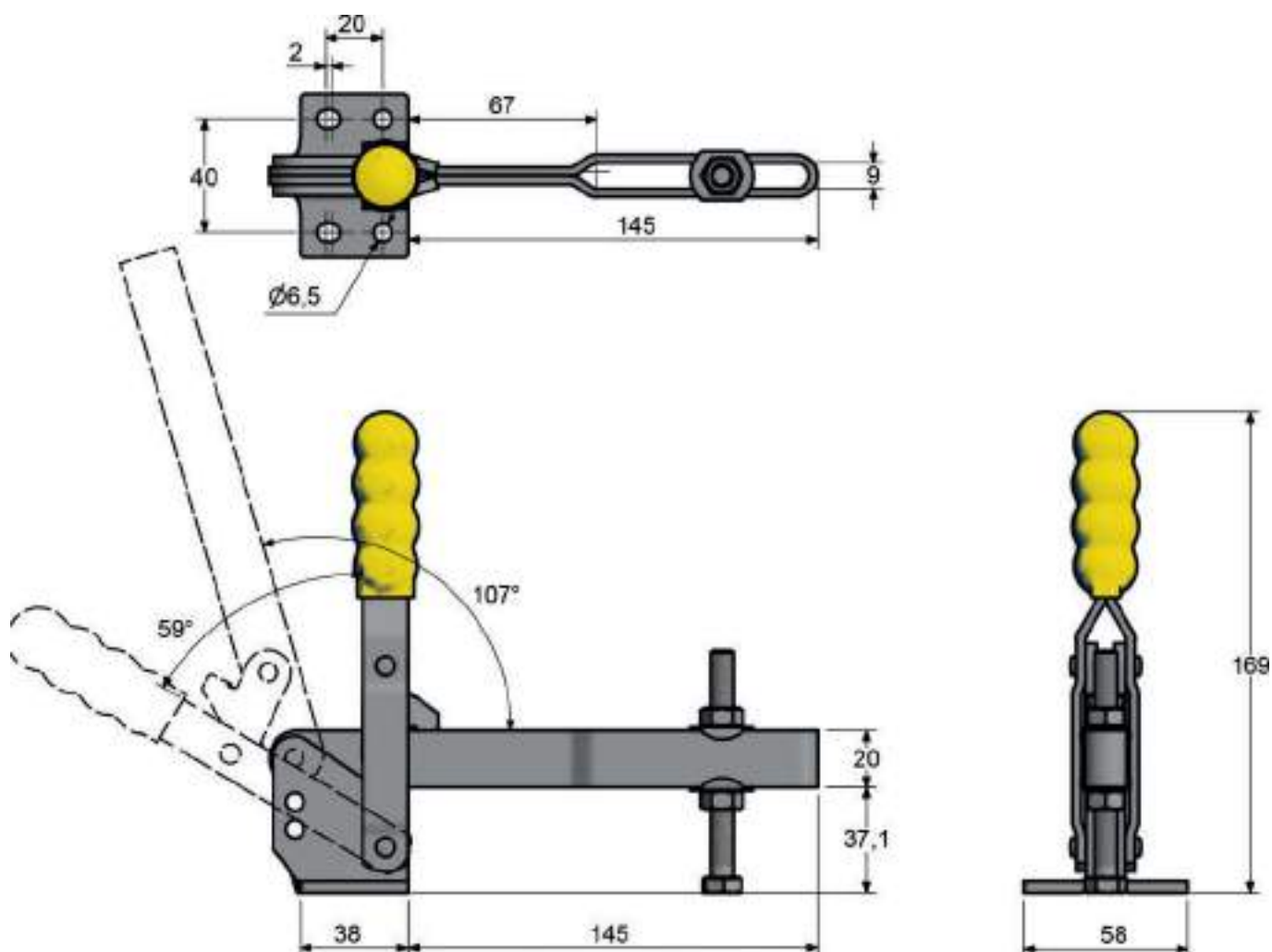
VERTICAL ACTION



Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	M8x80 mm spindles
Max holding force	290 daN
Weight	0.6 Kgs
Stroke	-
Clamping Pressure	165 daN



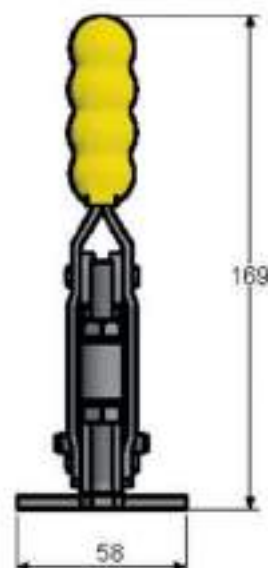
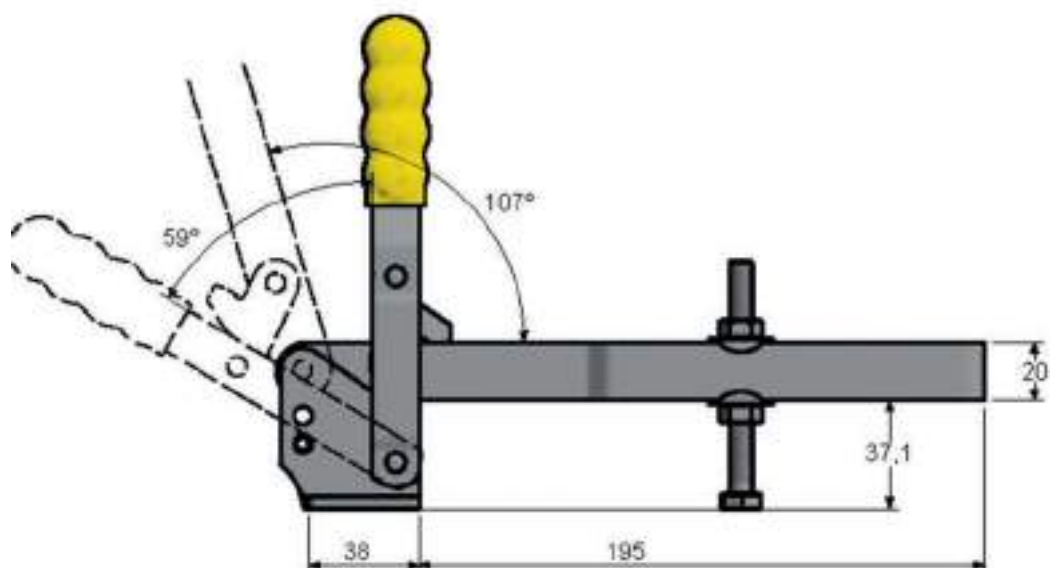
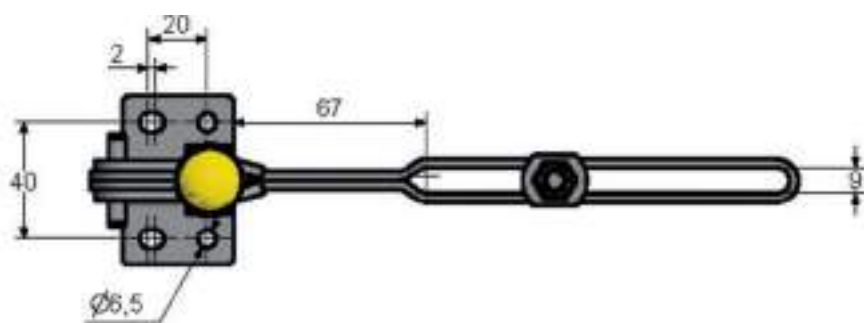
VERTICAL ACTION



Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	M8x80 mm spindles
Max holding force	290 daN
Weight	0.6 Kgs
Stroke	–
Clamping Pressure	165 daN



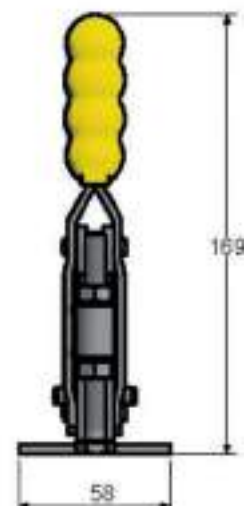
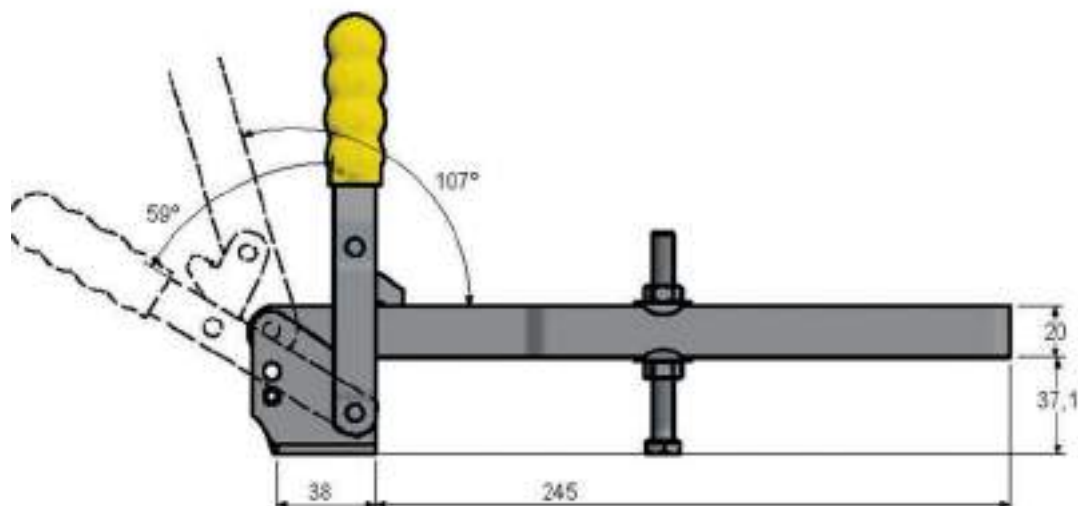
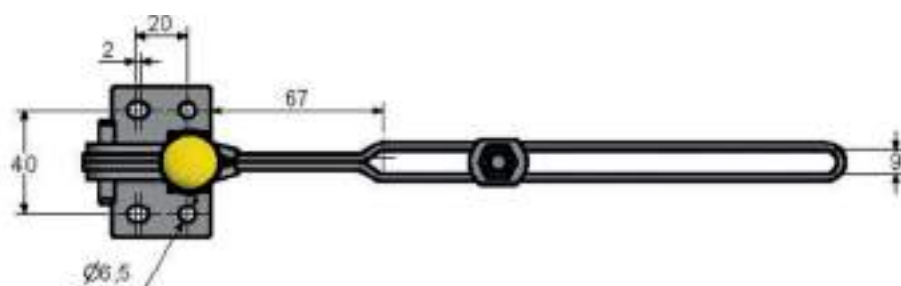
VERTICAL ACTION



Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	M8x80 mm spindles
Max holding force	290 daN
Weight	0.6 Kgs
Stroke	–
Clamping Pressure	165 daN



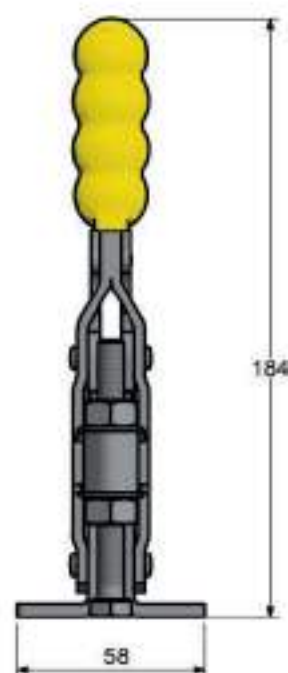
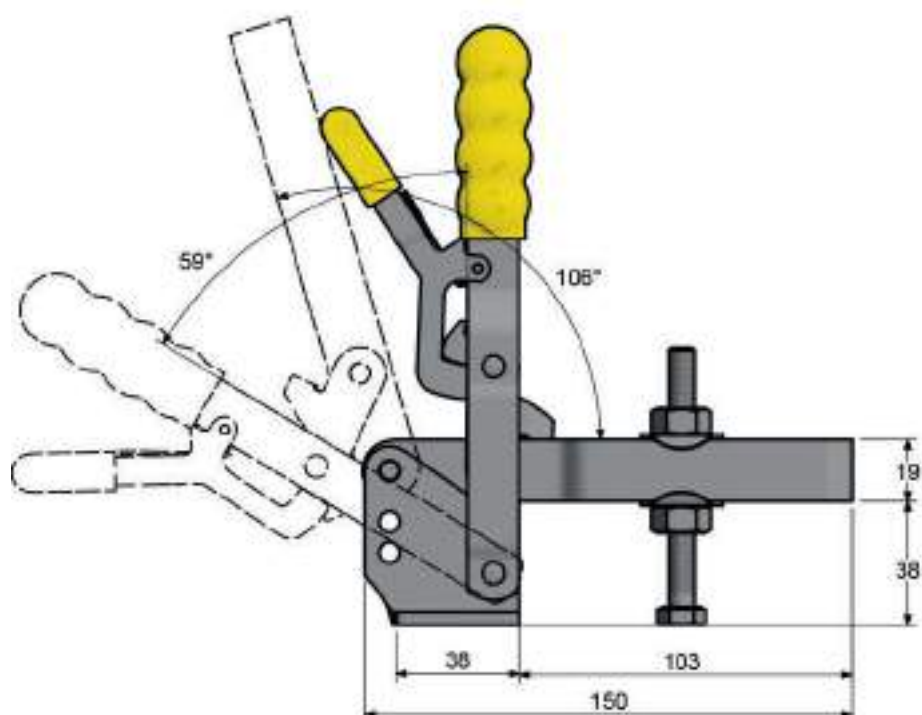
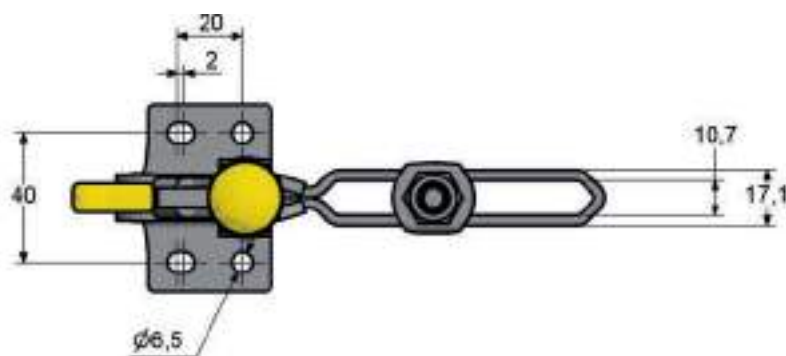
VERTICAL ACTION



Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	M8x80 mm spindles
Max holding force	290 daN
Weight	0.6 Kgs
Stroke	–
Clamping Pressure	165 daN



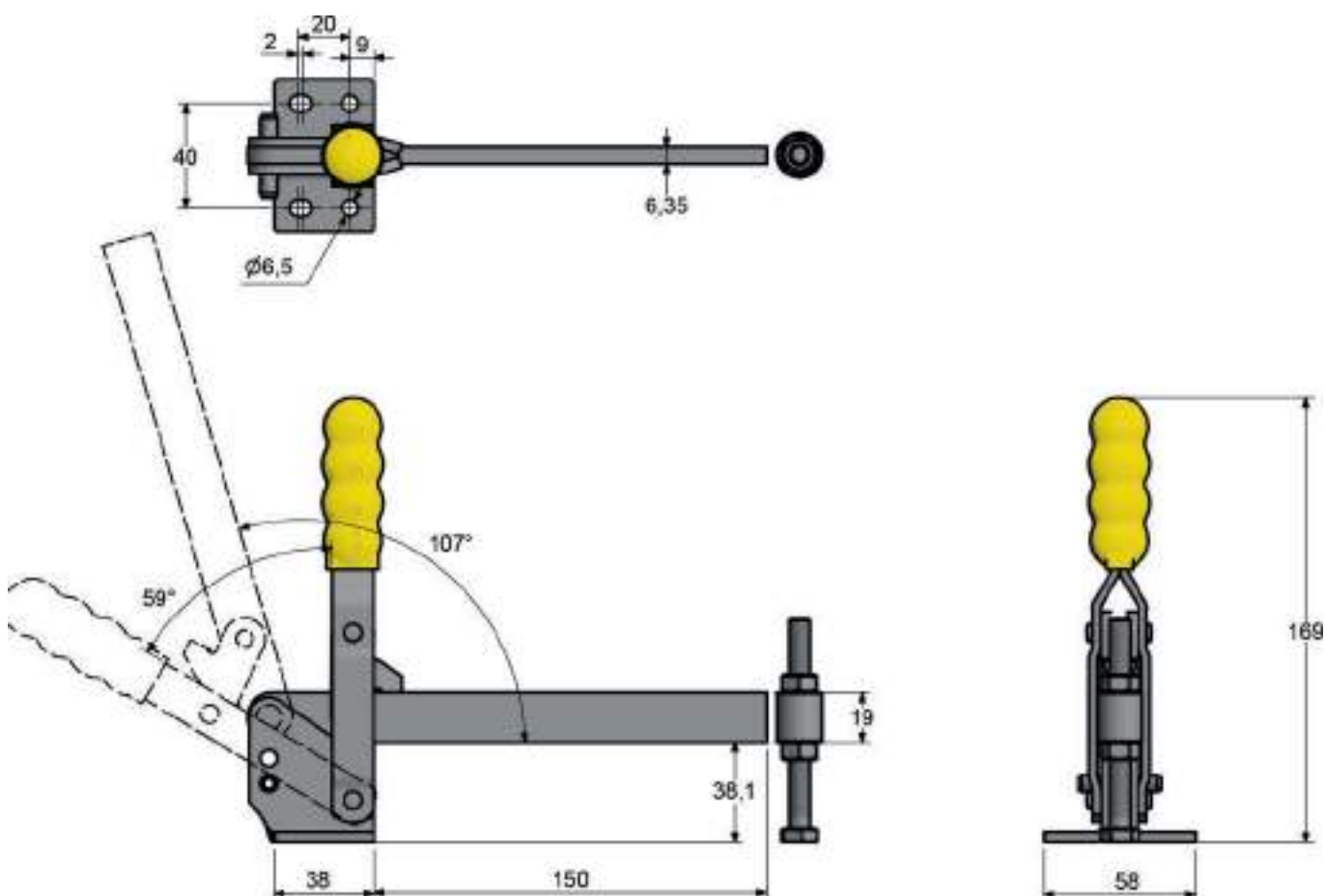
VERTICAL ACTION



Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	M8x80 mm spindles
Max holding force	290 daN
Weight	0.6 Kgs
Stroke	–
Clamping Pressure	165 daN



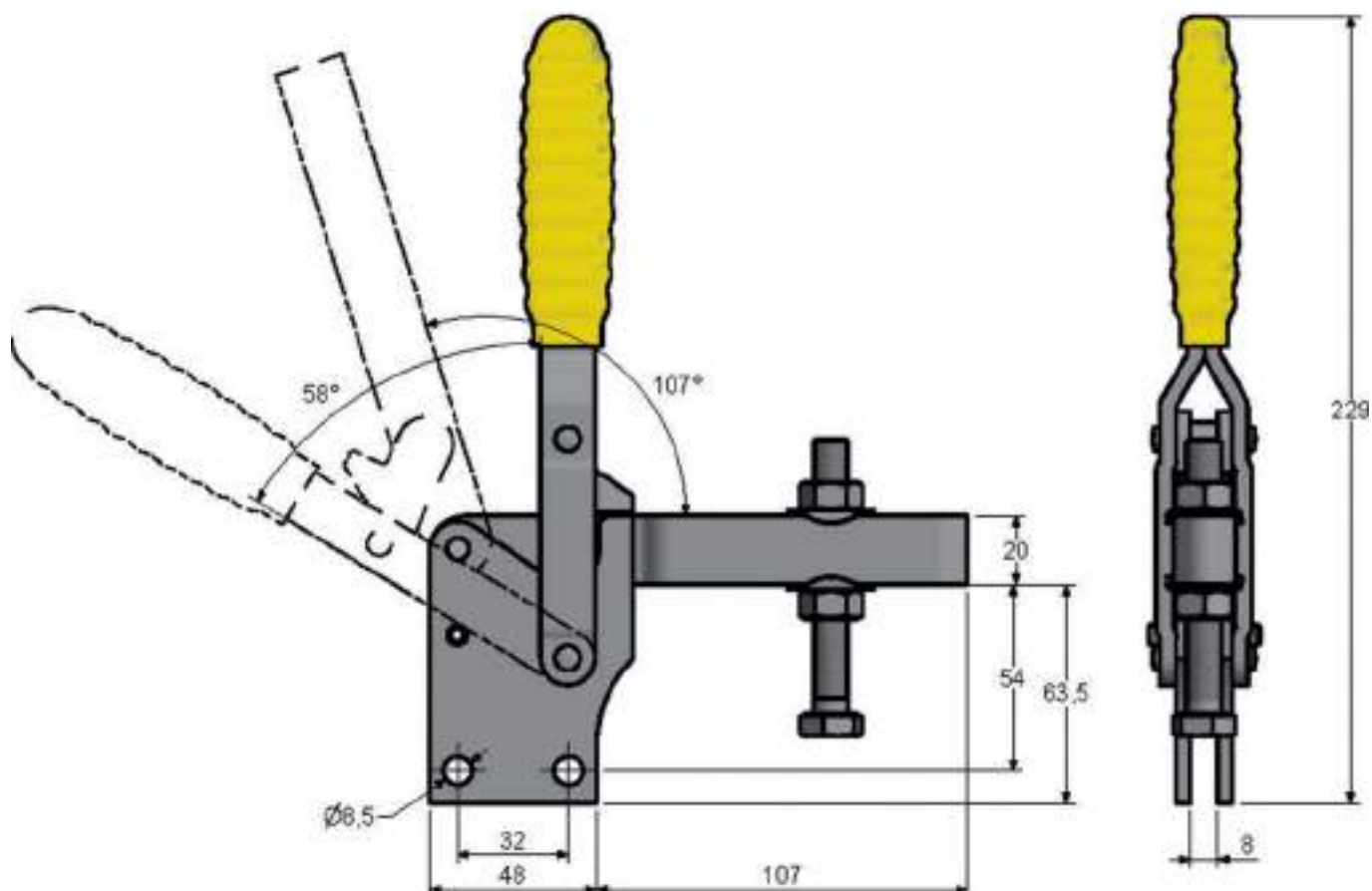
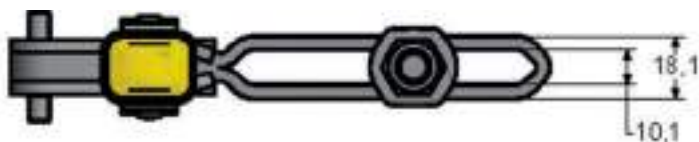
VERTICAL ACTION



Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	10x80 mm spindles
Max holding force	360 daN close to body
Weight	0.68 Kgs
Stroke	–
Clamping Pressure	145 daN/280 daN



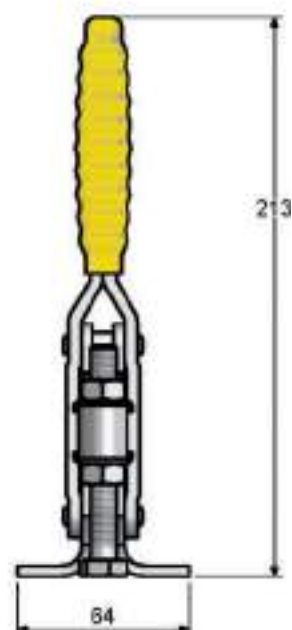
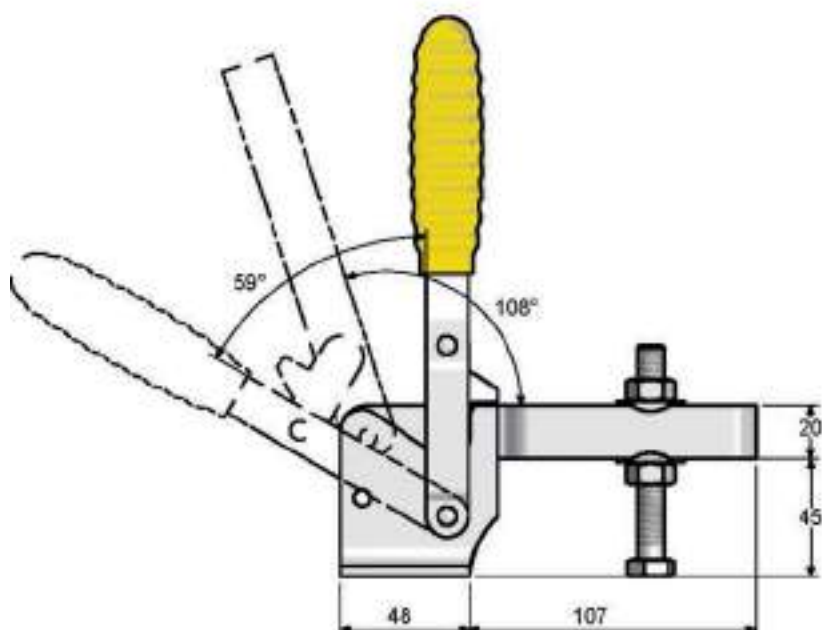
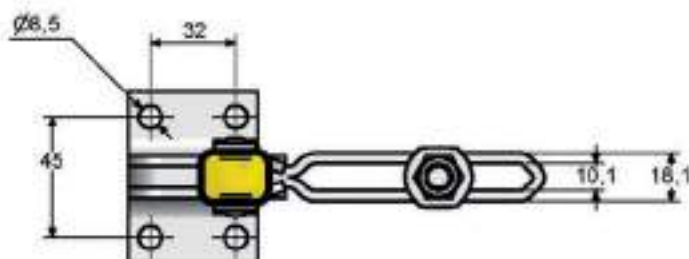
VERTICAL ACTION



Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	10x80 mm spindles
Max holding force	360 daN close to body
Weight	0.68 Kgs
Stroke	–
Clamping Pressure	145 daN/280 daN



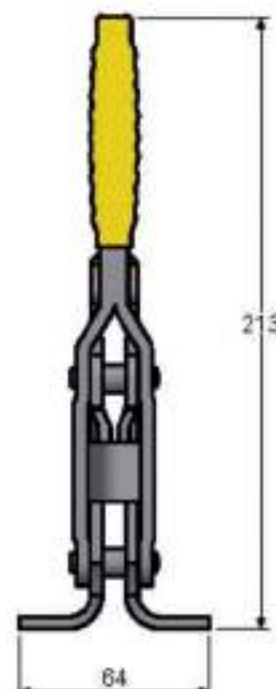
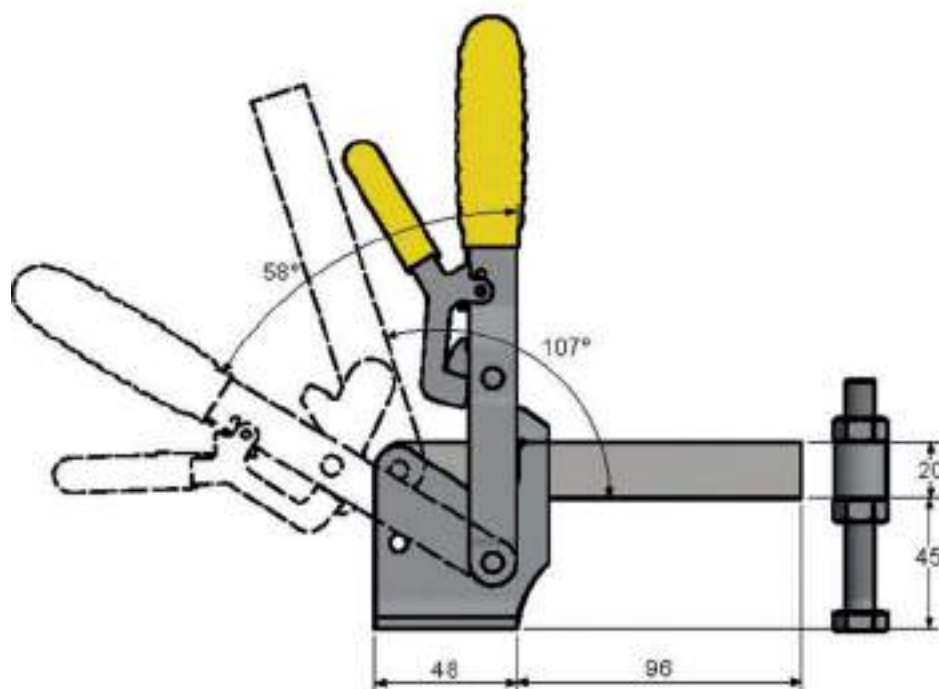
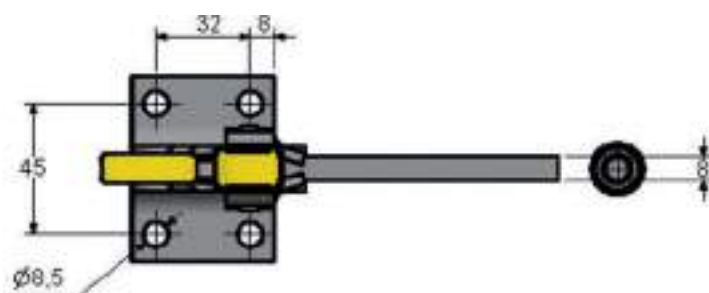
VERTICAL ACTION



Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	10x80 mm spindles
Max holding force	360 daN close to body
Weight	0.69 Kgs
Stroke	–
Clamping Pressure	145 daN/280 daN



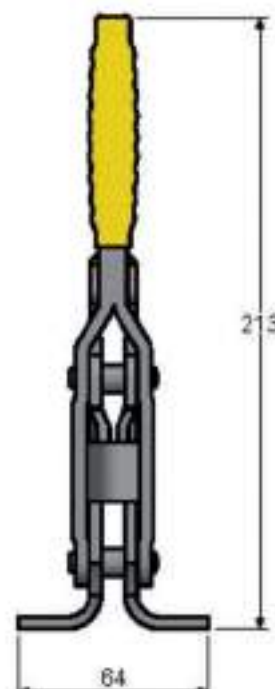
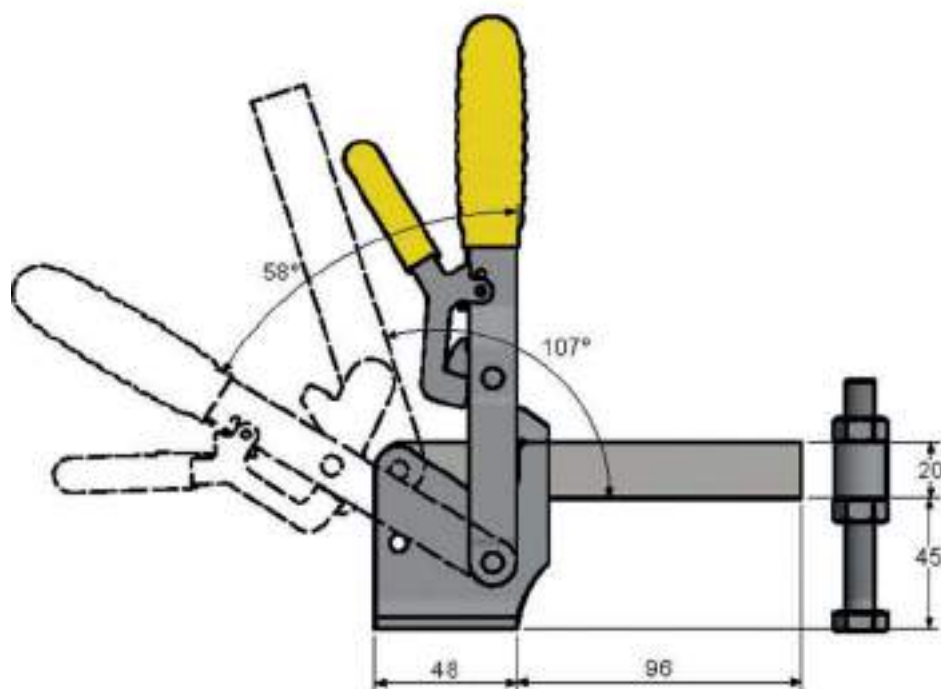
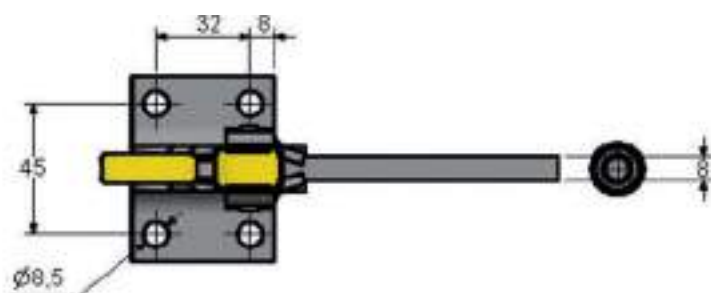
VERTICAL ACTION



Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	10x80 mm spindles
Max holding force	360 daN close to body
Weight	0.69 Kgs
Stroke	–
Clamping Pressure	145 daN/280 daN



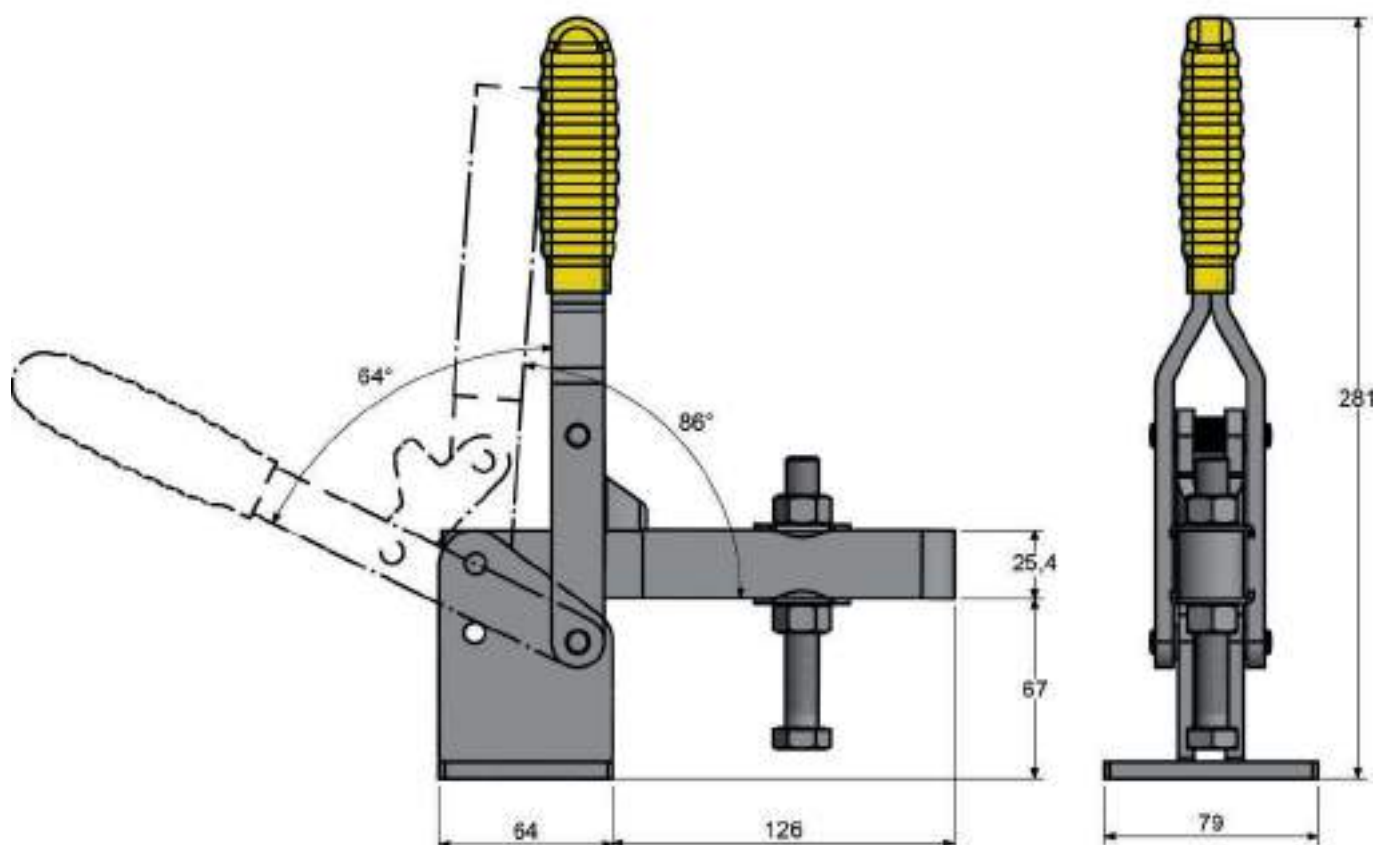
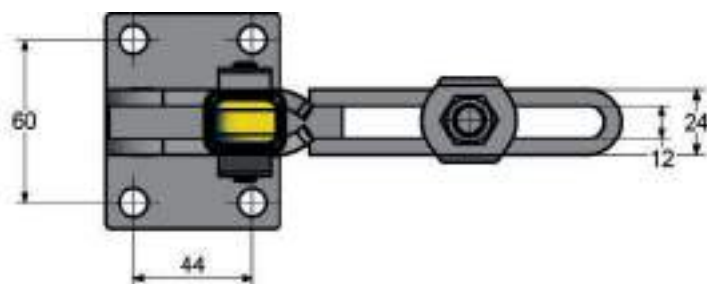
VERTICAL ACTION



Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	12x100 mm spindles
Max holding force	545 daN close to body
Weight	1.8 Kgs
Stroke	–
Clamping Pressure	180 daN/370 daN



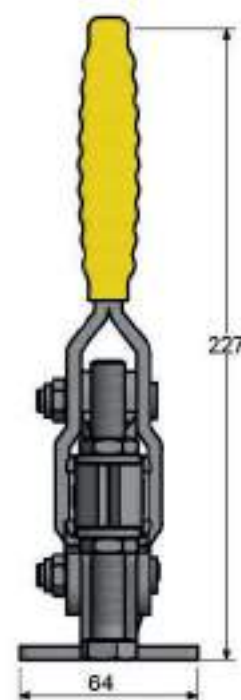
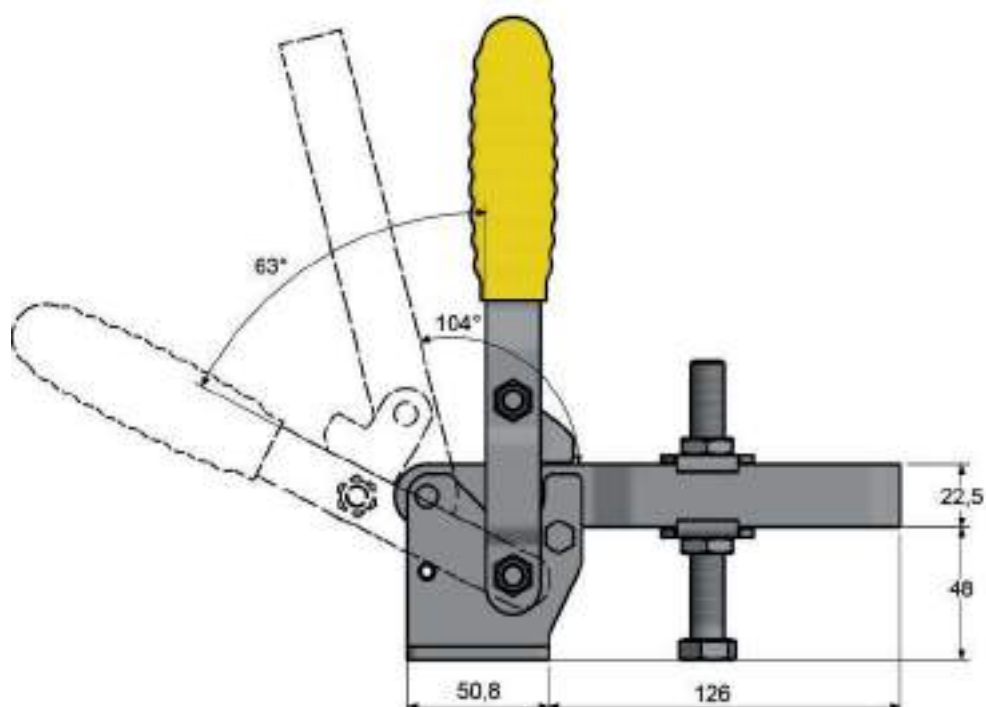
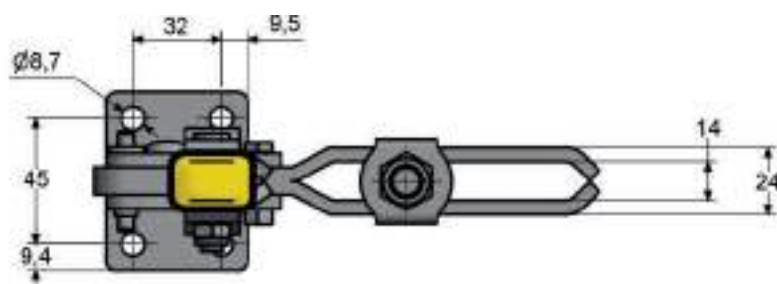
VERTICAL ACTION



Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	M12x100 mm spindles
Max holding force	600 daN
Weight	1.25 Kgs
Stroke	–
Clamping Pressure	290 daN/135 daN



VERTICAL ACTION



Product Description

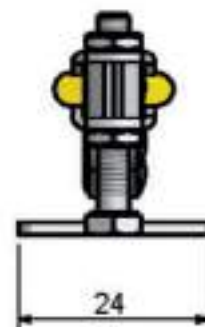
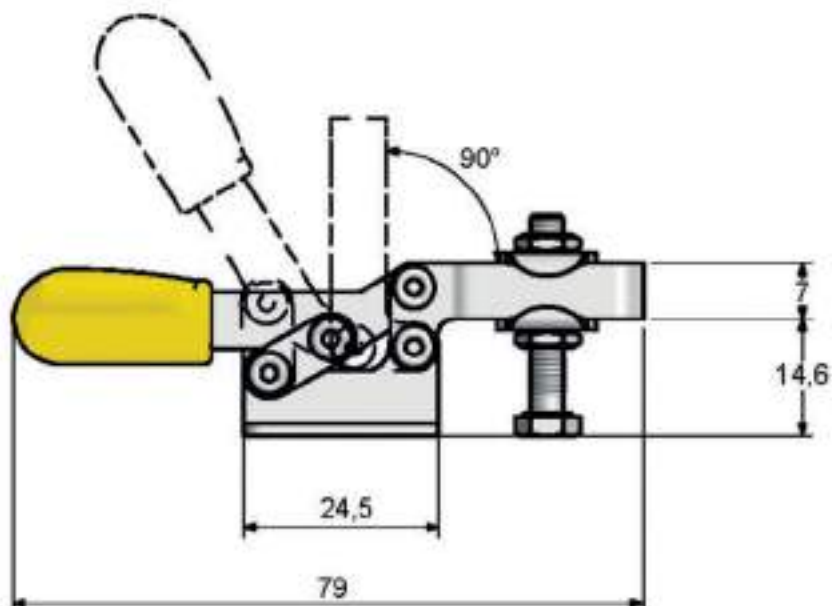
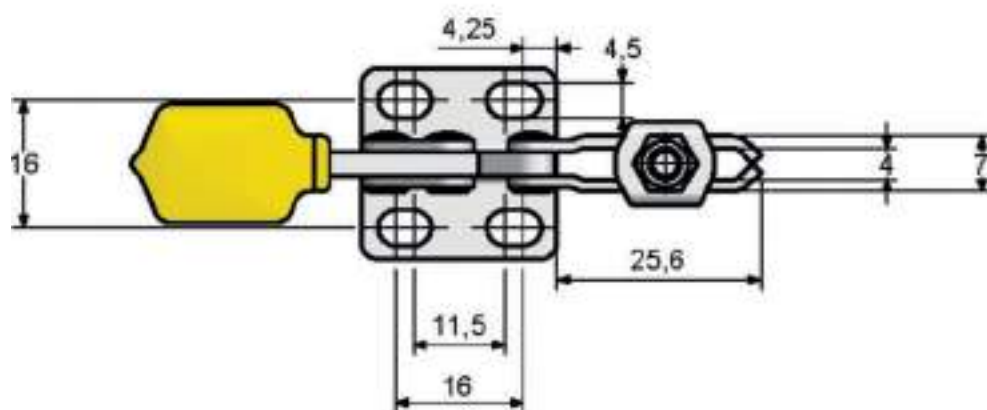
The TÜNKERS horizontal action hold down clamp with low height design is holding down the work piece with a downward clamping action with holding forces up to 680daN. In contrast to the vertical hold down action clamps, with these the movement of the clamp arm and the handle are in opposite direction.

The clamping arm can be solid bar, U-bar or with a weldable bush, while the base design can be straight or angulated.

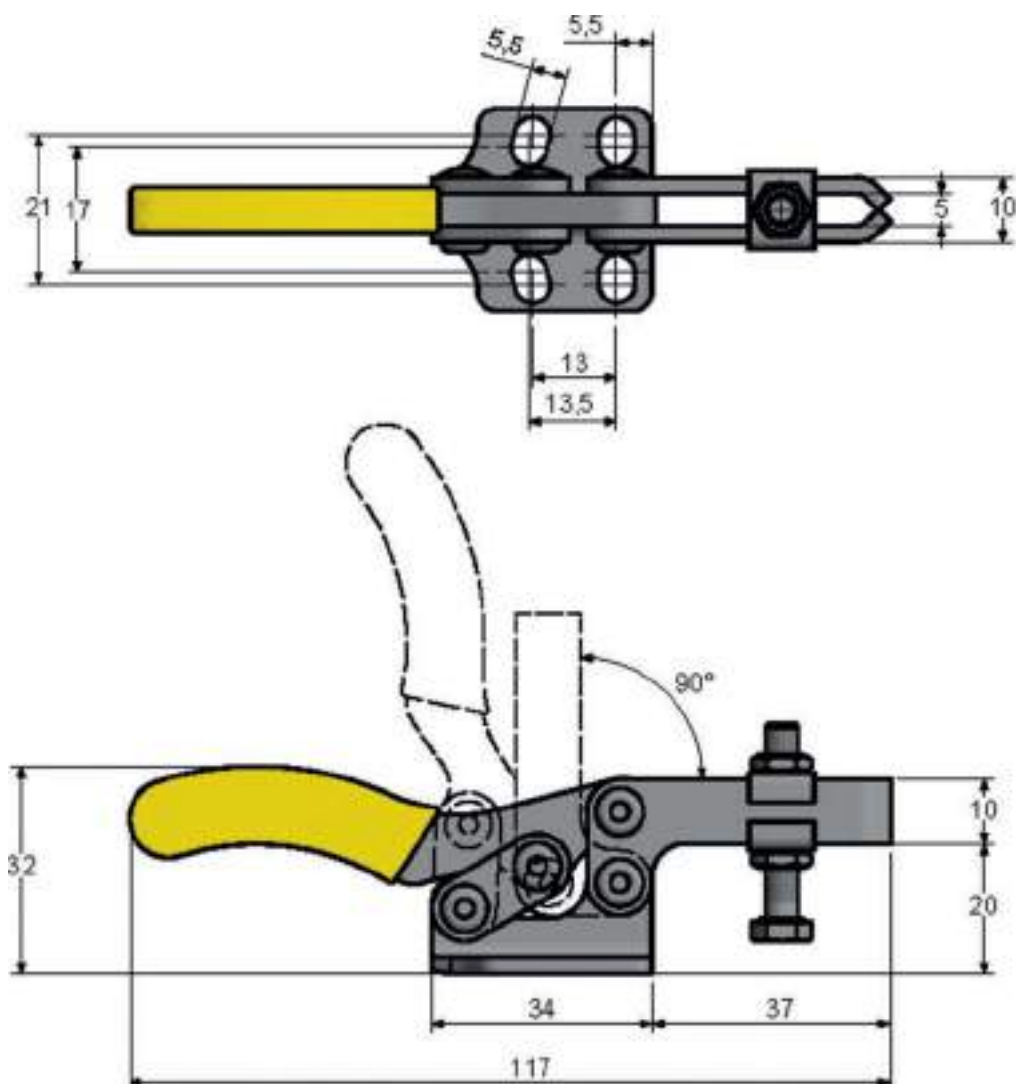
Chapter Overview

TS – H – 60 – UB	3 – 2
TS – H – 80 – UB	3 – 3
TS – H – 155 – U	3 – 4
TS – H – 155 – UB	3 – 5
TS – H – 255 – U	3 – 6
TS – H – 255 – UB	3 – 7
TS – H – 480 – U	3 – 8
TS – H – 680 – U	3 – 9

Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	4x25 mm spindles
Max holding force	60 daN close to body
Weight	0.05 Kgs
Stroke	-
Clamping Pressure	20 daN



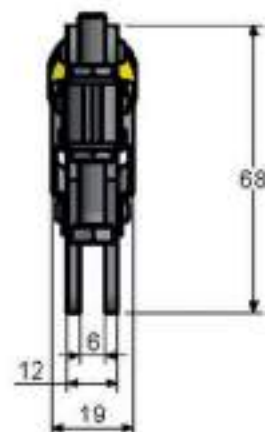
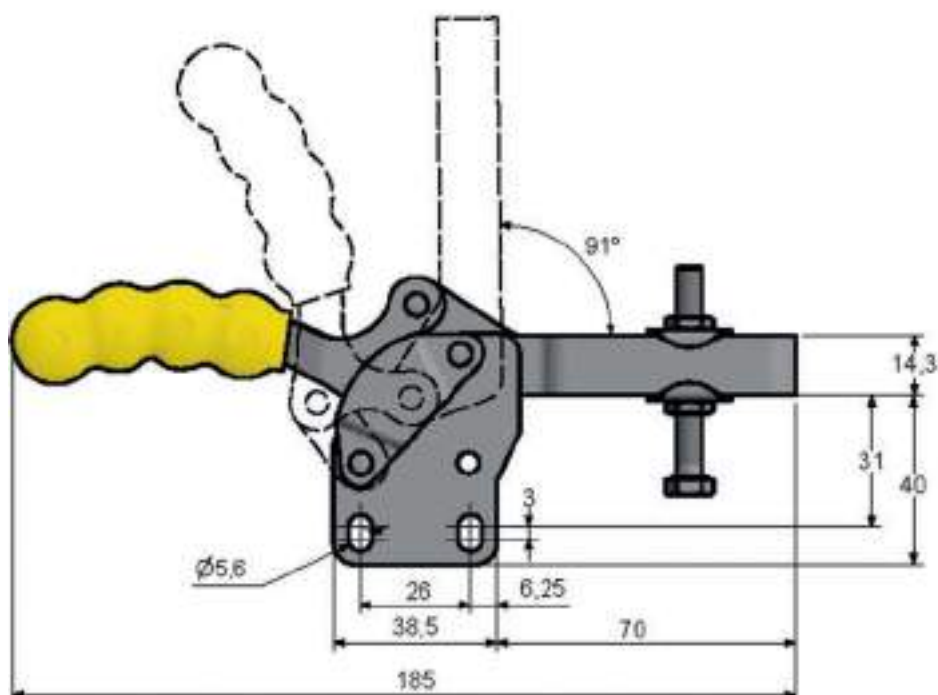
Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	5x30 mm spindles
Max holding force	80 daN close to body
Weight	0.1 Kgs
Stroke	–
Clamping Pressure	40 daN/70 daN



Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	6x50 mm spindles
Max holding force	155 daN close to body
Weight	0.2 Kgs
Stroke	-
Clamping Pressure	80 daN/140 daN



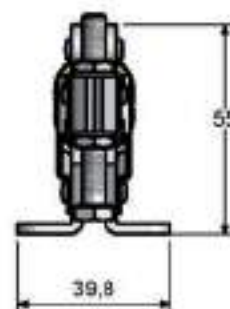
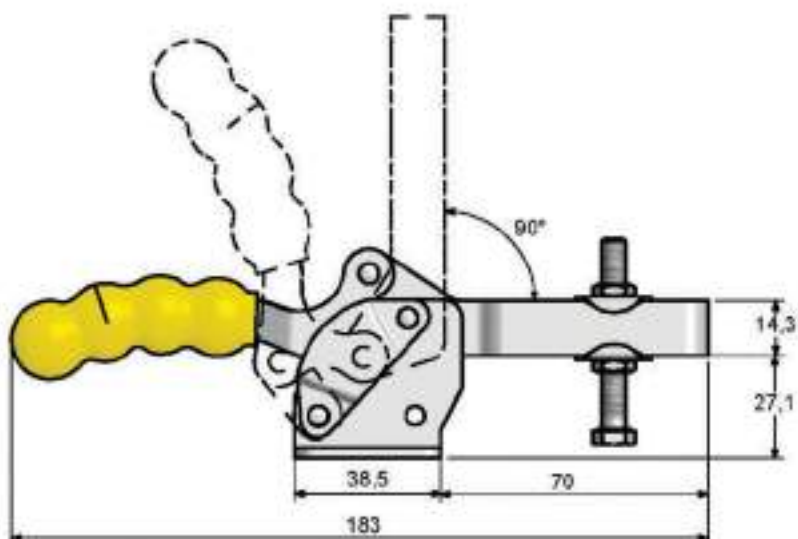
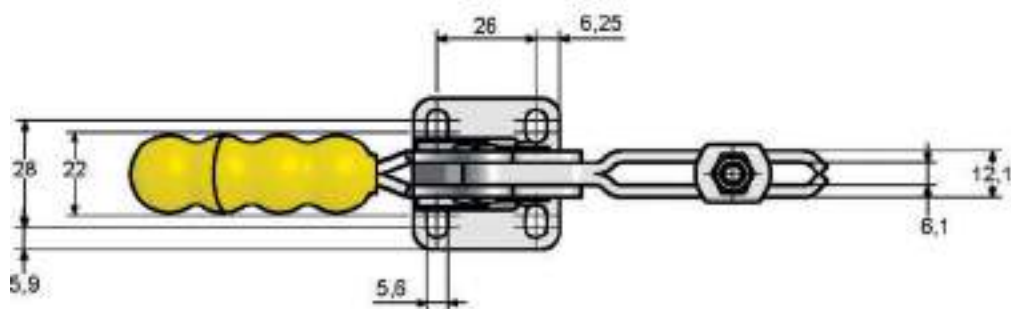
HORIZONTAL ACTION



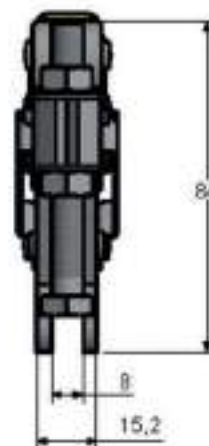
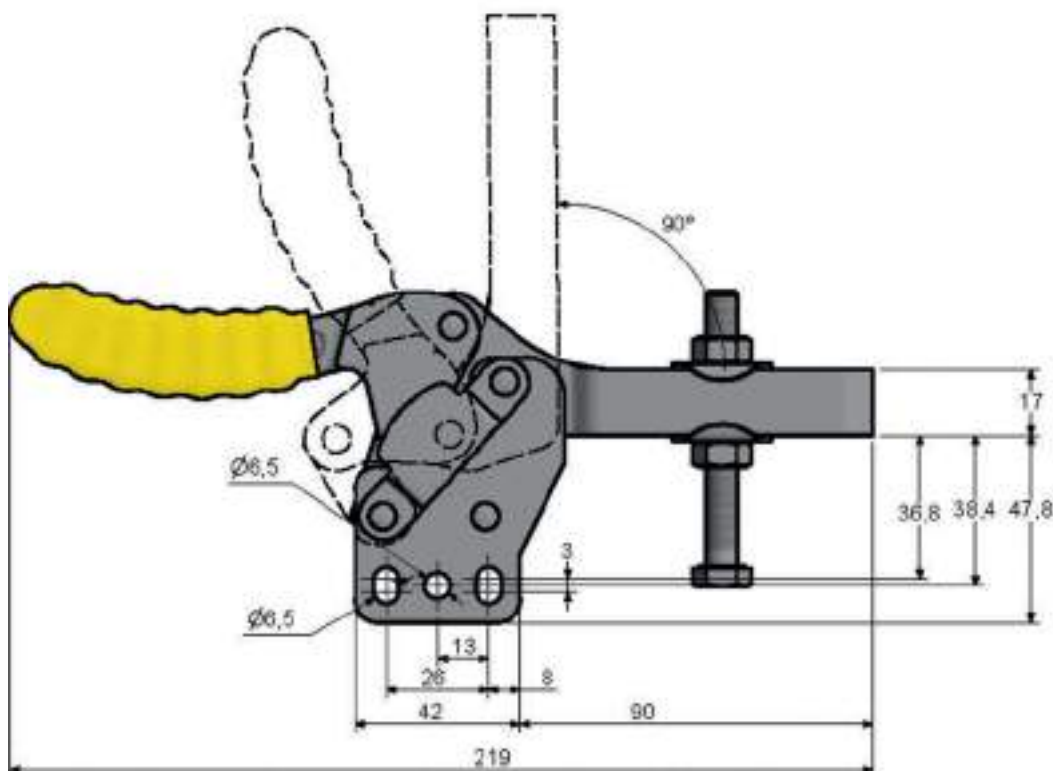
Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	6x50 mm spindles
Max holding force	155 daN close to body
Weight	0.2 Kgs
Stroke	–
Clamping Pressure	80 daN/140 daN



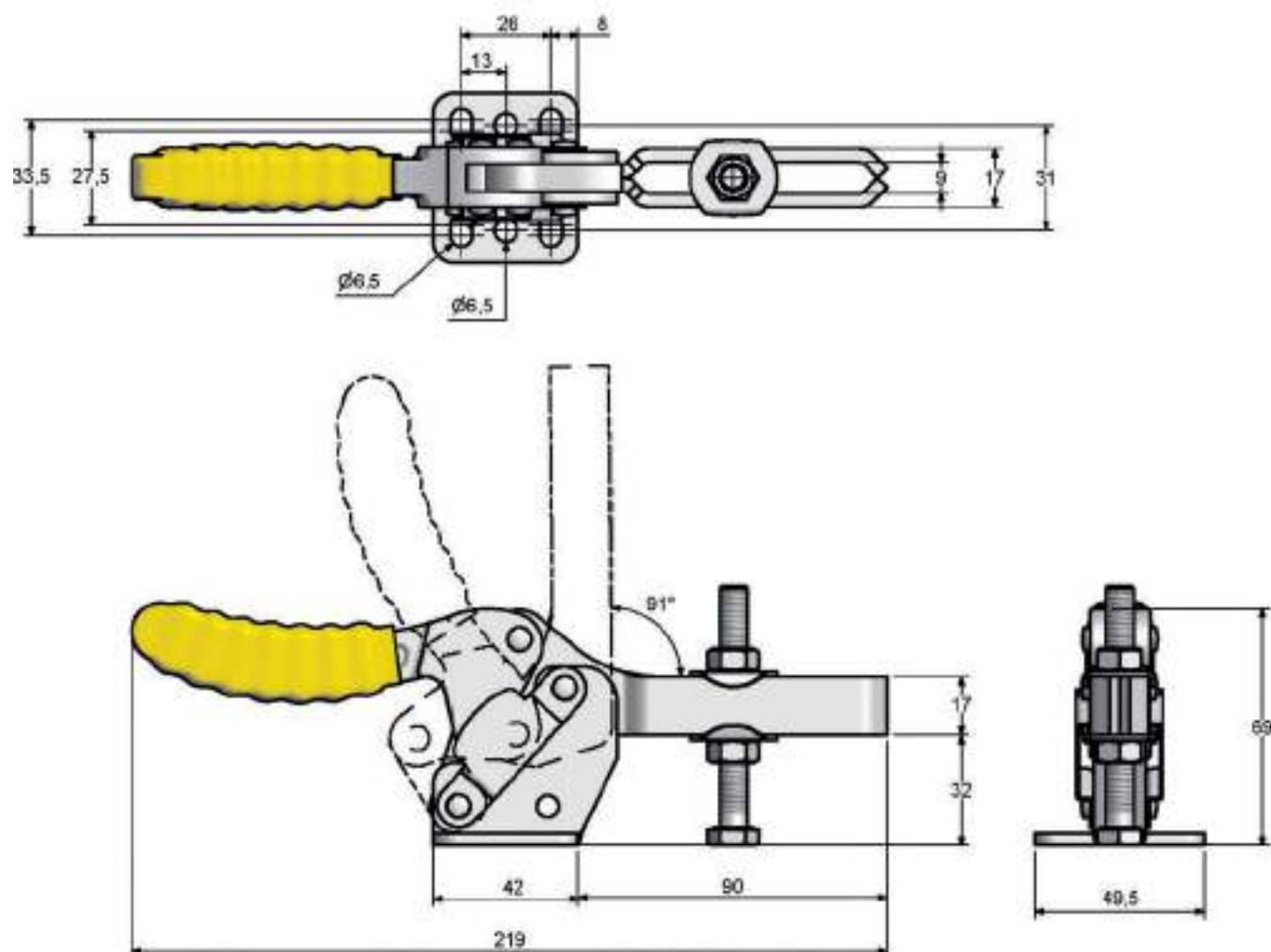
HORIZONTAL ACTION



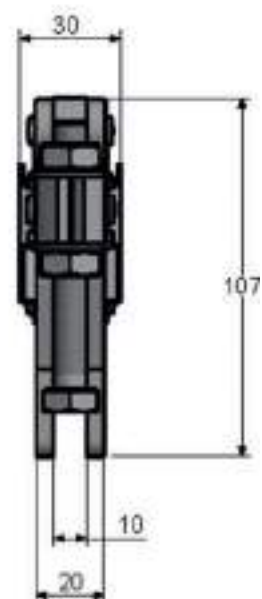
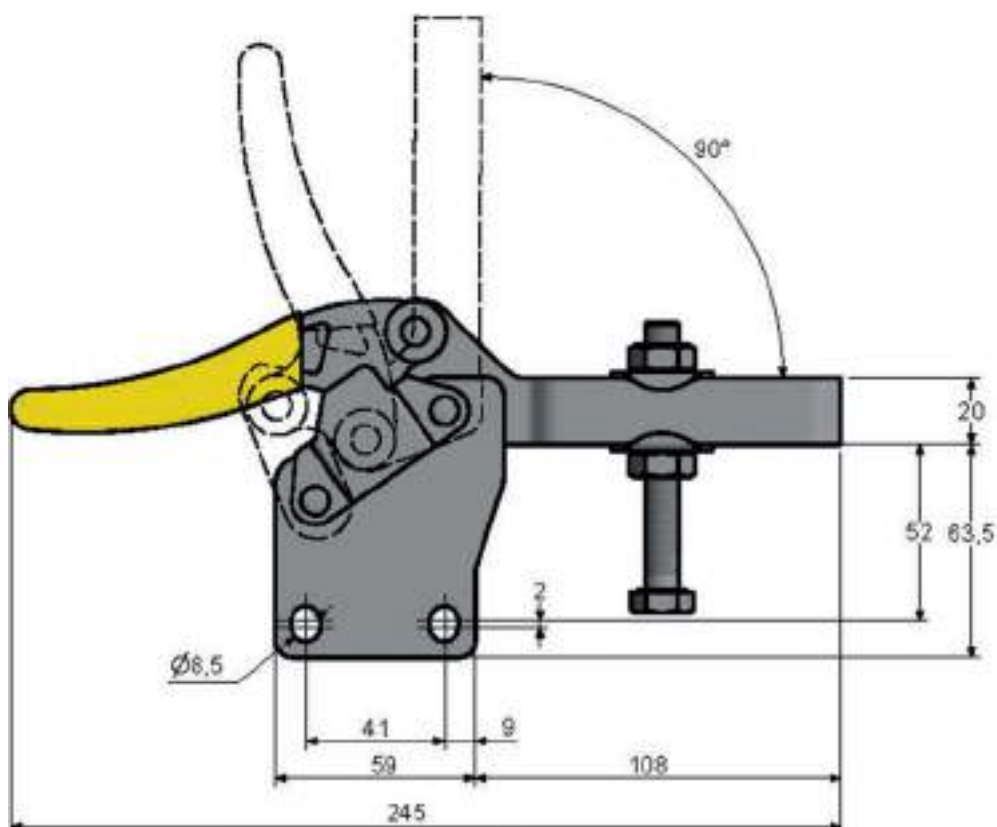
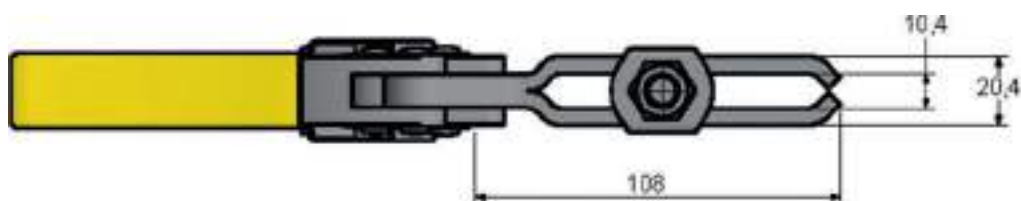
Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	8x70 mm spindles
Max holding force	255 daN close to body
Weight	0.37 Kgs
Stroke	-
Clamping Pressure	100 daN/190 daN



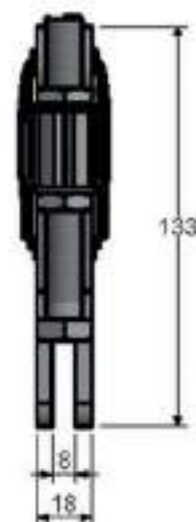
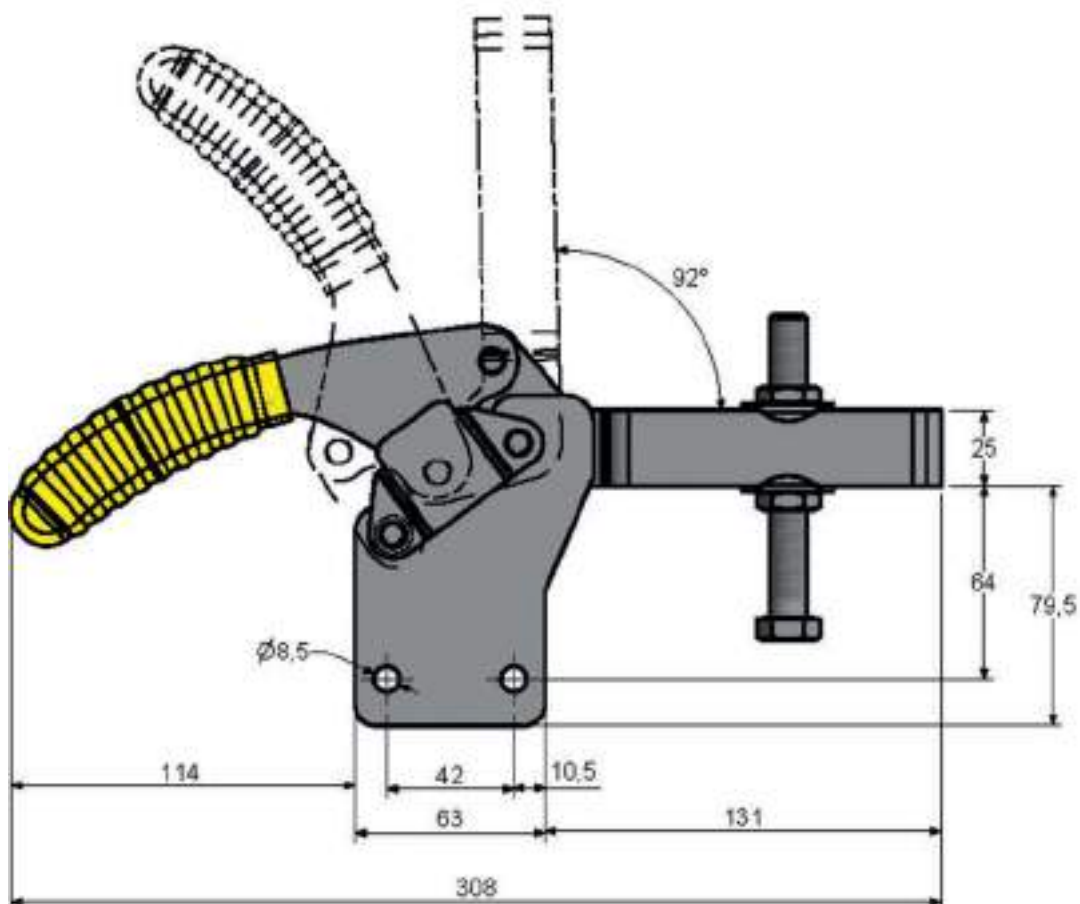
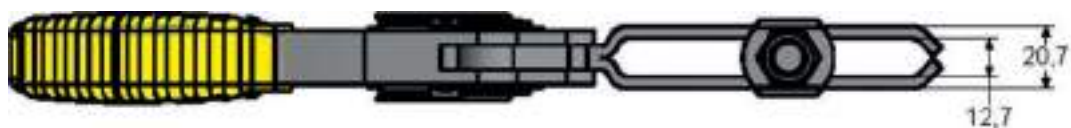
Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	8x70 mm spindles
Max holding force	255 daN close to body
Weight	0.37 Kgs
Stroke	–
Clamping Pressure	100 daN/190 daN



Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	M10x80 mm spindles
Max holding force	480 daN close to body
Weight	0.9 Kgs
Stroke	–
Clamping Pressure	315 daN/180 daN



Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	M12x100 mm spindles
Max holding force	680 daN close to body
Weight	1.4 Kgs
Stroke	–
Clamping Pressure	370 daN/230 daN



Product Description

The TÜNKERS TS-P straight line action clamps use a straight-line or push/pull clamping action with plungers moving in and out along ist axis.

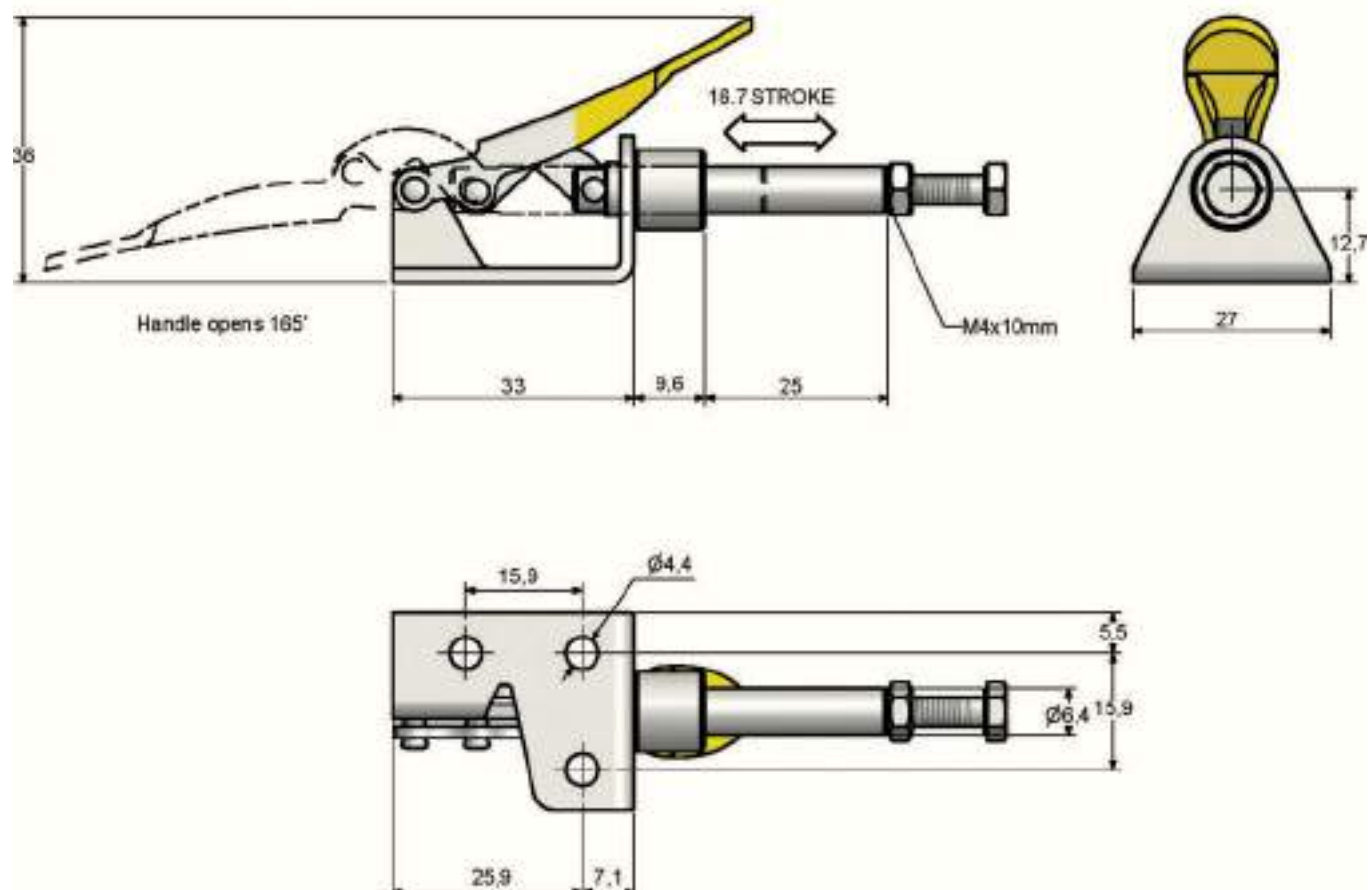
These clamps are manufactured in a variety of models enabling the designer to find the most suitable model for different applications with holding forces from 45 to 5.000daN.

Toggling in forward and reverse positions most of these clamps can be used either as push or pull clamp.

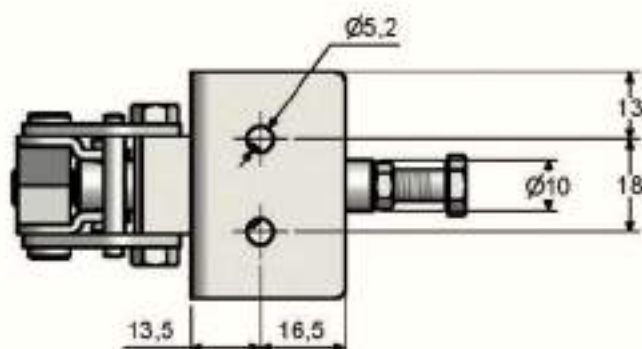
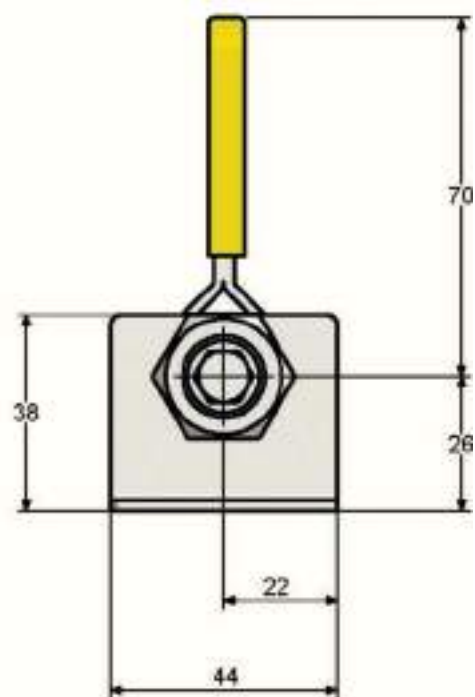
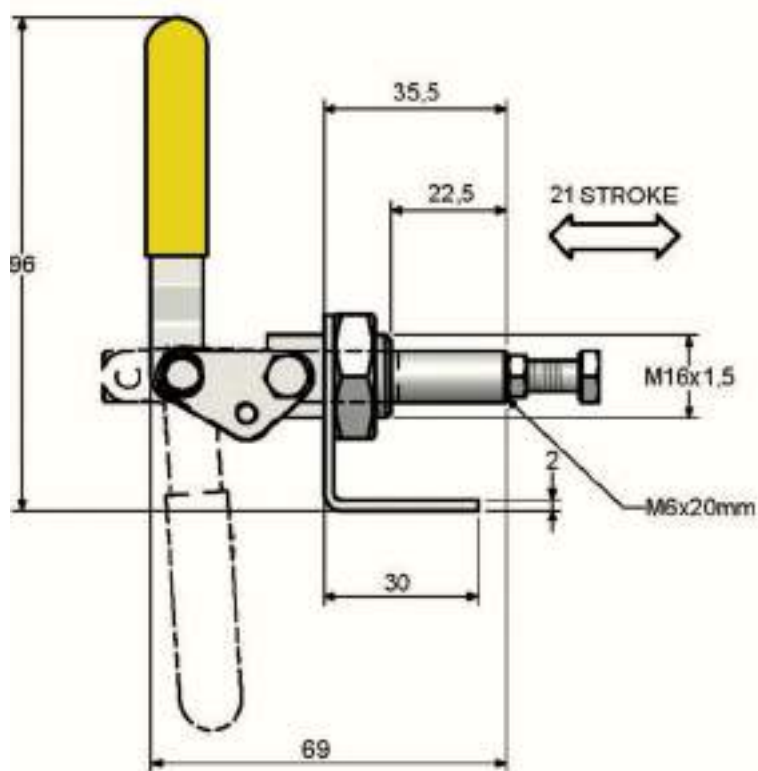
Chapter Overview

TS – P – 45	4 – 2
TS – P – 100	4 – 3
TS – P – 200	4 – 4
TS – P – 210 – NM	4 – 5
TS – P – 350	4 – 6
TS – P – 400	4 – 7
TS – P – 410 – NM	4 – 8
TS – P – 590	4 – 9
TS – P – 600	4 – 10
TS – P – 750	4 – 11
TS – P – 1200	4 – 12
TS – P – 1200 – 90L	4 – 13
TS – P – 2500	4 – 14
TS – P – 2500 – 90L	4 – 15
TS – P – 5000	4 – 16
TS – P – 5000 – 90L	4 – 17

Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	M4x20 mm
Max holding force	45 daN
Weight	0.05 Kgs
Stroke	16.7 mm
Clamping Pressure	40 daN

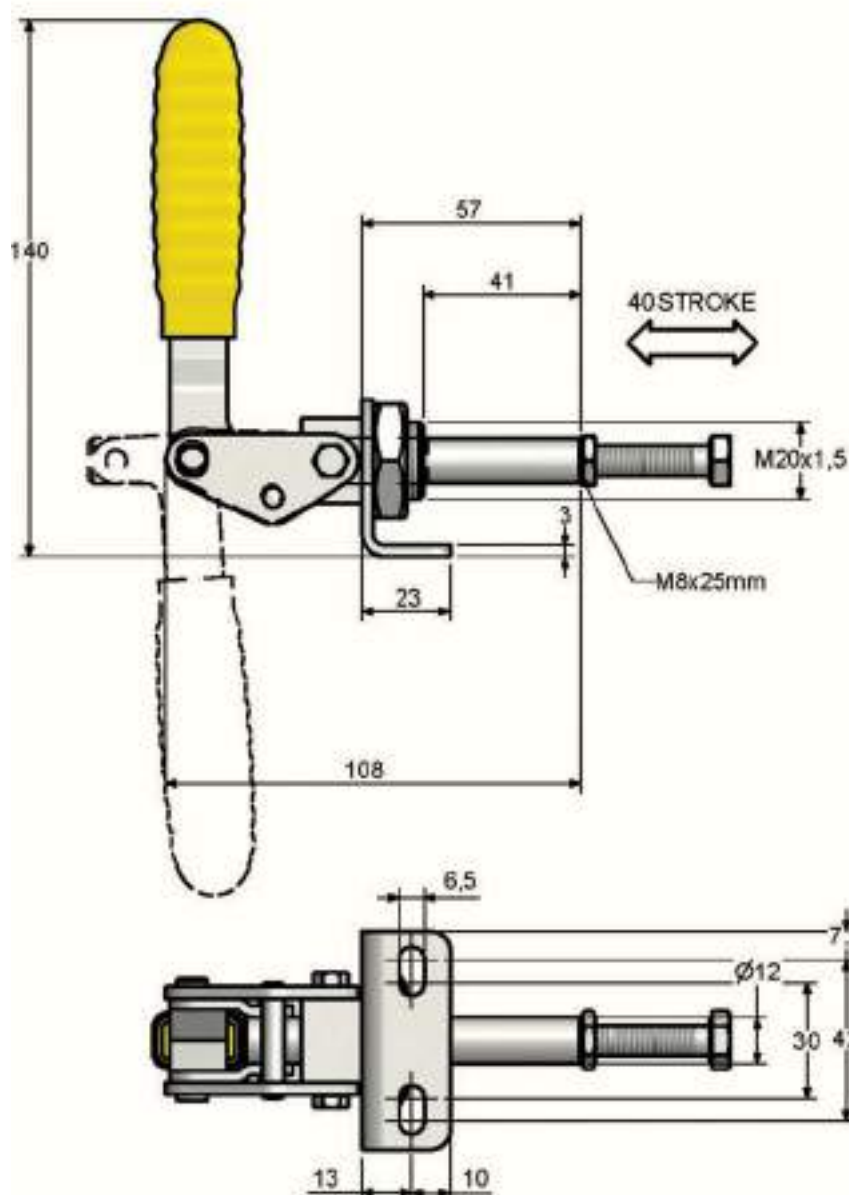


Material	Heavy gauge steel
Finish	Zinc Plated Chemi-Blackened plunger
Supplied with	M6x50 mm spindles Mounting Bracket
Max holding force	100 daN
Weight	0.15 Kgs
Stroke	21 mm
Clamping Pressure	50 daN



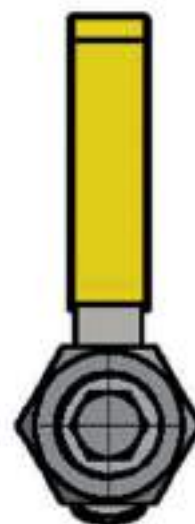
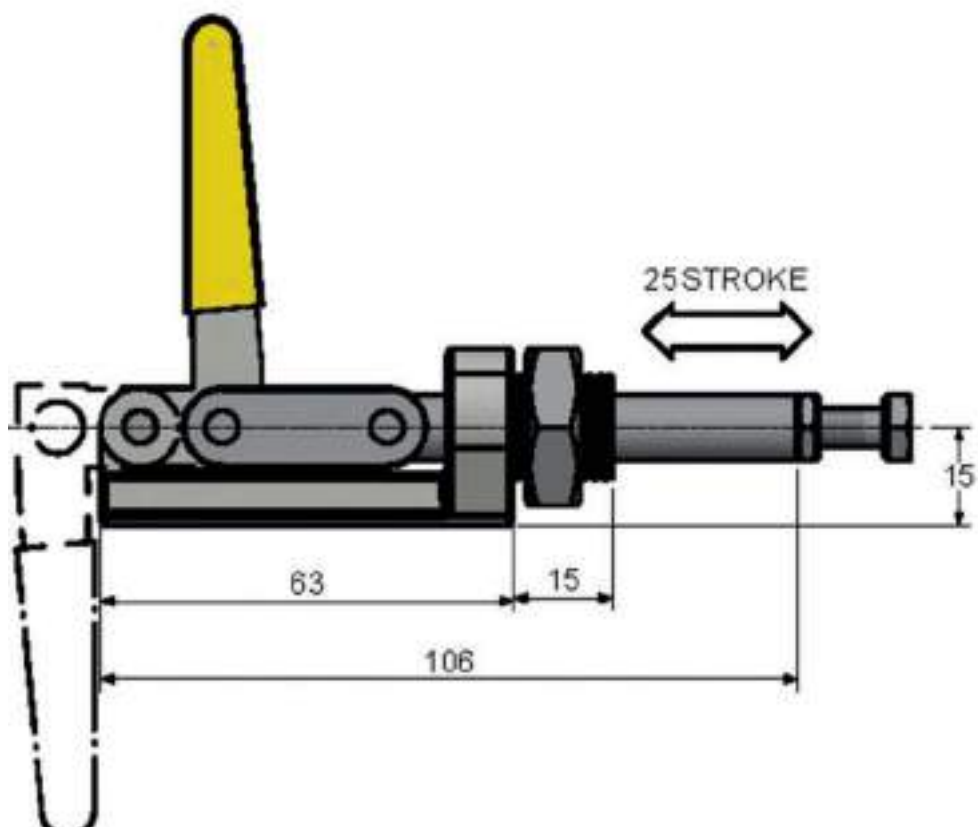
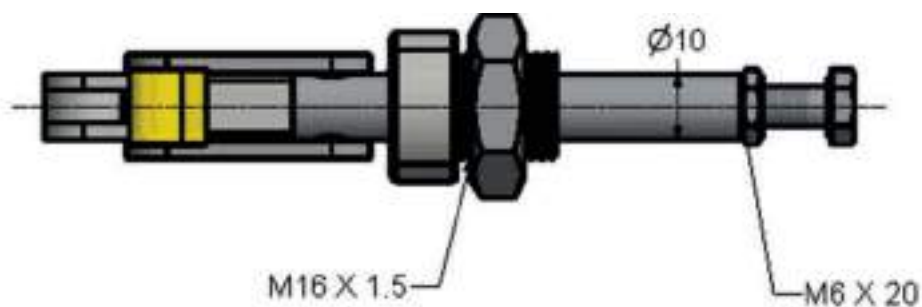
PLUNGER ACTION

Material	Heavy gauge steel
Finish	Zinc Plated Chemi-Blackened plunger
Supplied with	M8x60 mm spindles Mounting Bracket
Max holding force	200 daN
Weight	0.35 Kgs
Stroke	40 mm
Clamping Pressure	120 daN

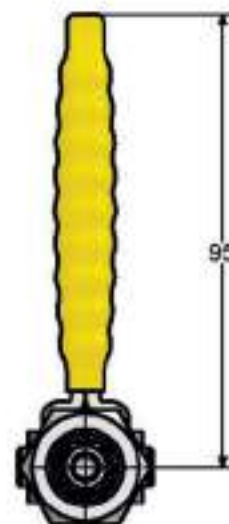
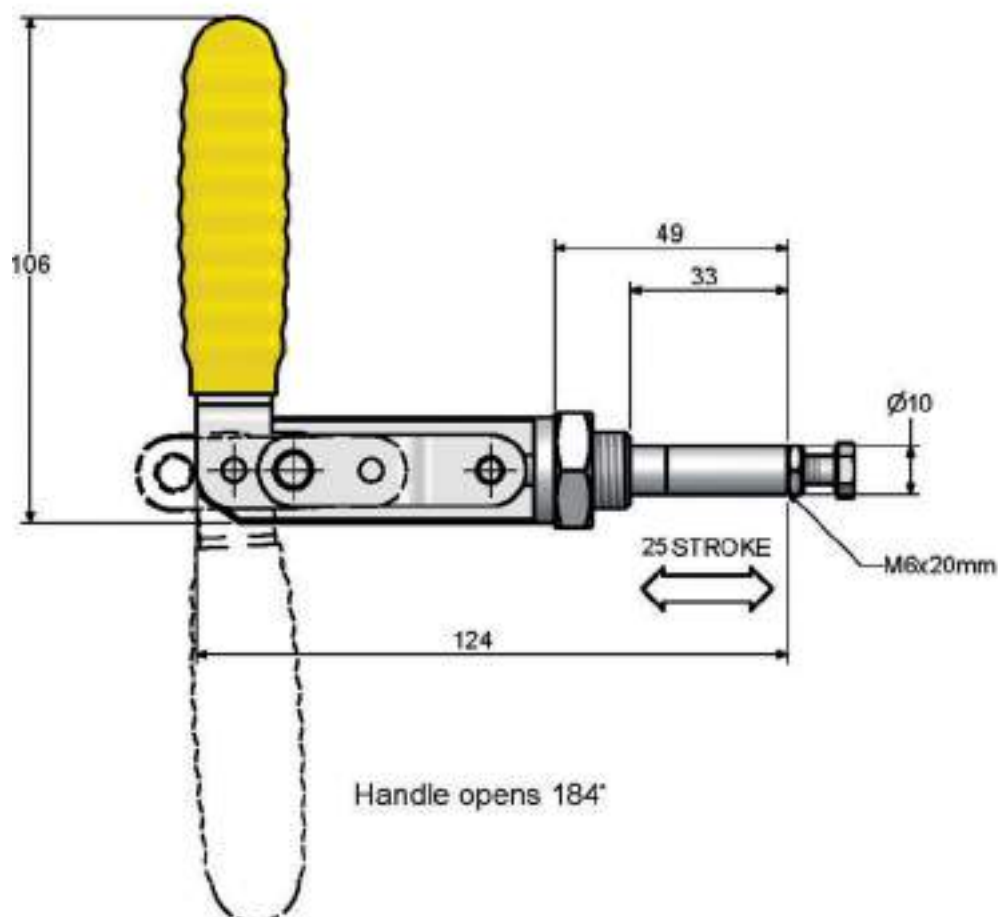
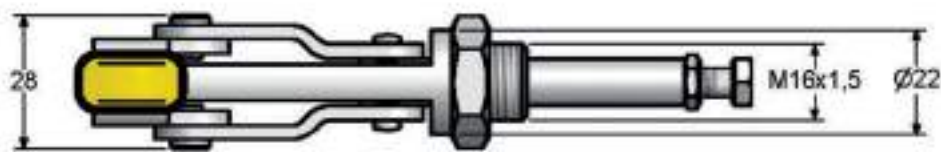


PLUNGER ACTION

Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	6x40 mm spindles
Max holding force	210 daN
Weight	0.27 Kgs
Stroke	25 mm
Clamping Pressure	110 daN

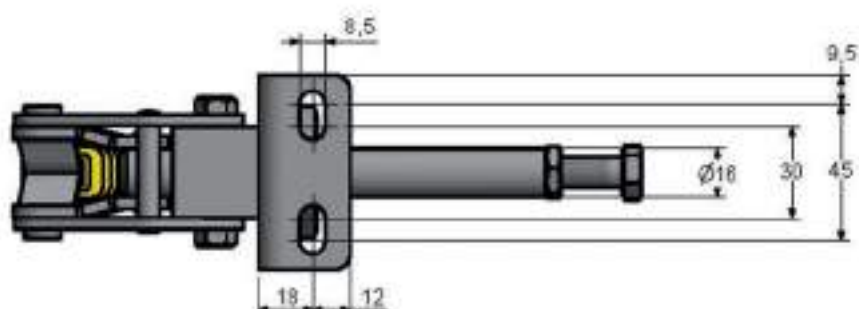
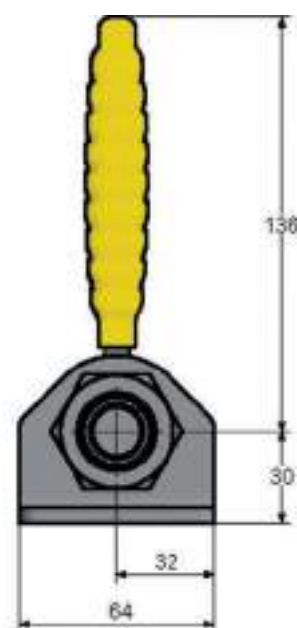
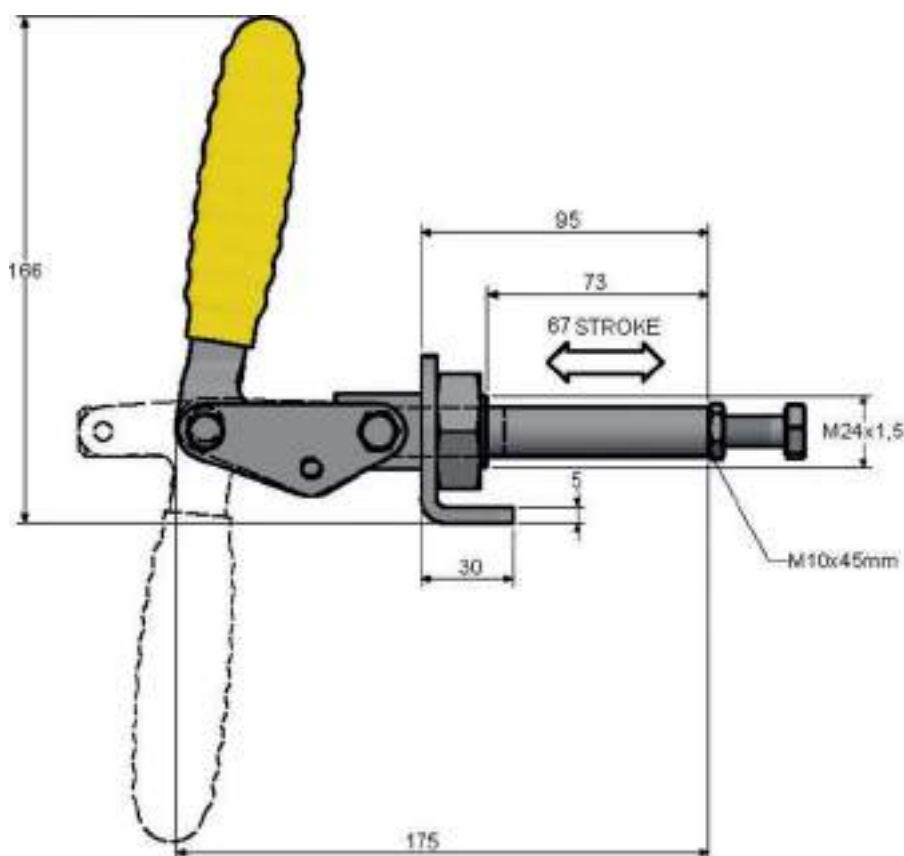


Material	Heavy gauge steel
Finish	Zinc Plated Chemi-Blackened plunger
Supplied with	M6x250 mm spindles
Max holding force	350 daN
Weight	0.25 Kgs
Stroke	25 mm
Clamping Pressure	150 daN



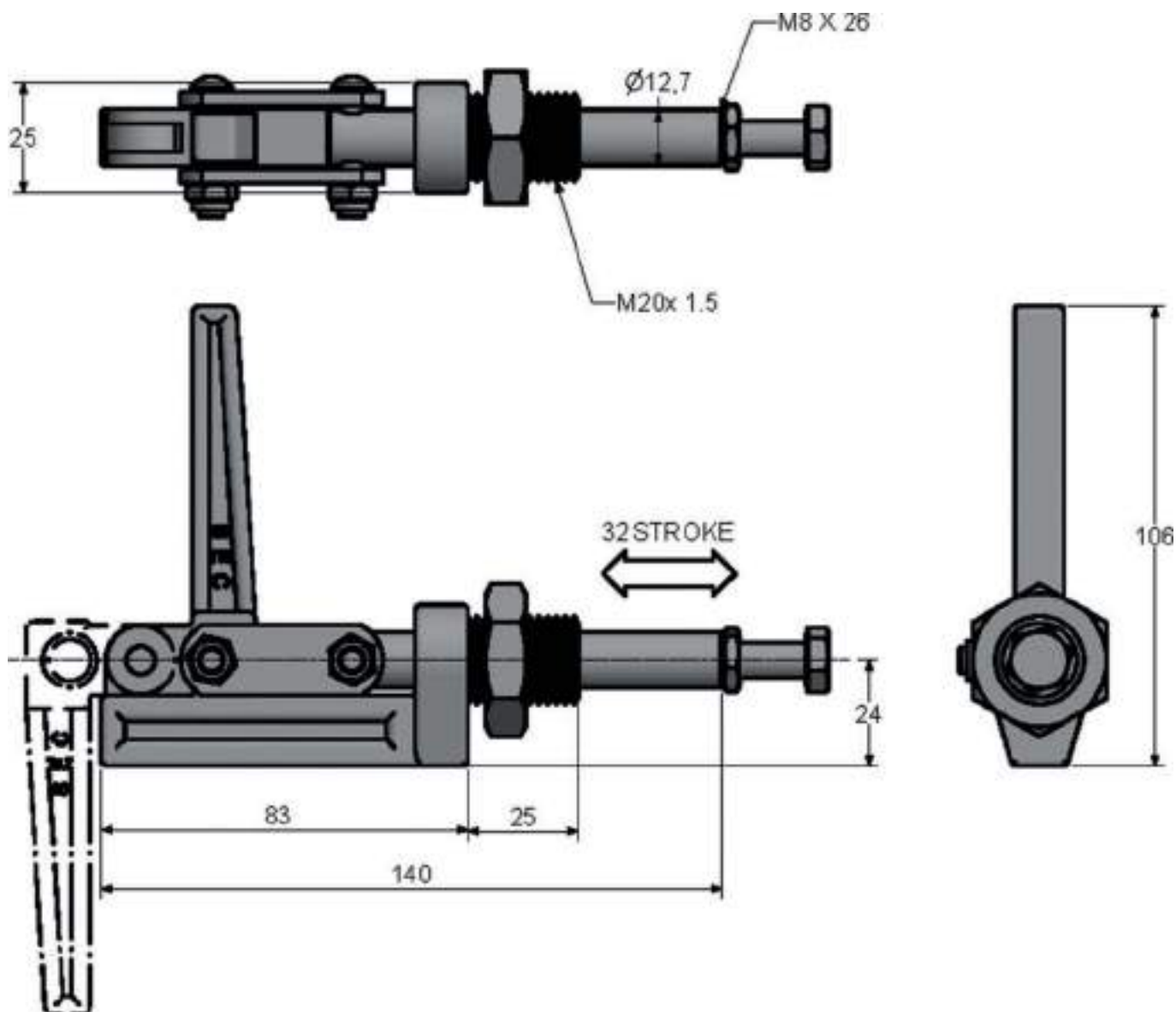
PLUNGER ACTION

Material	Heavy gauge steel
Finish	Zinc Plated Chemi-Blackened plunger
Supplied with	M10x50 mm spindles Mounting Bracket
Max holding force	400 daN
Weight	0.8 Kgs
Stroke	67 mm
Clamping Pressure	250 daN

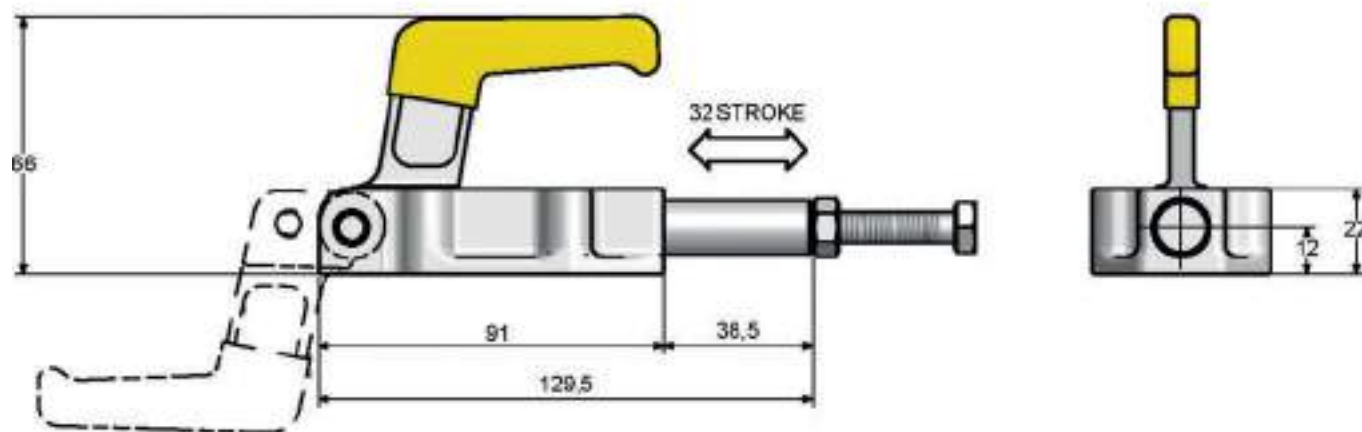
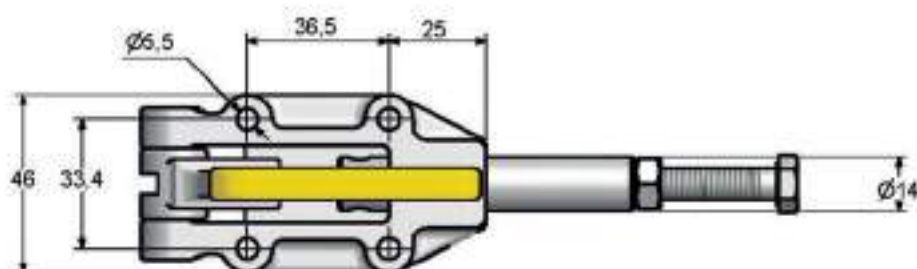


PLUNGER ACTION

Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc-Plated Body – Copper
Supplied with	8x40 mm spindles
Max holding force	410 daN
Weight	0.43 Kgs
Stroke	32 mm
Clamping Pressure	170 daN

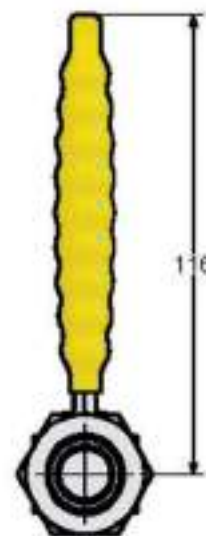
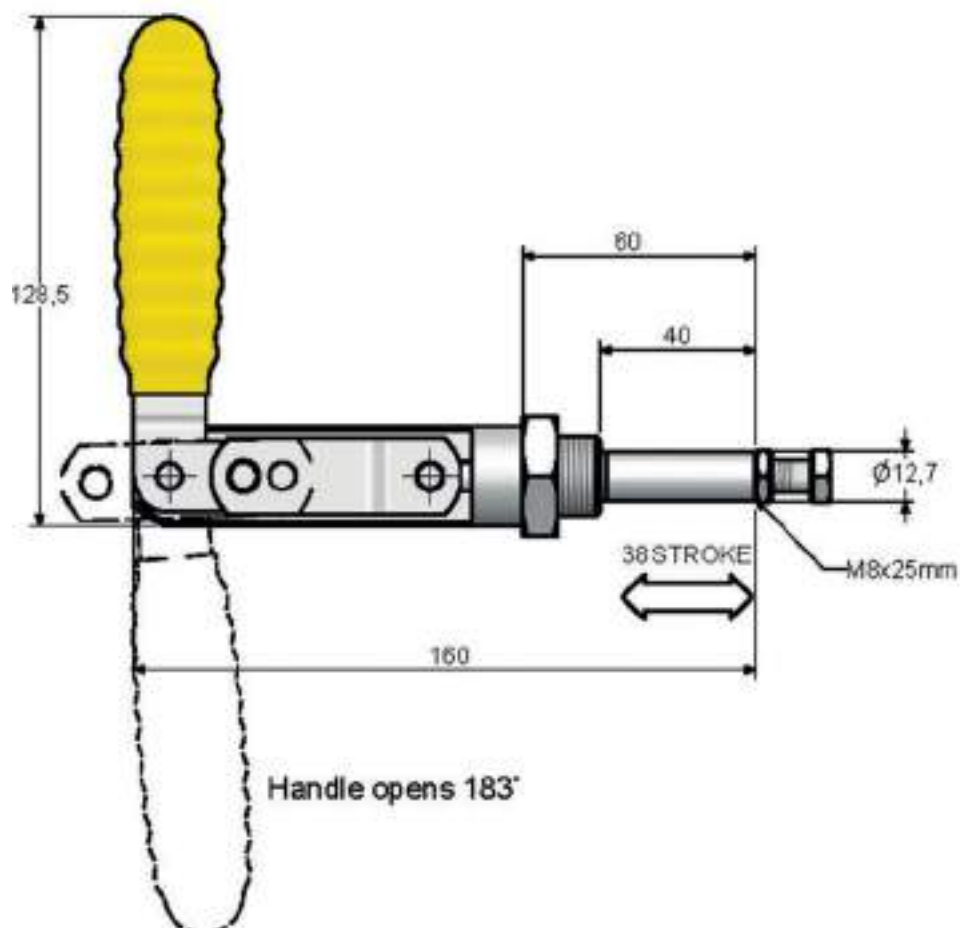
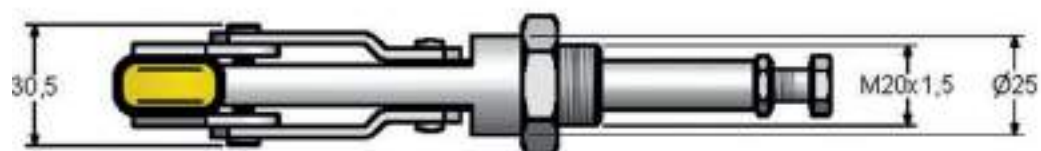


Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	8x65 mm spindles
Max holding force	590 daN
Weight	0.48 Kgs
Stroke	32 mm
Clamping Pressure	325 daN

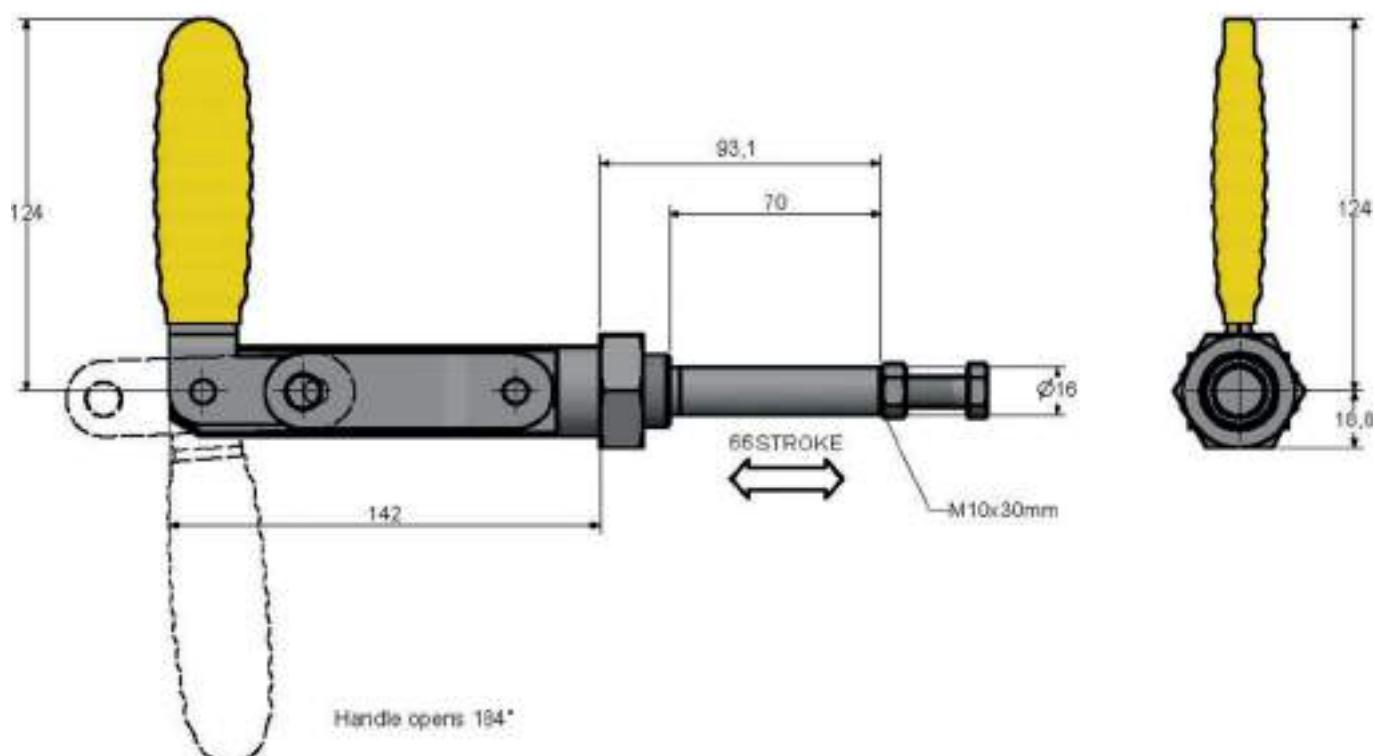


Handle opens 180°

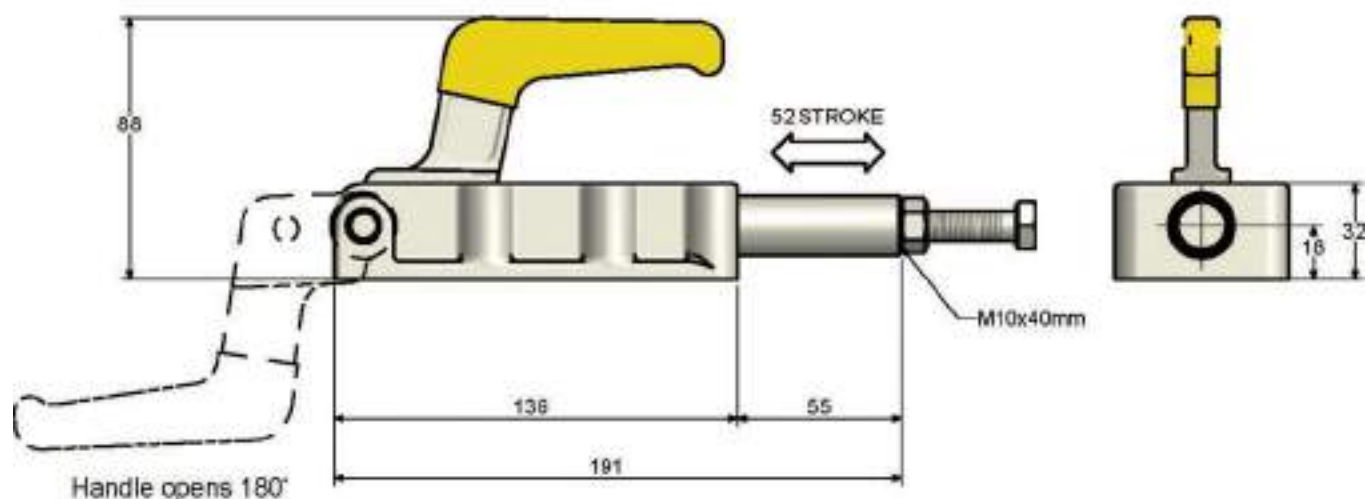
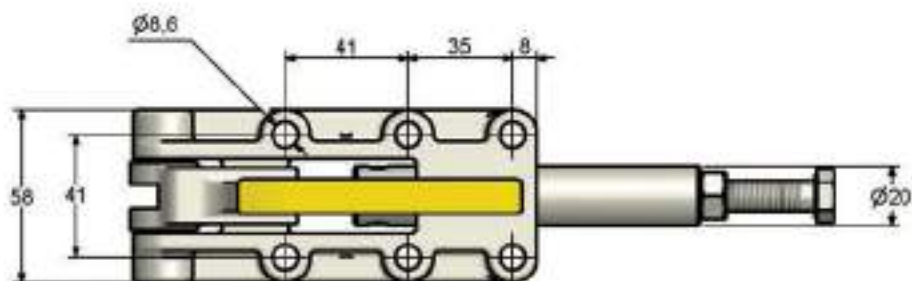
Material	Heavy gauge steel
Finish	Zinc Plated Chemi-Blackened plunger
Supplied with	M8x40 mm spindles
Max holding force	600 daN
Weight	0.45 Kgs
Stroke	38 mm
Clamping Pressure	170 daN



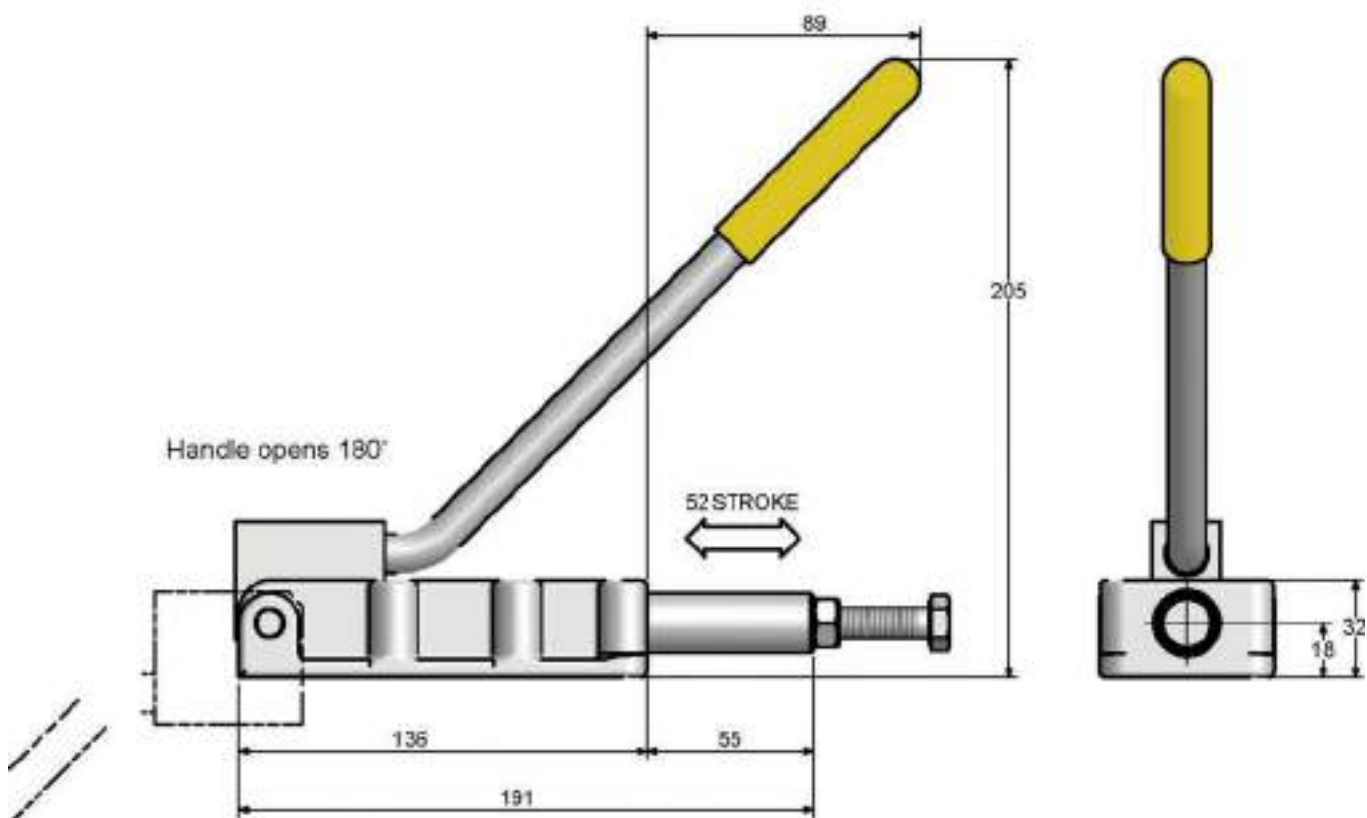
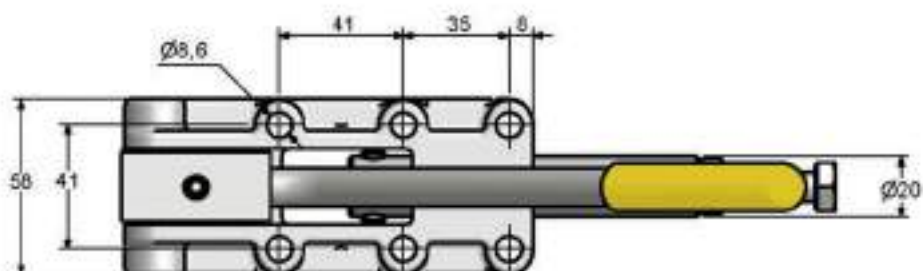
Material	Heavy gauge steel
Finish	Zinc Plated Chemi-Blackened plunger
Supplied with	M10x50 mm spindles
Max holding force	750 daN
Weight	0.9 Kgs
Stroke	66 mm
Clamping Pressure	190 daN



Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	10x75 mm spindles
Max holding force	1200 daN
Weight	1.5 Kgs
Stroke	52 mm
Clamping Pressure	520 daN

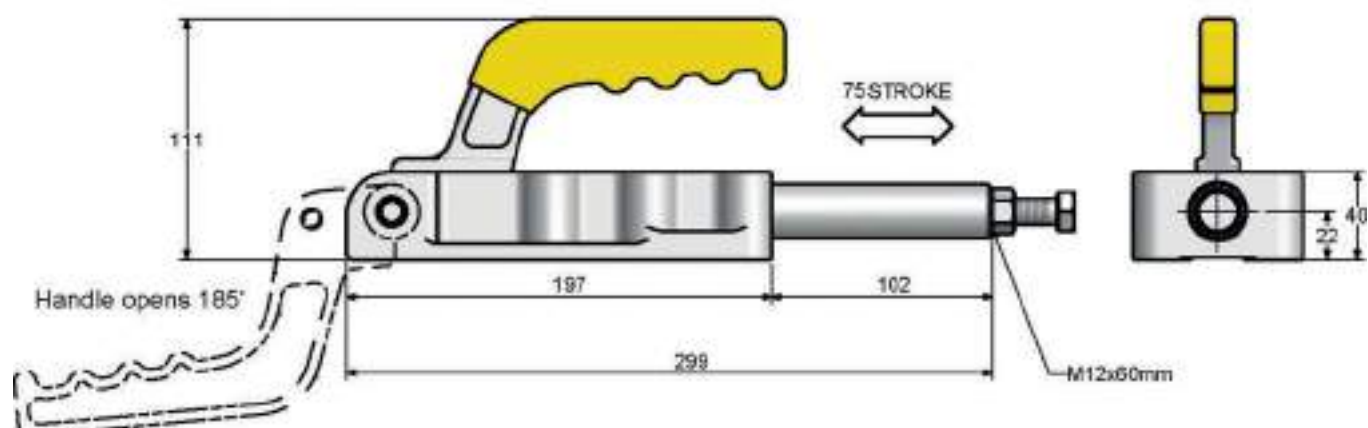
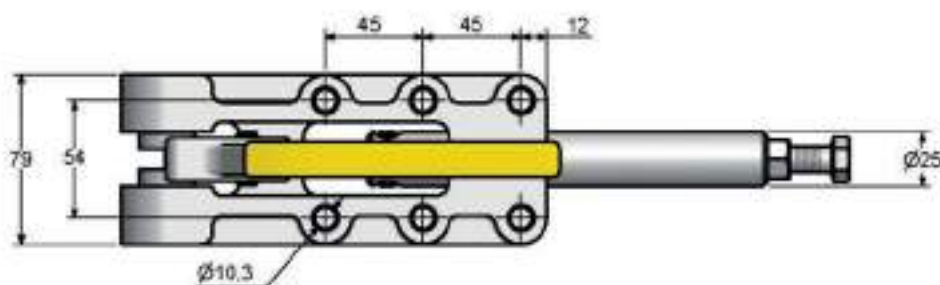


Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	10x75 mm spindles
Max holding force	1200 daN
Weight	1.6 Kgs
Stroke	52 mm
Clamping Pressure	520 daN

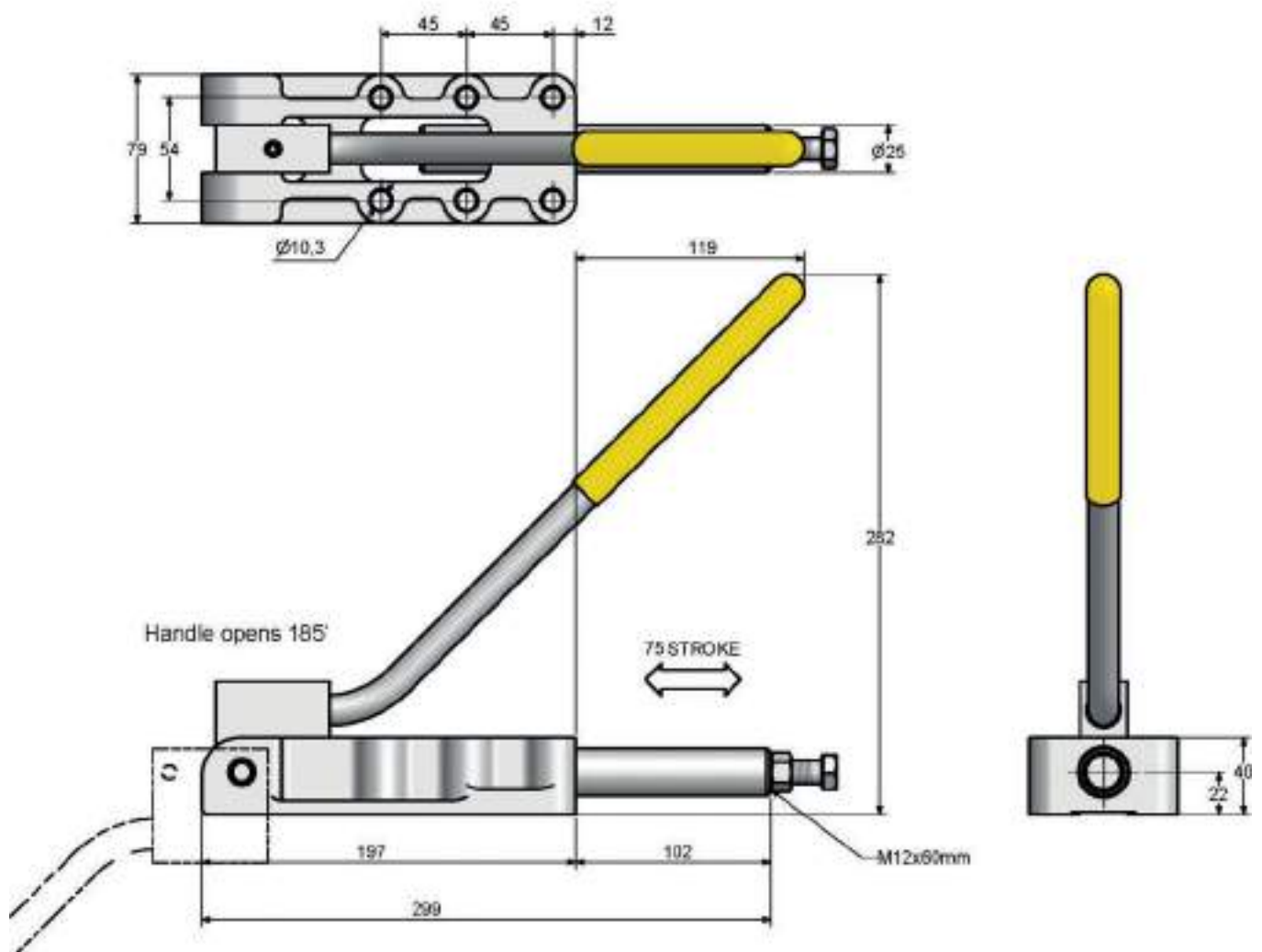


PLUNGER ACTION

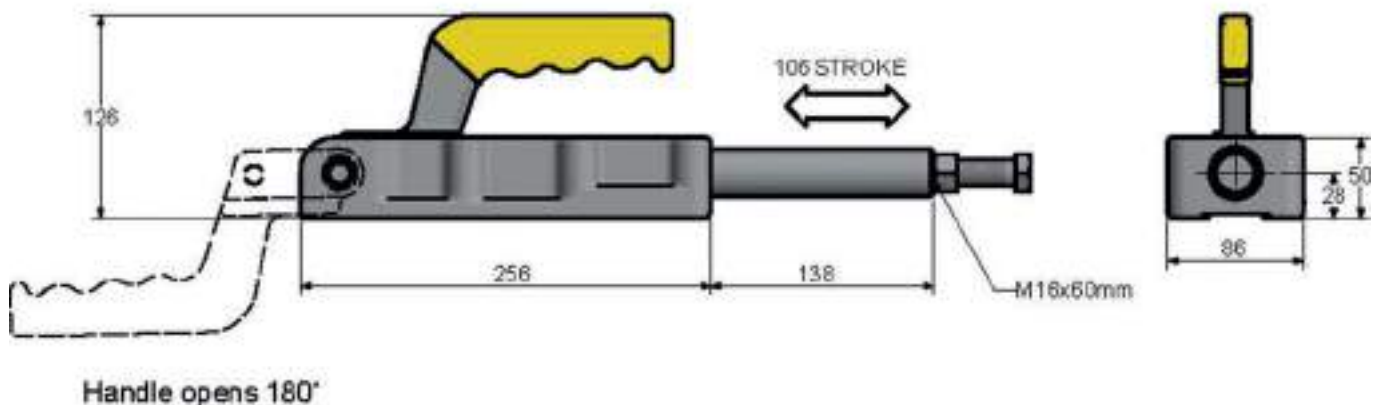
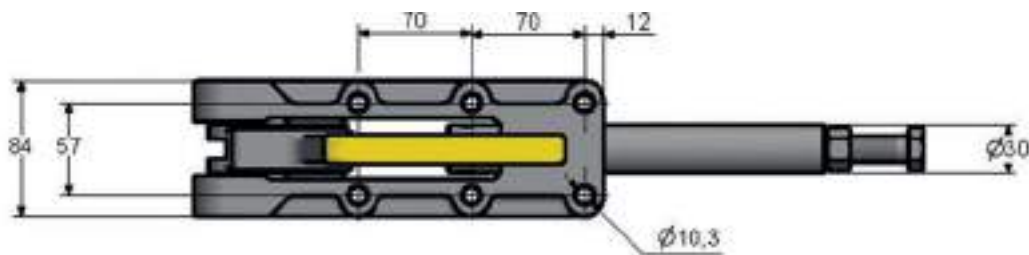
Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	12x50 mm spindles
Max holding force	2500 daN
Weight	3.7 Kgs
Stroke	75 mm
Clamping Pressure	530 daN



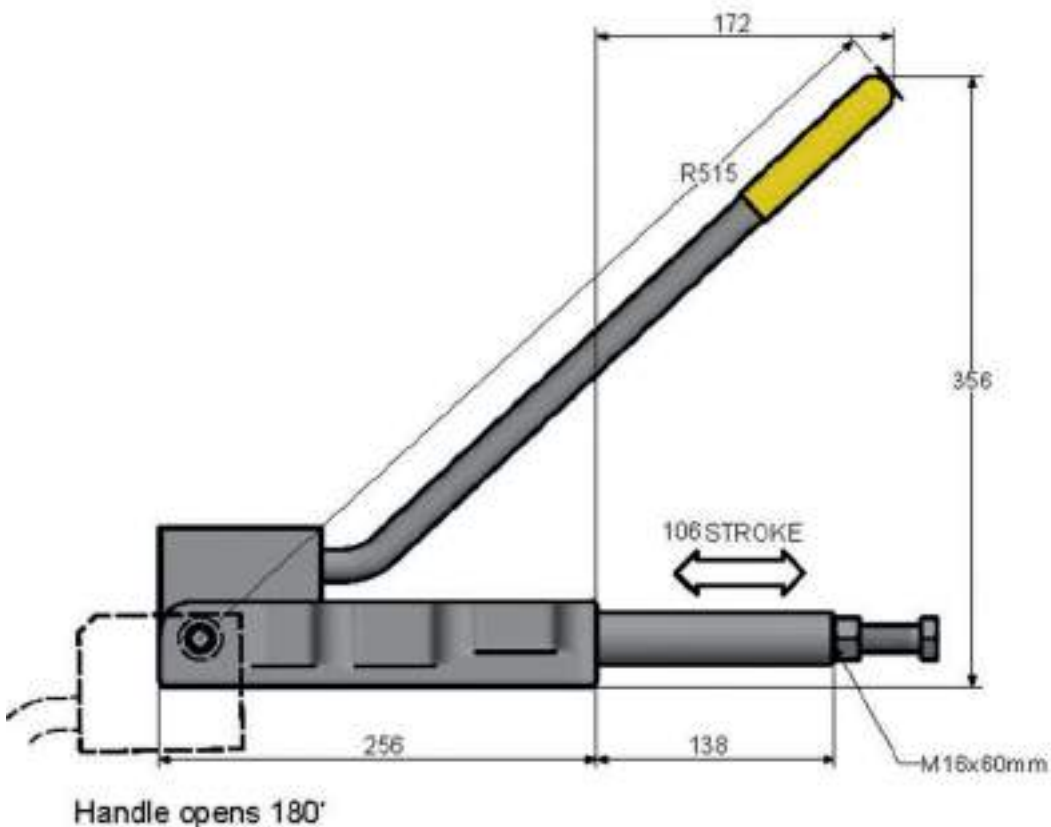
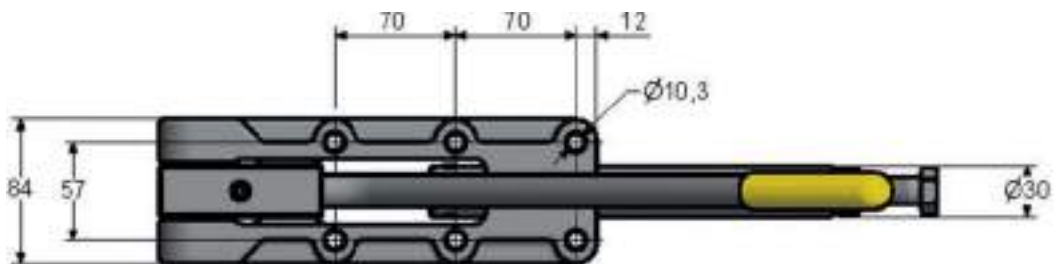
Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	12x50 mm spindles
Max holding force	2500 daN
Weight	4.2 Kgs
Stroke	75 mm
Clamping Pressure	530 daN



Material	Heavy gauge steel
Finish	Chemi-Blacked
Supplied with	M16x100 mm spindles
Max holding force	5000 daN
Weight	6.2 Kgs
Stroke	106 mm
Clamping Pressure	650 daN



Material	Heavy gauge steel
Finish	Chemi-Blackened
Supplied with	M16x100 mm spindles
Max holding force	5000 daN
Weight	7.2 Kgs
Stroke	106 mm
Clamping Pressure	650 daN



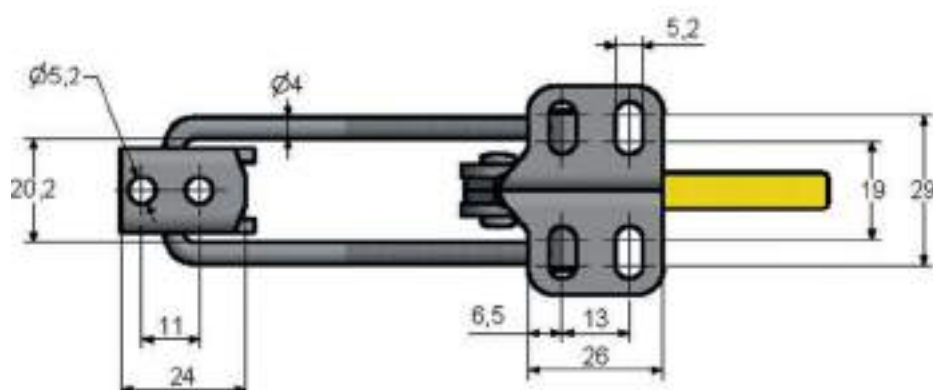
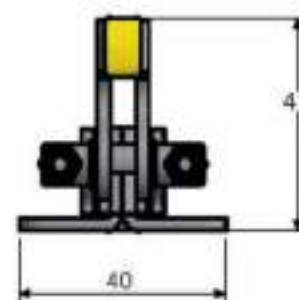
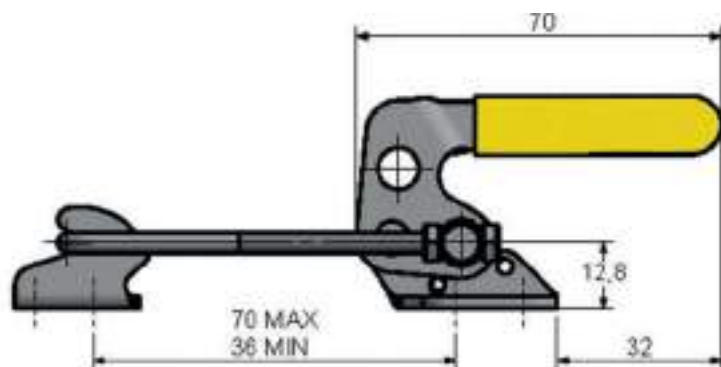
Product Description

The TÜNKERS HC hook action clamps are designed for applications requiring closure mechanisms such as doors, moulds etc.

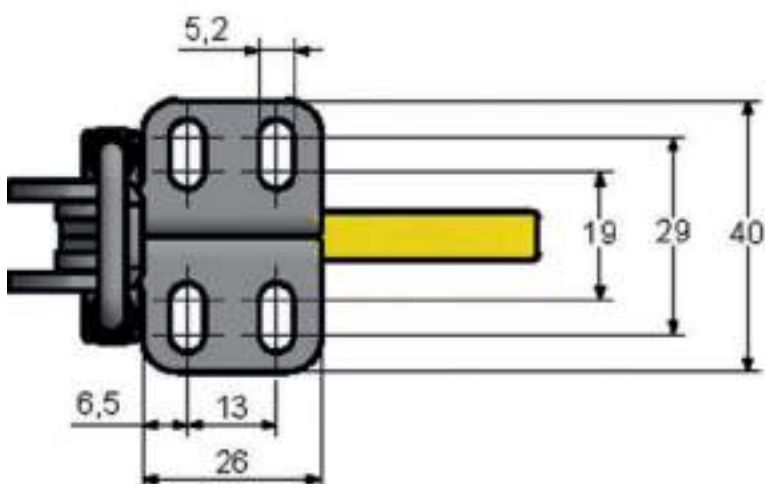
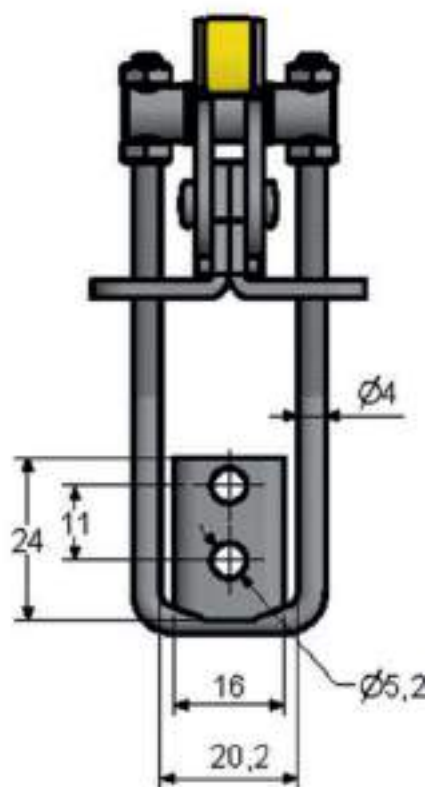
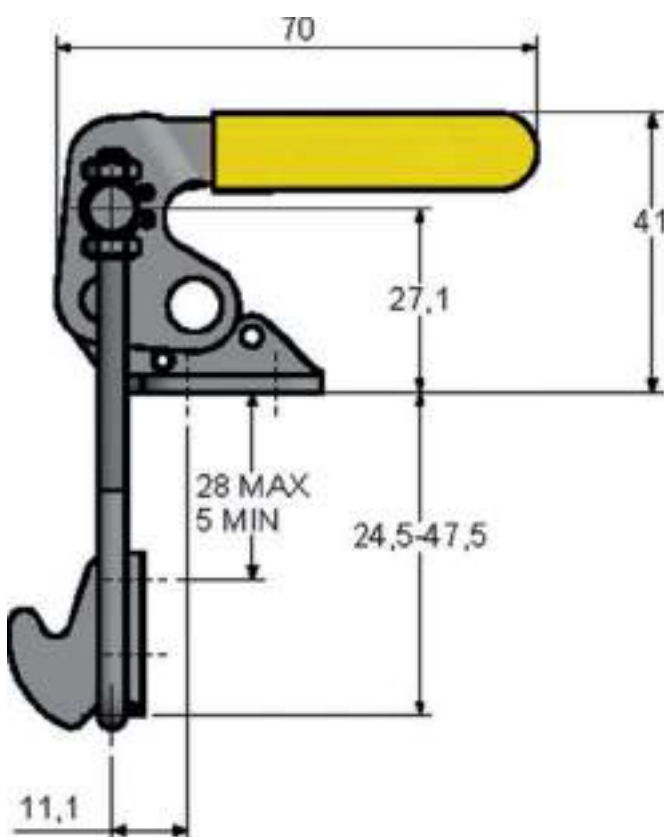
Chapter Overview

TS – HC – 210 – H	5 – 2
TS – HC – 210 – V	5 – 3
TS – HC – 410 – H	5 – 4
TS – HC – 410 – V	5 – 5
TS – HC – 710 – H	5 – 6
TS – HC – 710 – V	5 – 7
TS – HC – 500	5 – 8
TS – HC – 3730	5 – 9
TS – HC – 6000	5 – 10

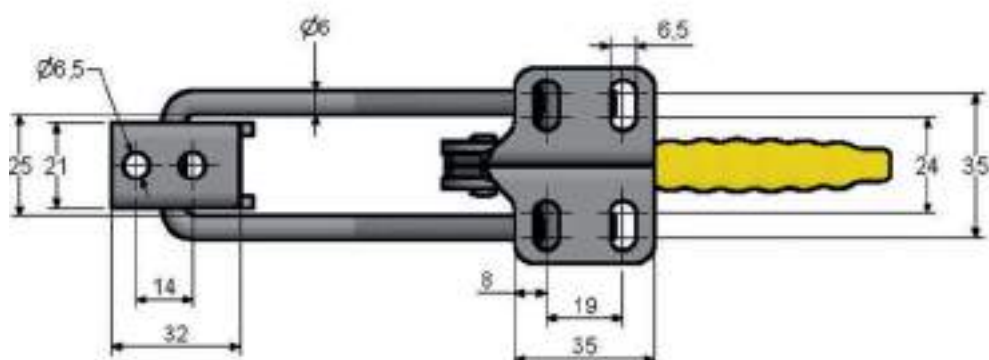
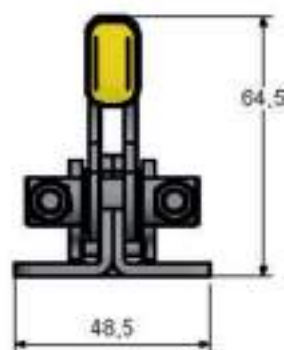
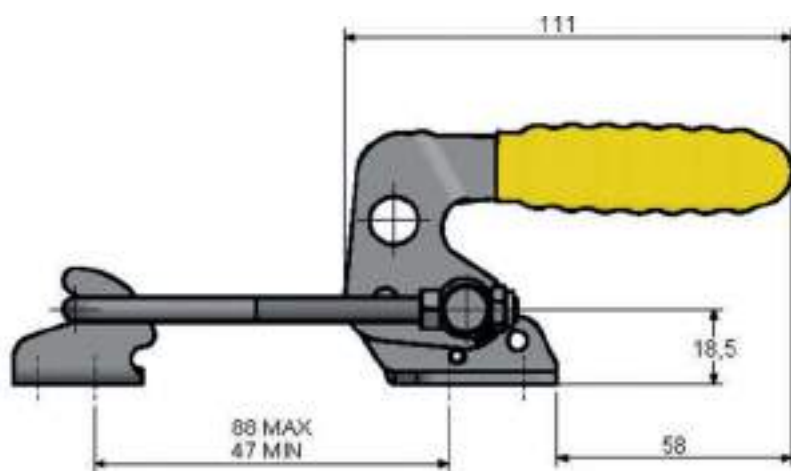
Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	Hook Latch plate
Max holding force	210 daN
Weight	0.13 Kgs
Stroke	–
Clamping Pressure	180 daN



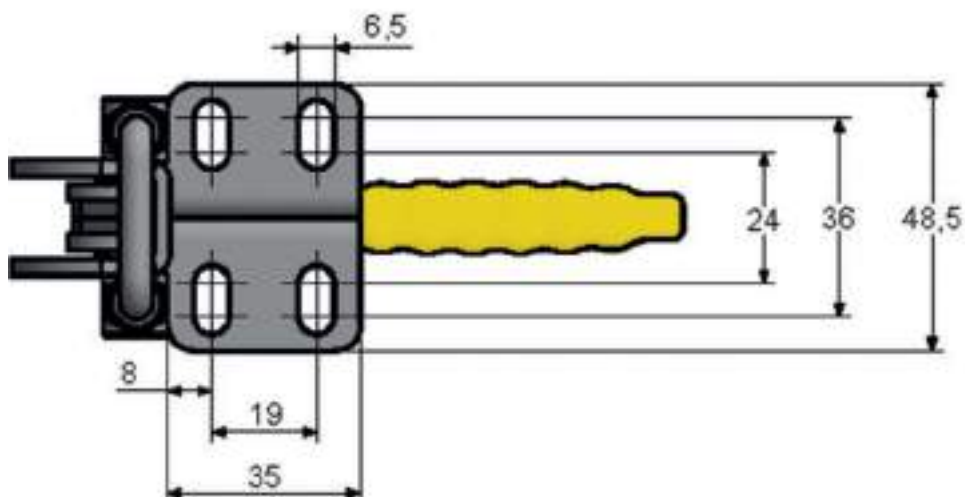
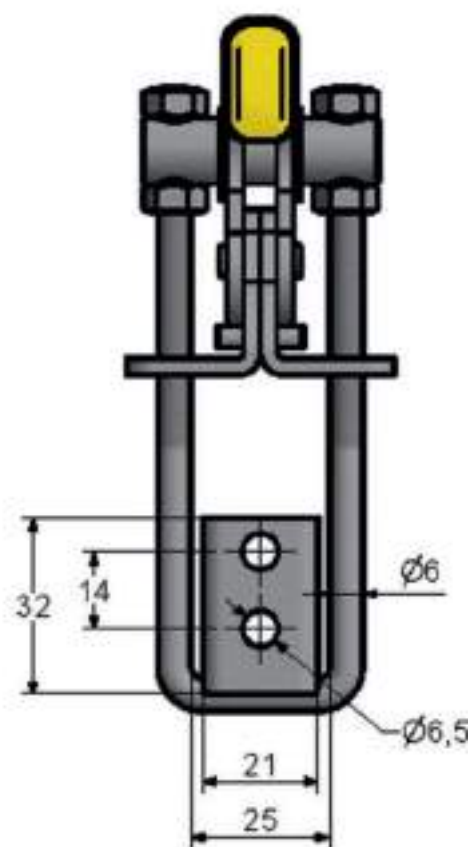
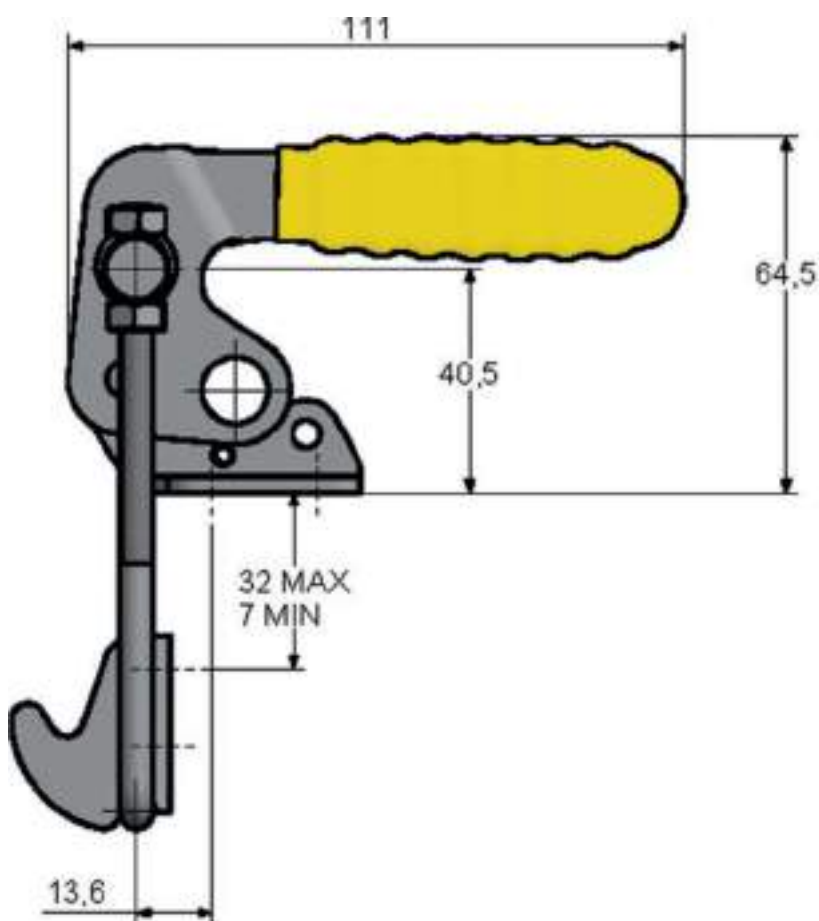
Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	Hook Latch plate
Max holding force	210 daN
Weight	0.13 Kgs
Stroke	–
Clamping Pressure	180 daN



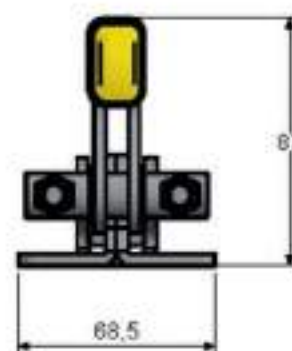
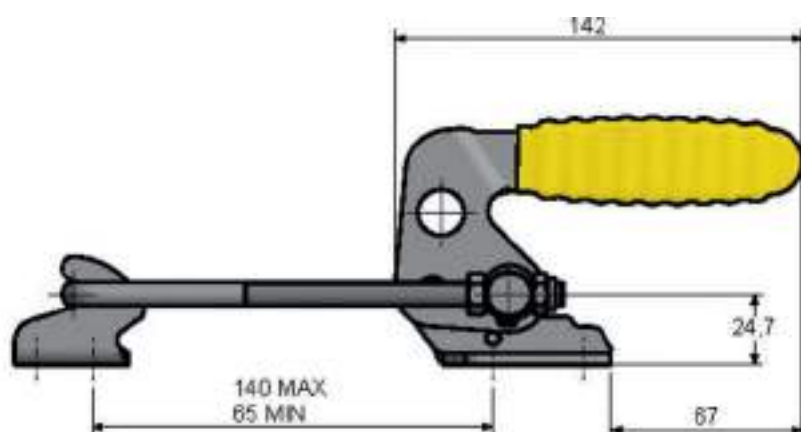
Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	Hook Latch plate
Max holding force	410 daN
Weight	0.3 Kgs
Stroke	–
Clamping Pressure	270 daN



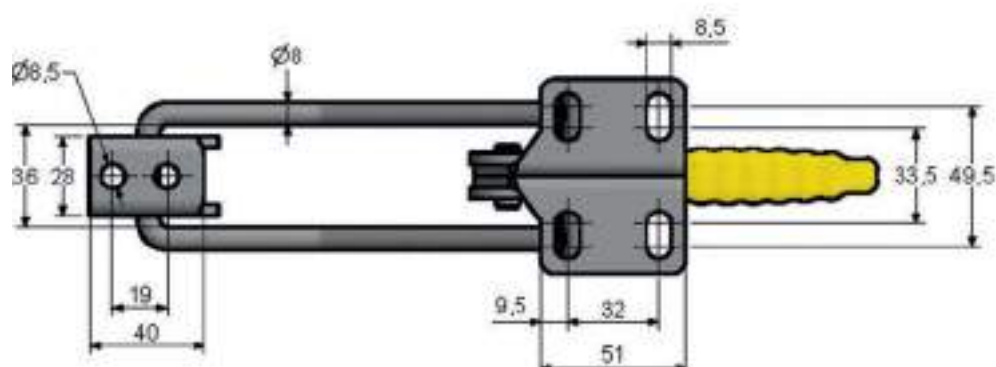
Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	Hook Latch plate
Max holding force	410 daN
Weight	0.3 Kgs
Stroke	–
Clamping Pressure	270 daN



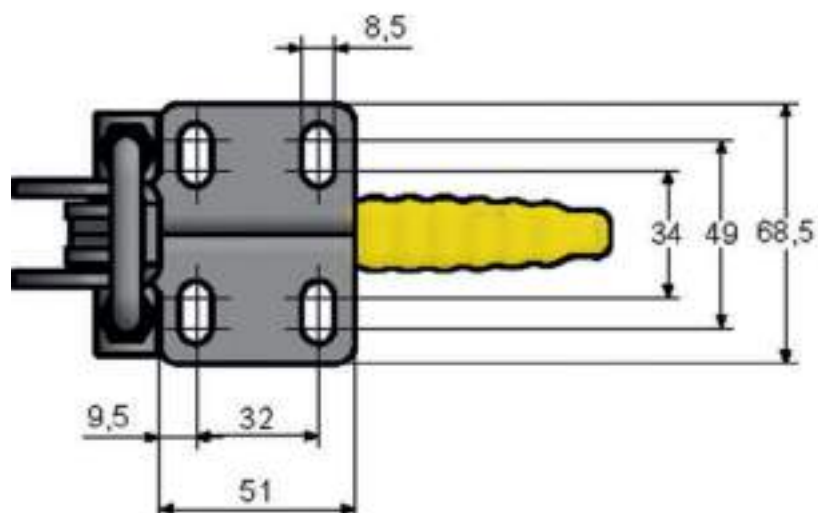
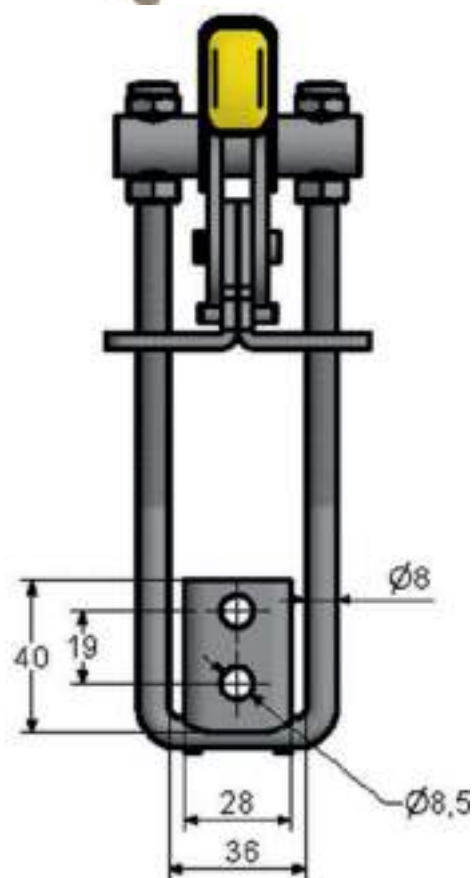
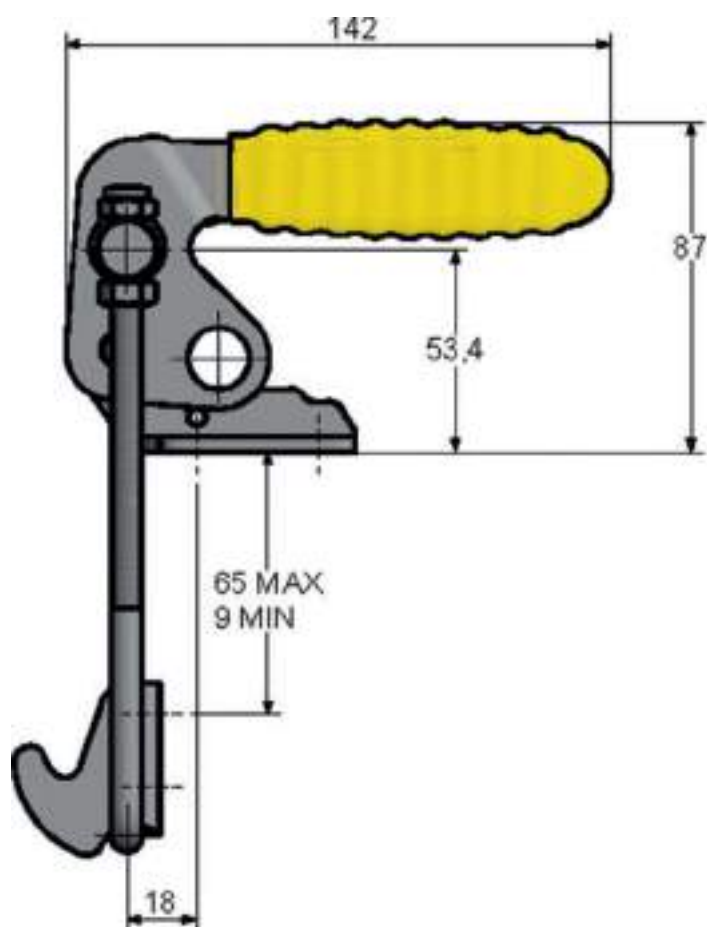
Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	Hook Latch plate
Max holding force	710 daN
Weight	0.72 Kgs
Stroke	–
Clamping Pressure	430 daN



HOOK CLAMP



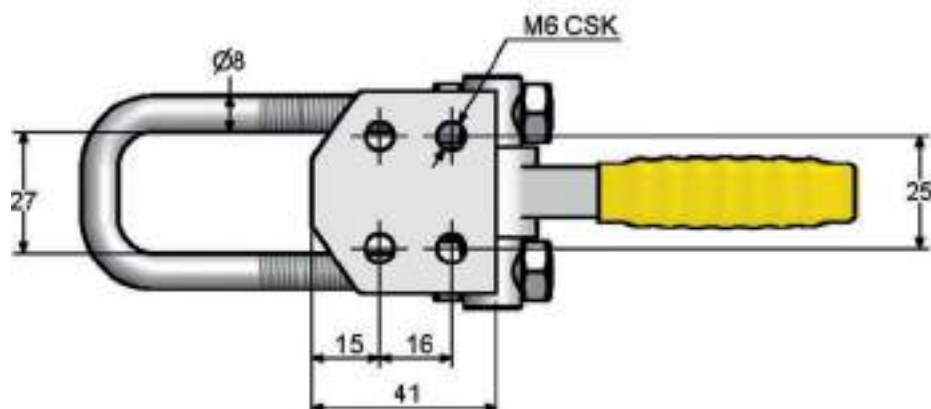
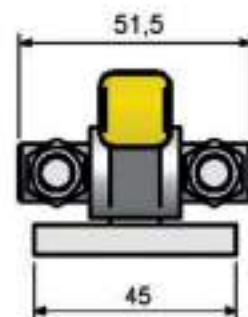
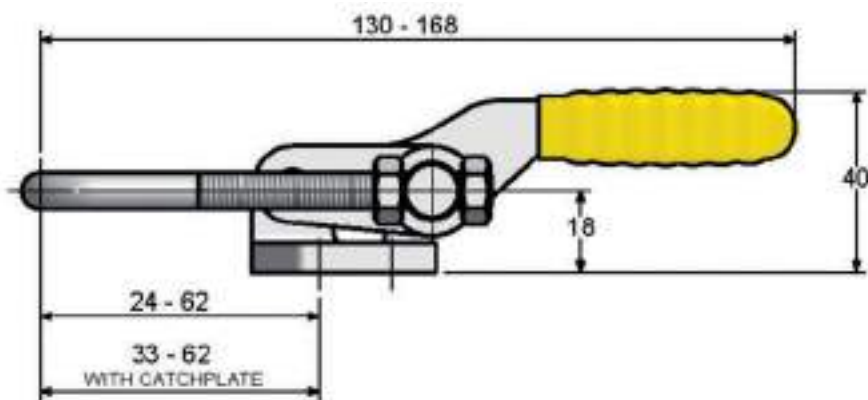
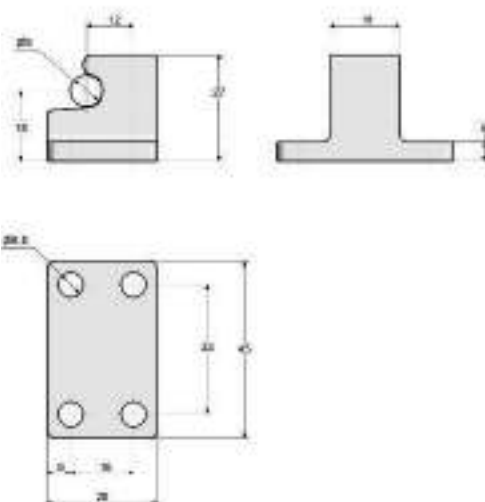
Material	Heavy gauge steel
Finish	Zinc Plated
Supplied with	Hook Latch plate
Max holding force	710 daN
Weight	0.72 Kgs
Stroke	–
Clamping Pressure	430 daN



Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
	order latch plate seperately
Max holding force	500 daN
Weight	0.56 Kgs
Stroke	–
Clamping Pressure	–



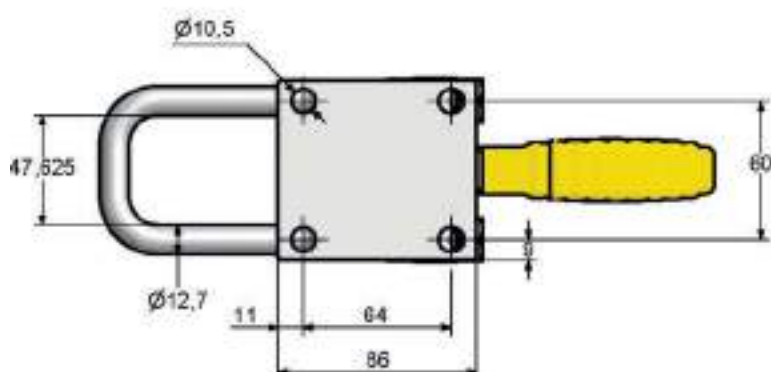
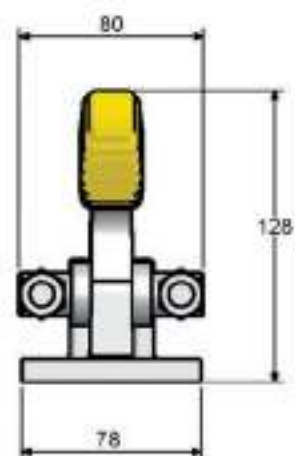
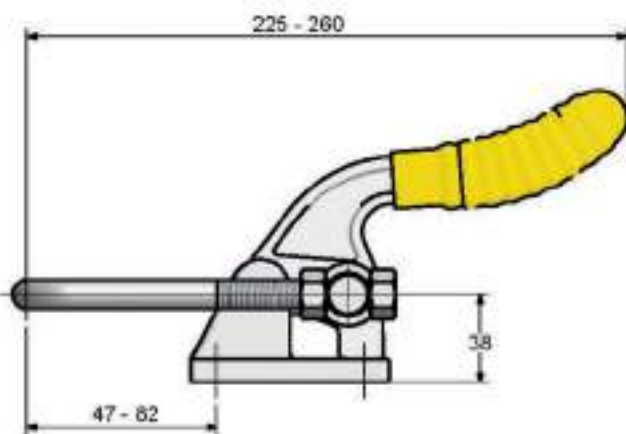
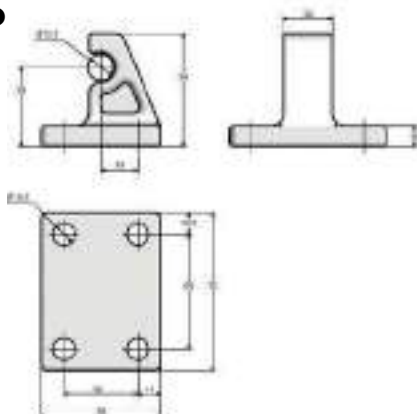
TS – HC – 500 – LP



Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
	order latch plate seperately
Max holding force	3730 daN
Weight	1.85 Kgs
Stroke	–
Clamping Pressure	–



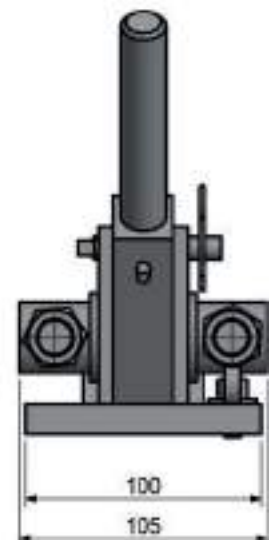
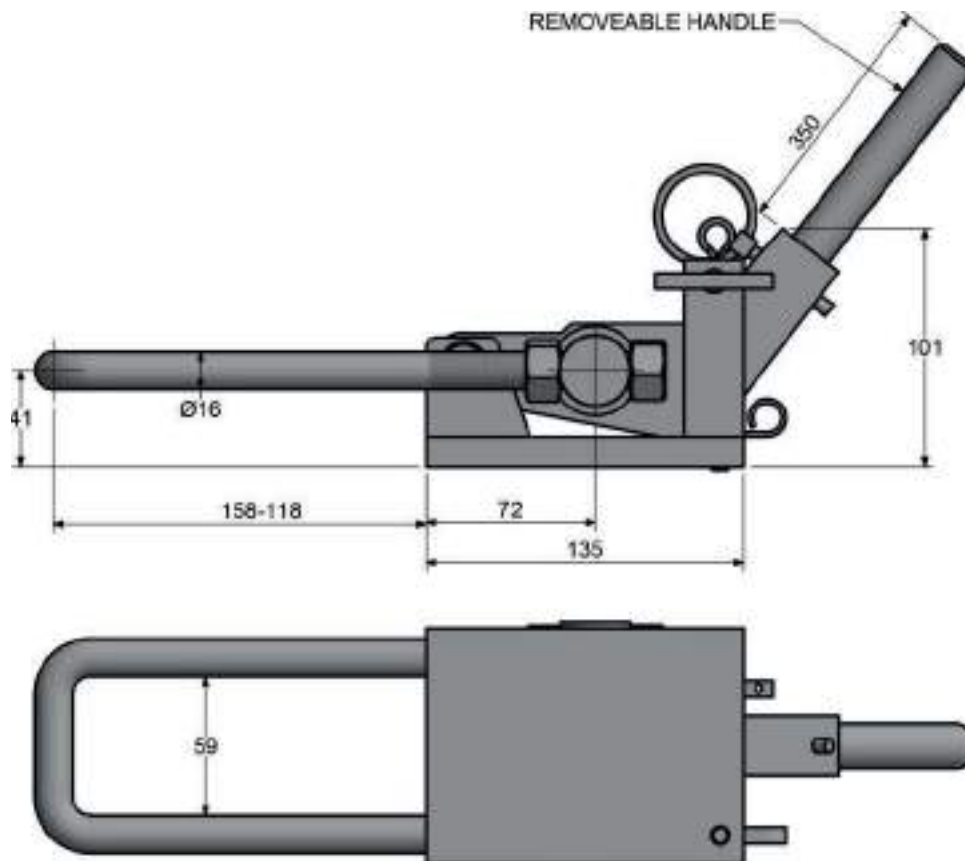
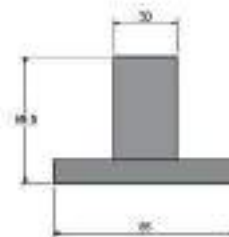
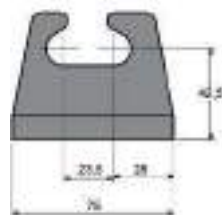
TS – HC – 3730 – LP



Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blacked
	order latch plate seperately
Max holding force	6000 daN
Weight	5.7 Kgs
Stroke	–
Clamping Pressure	–



TS – HC – 6000 – LP



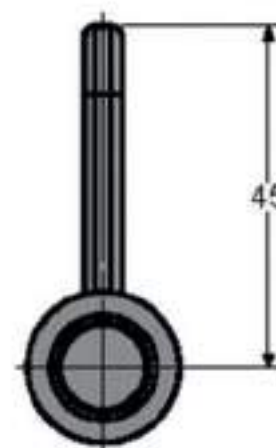
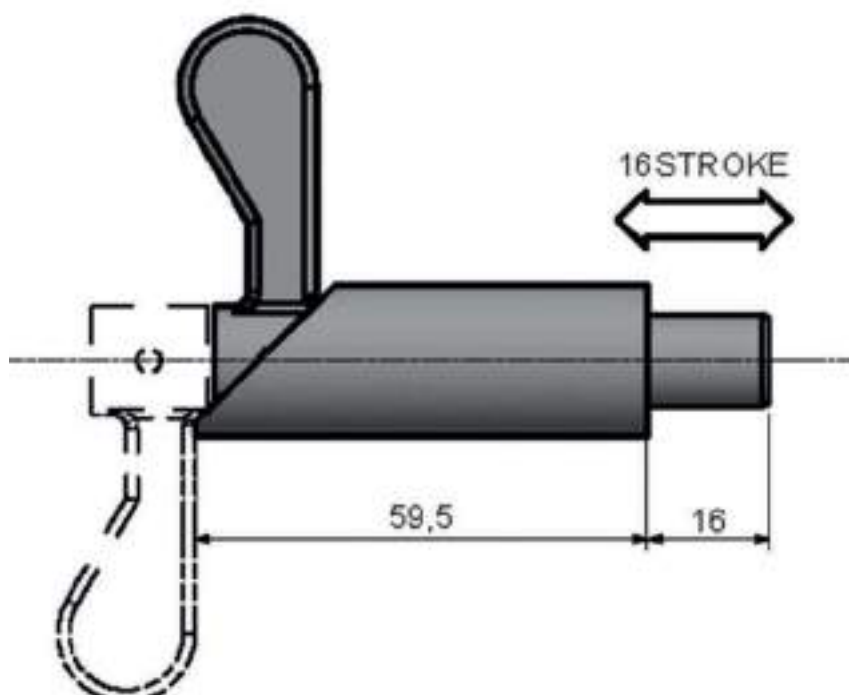
Product Description

The TÜNKERS TS-L locators are ideally suited for precision indexing on sliding/rotating fixtures.

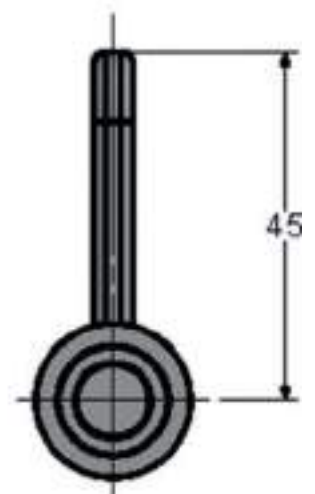
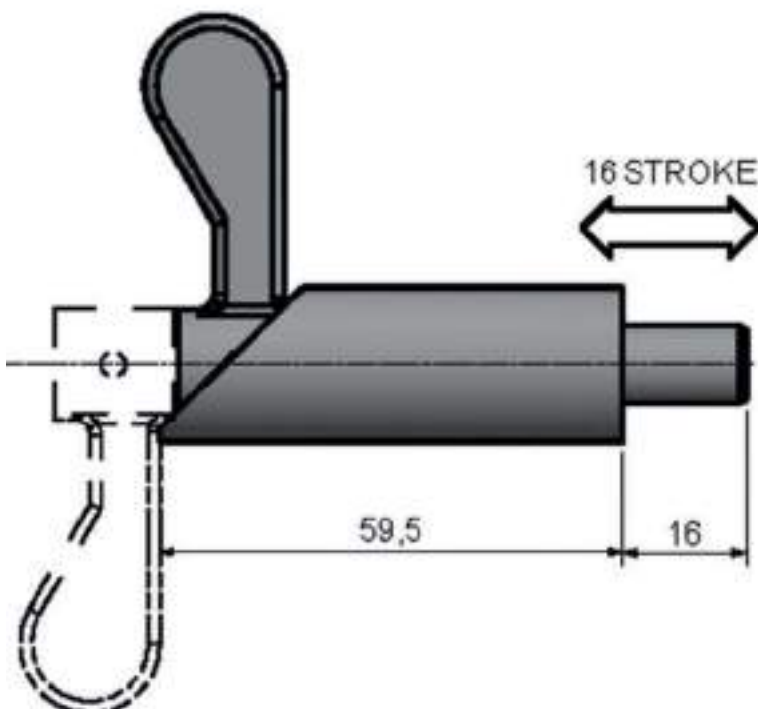
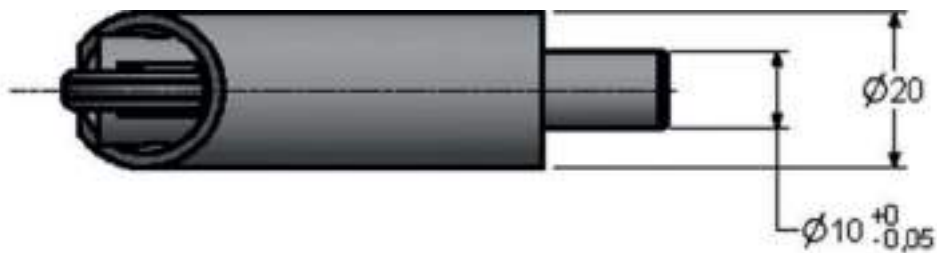
Chapter Overview

TS – L – 12	6 – 2
TS – L – 12A	6 – 3
TS – L – 123M-H	6 – 4

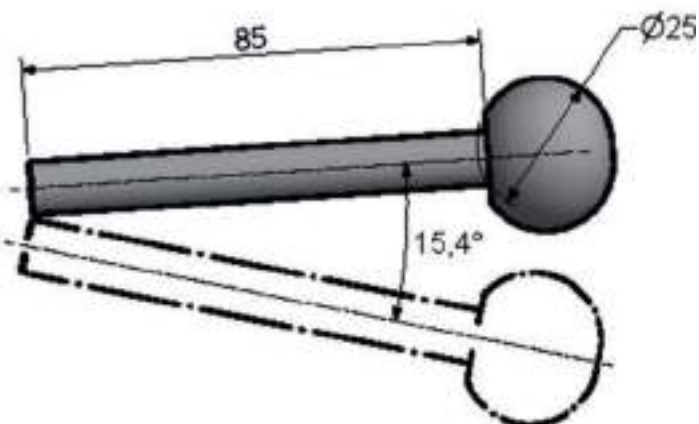
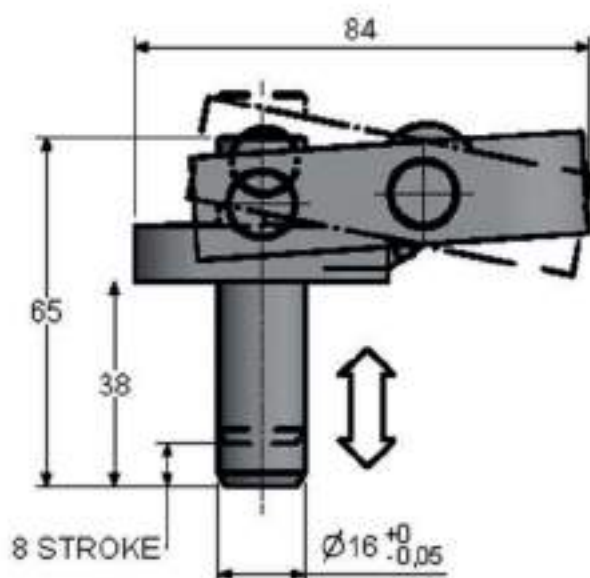
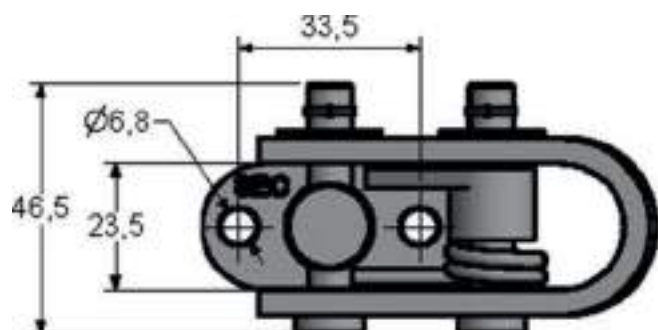
Material	Heavy gauge steel Precision ground Hardened casing and pin
Finish	–
Supplied with	–
Max holding force	–
Weight	0.15 Kgs
Stroke	16 mm
Clamping Pressure	–



Material	Heavy gauge steel
Finish	–
Supplied with	–
Max holding force	–
Weight	0.14 Kgs
Stroke	13 mm
Clamping Pressure	–



Material	Heavy gauge steel
Finish	–
Supplied with	–
Max holding force	–
Weight	0.36 Kgs
Stroke	8 mm
Clamping Pressure	–



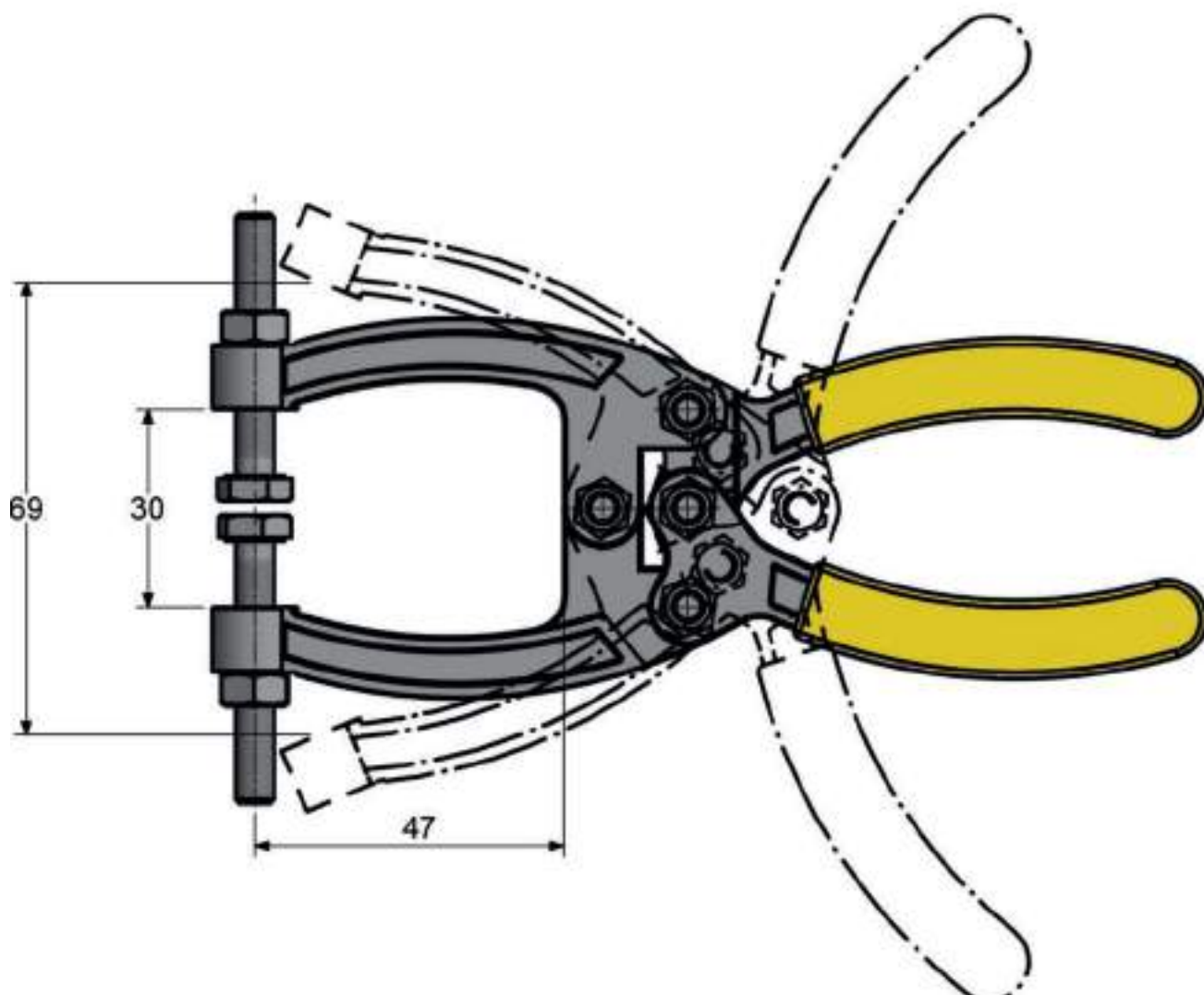
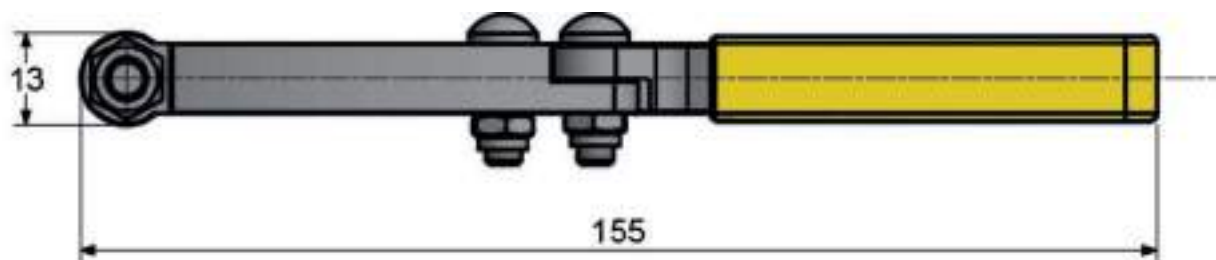
Product Description

The TÜNKERS TS-G (or S) toggle clamps allow holding work-pieces with a pinching or squeezing action between two clamping jaws.

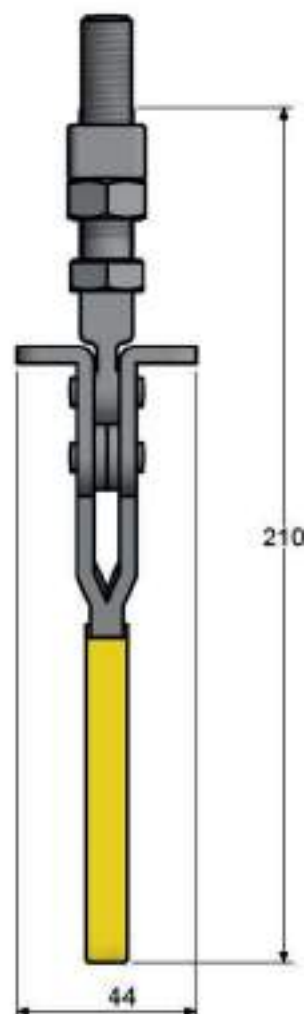
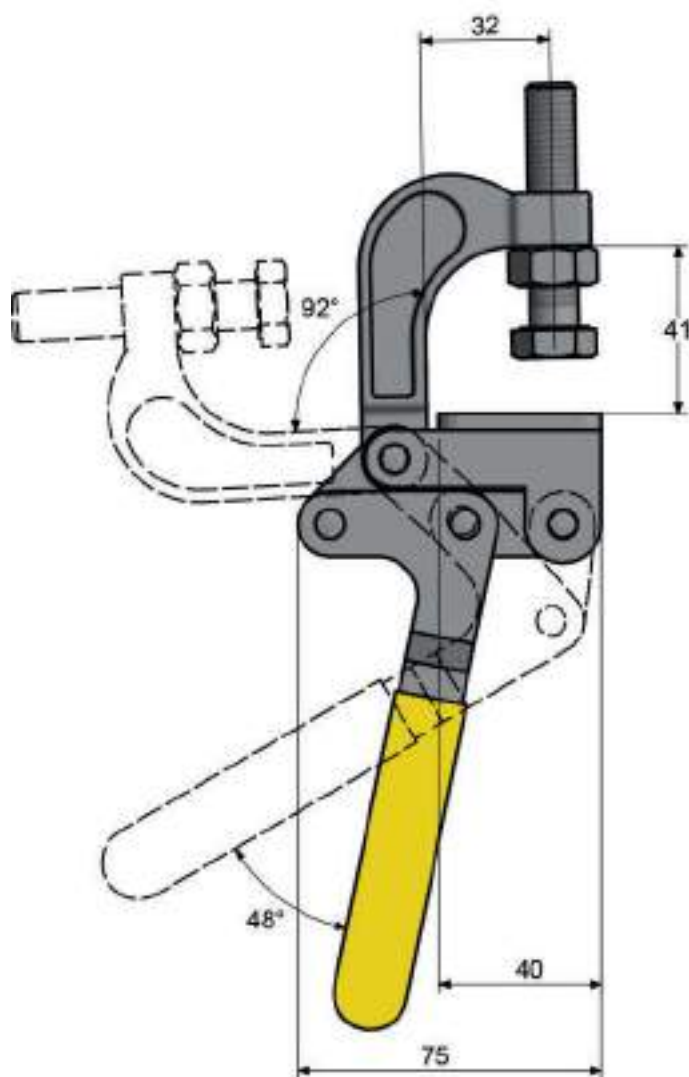
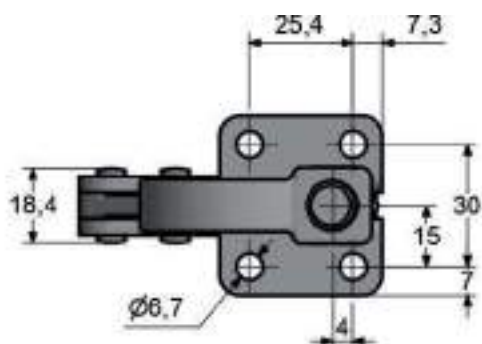
Chapter Overview

TS – G – 150 – JW30	7 – 2
TS – G – 365 – JW41	7 – 3
TS – G – 545 – JW44	7 – 4
TS – G – 545 – JW87	7 – 5
TS – G – 545 – JW112	7 – 6
TS – G – 386 – CJ	7 – 7

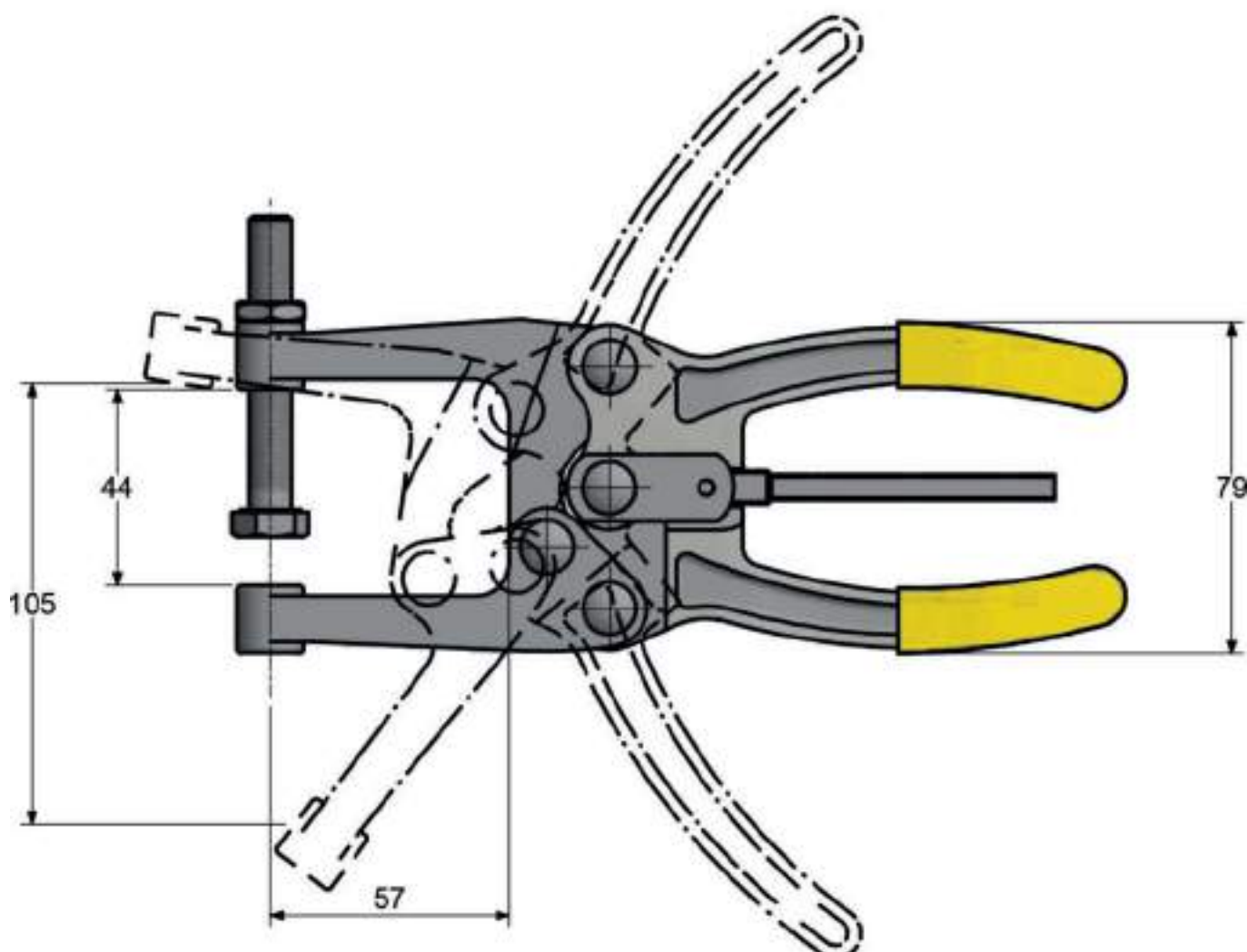
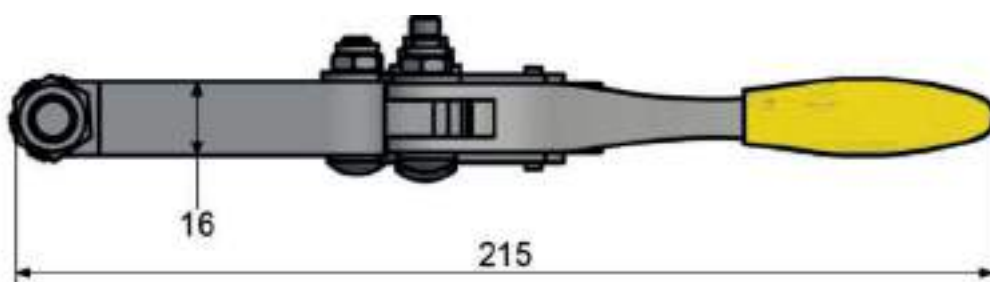
Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	6x40 mm spindles
Max holding force	150 daN
Weight	0.27 Kgs
Stroke	–
Clamping Pressure	80 daN



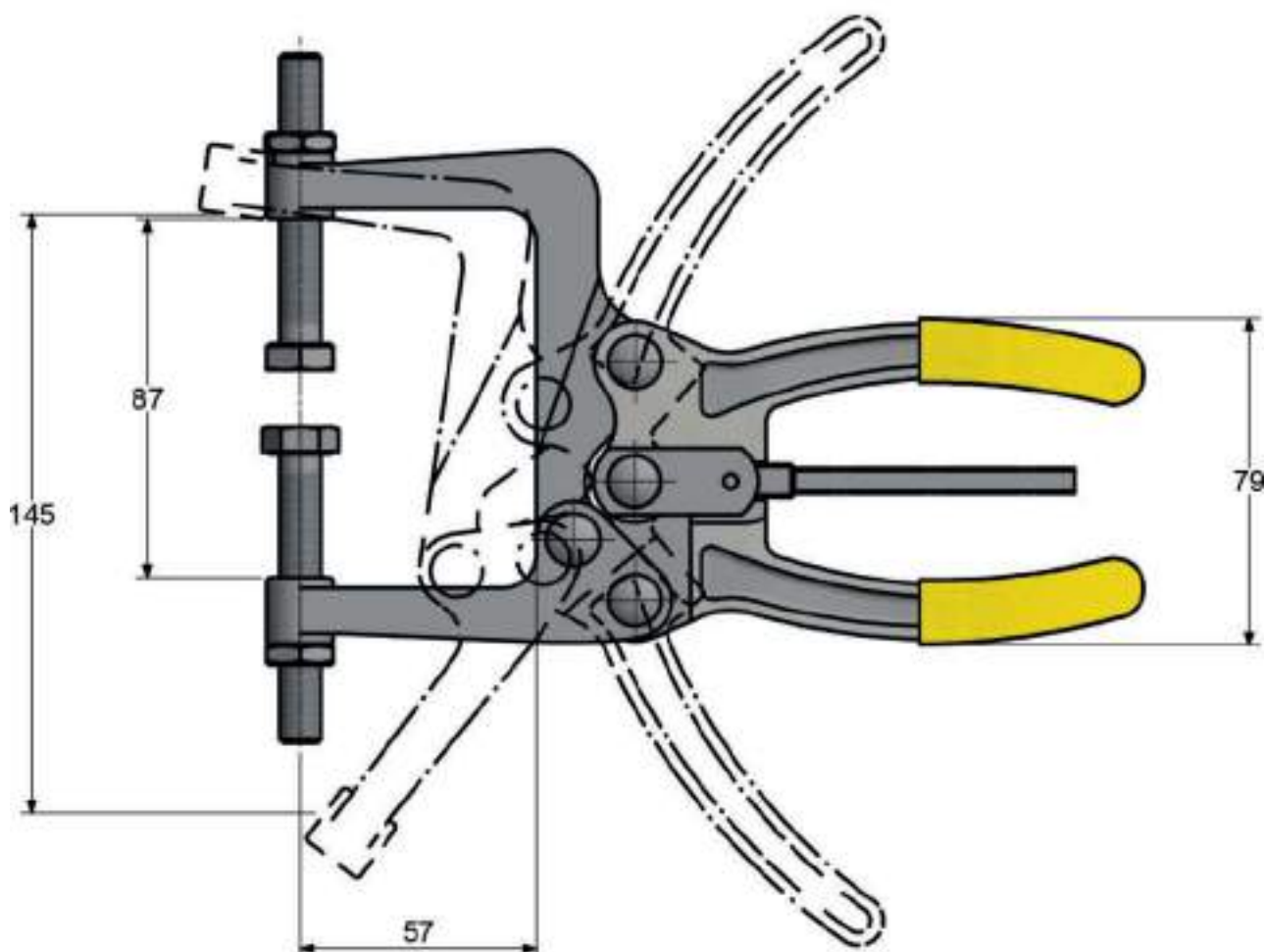
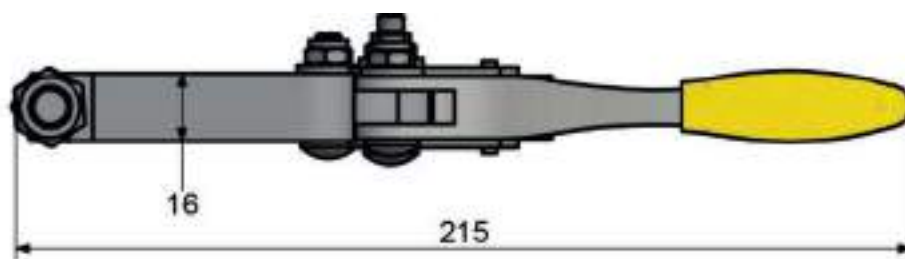
Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	12x60 mm spindles
Max holding force	365 daN
Weight	0.5 Kgs
Stroke	–
Clamping Pressure	125 daN



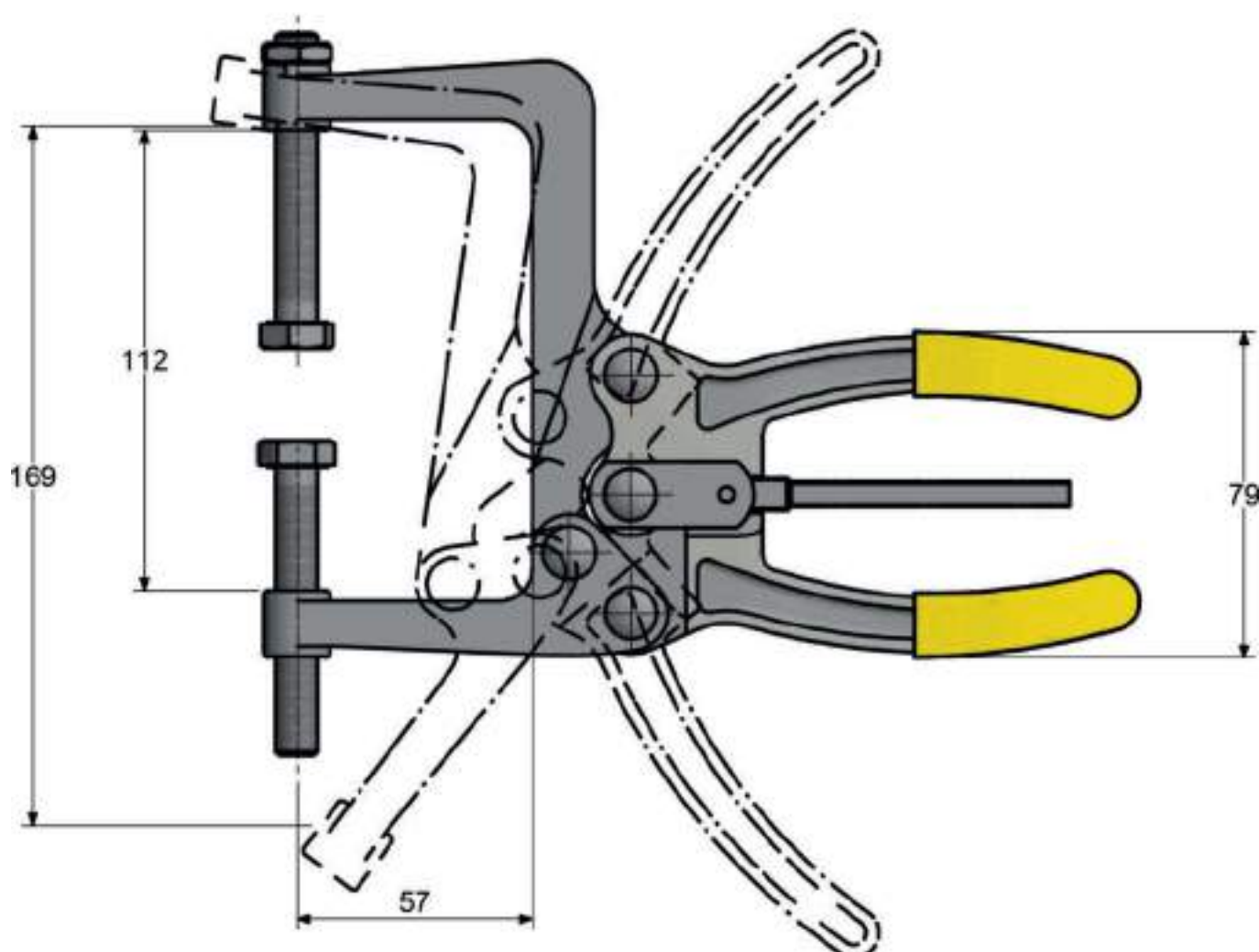
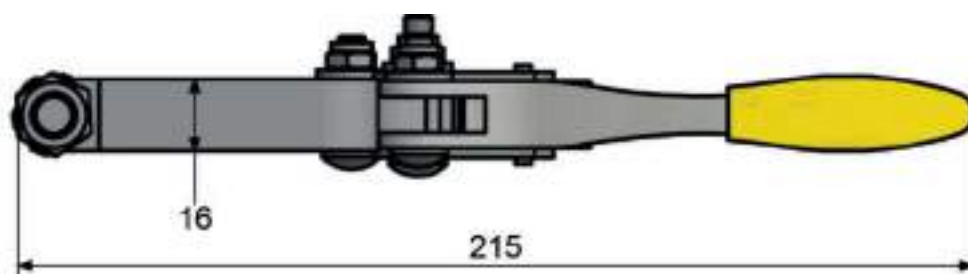
Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	10x70 mm spindles
Max holding force	545 daN
Weight	0.9 Kgs
Stroke	–
Clamping Pressure	250 daN



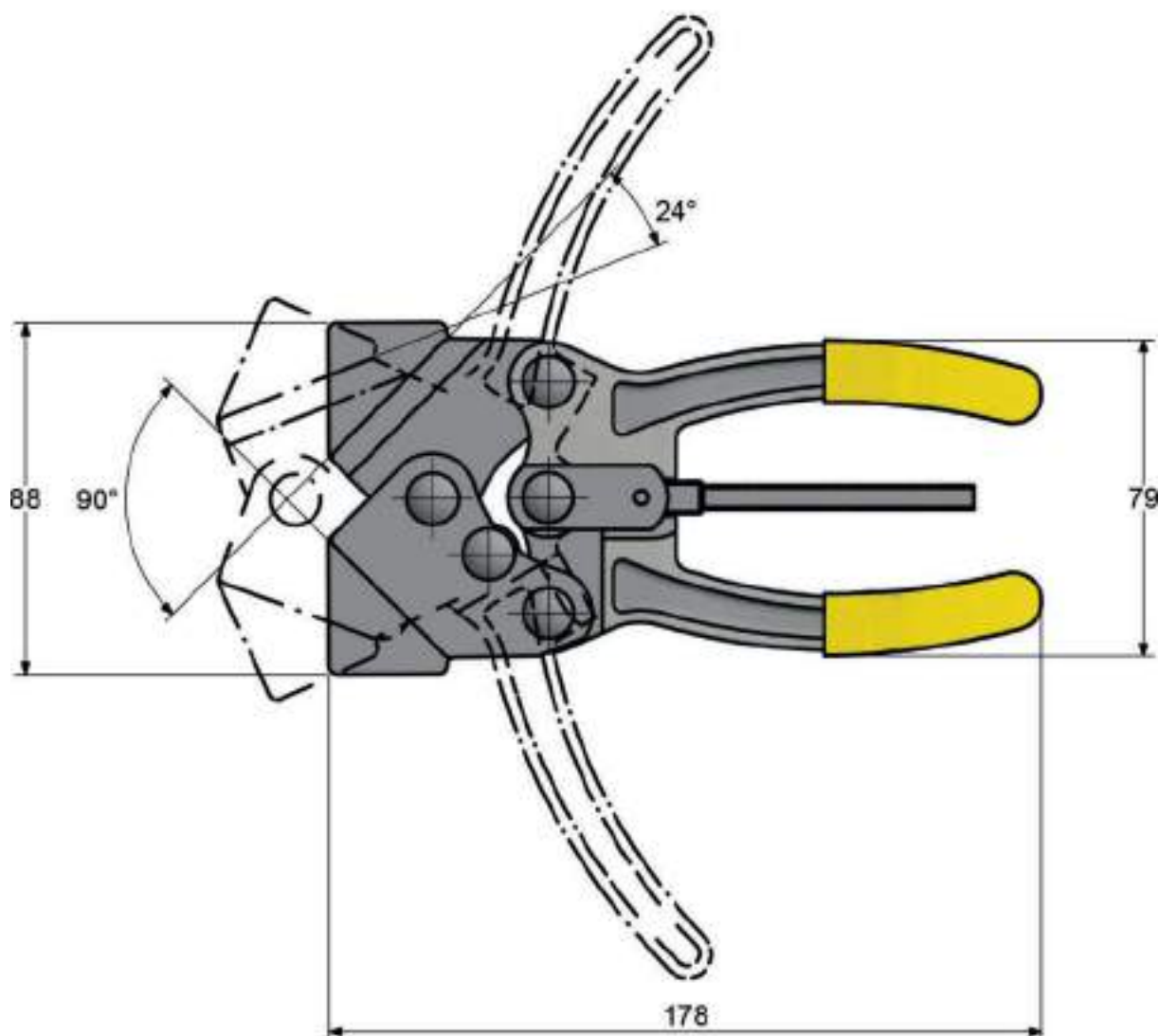
Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	10x70 mm spindles
Max holding force	545 daN
Weight	1.0 Kgs
Stroke	–
Clamping Pressure	170 daN



Material	Heavy gauge steel Hardened pins and bushes
Finish	Zinc Plated
Supplied with	10x70 mm spindles
Max holding force	545 daN
Weight	1.1 Kgs
Stroke	–
Clamping Pressure	170 daN



Material	Heavy gauge steel Hardened pins and bushes
Finish	Chemi-Blackened
Supplied with	–
Max holding force	–
Weight	0.56 Kgs
Stroke	–
Clamping Pressure	100-200 daN



Swivel foot adjustment spindle

Order Code	A	B	C	D
SM665	6	50	12.5	12
SM865	8	65	17.5	18
SM885	8	85	17.5	18
SM1080	10	80	19	20
SM1265	12	65	19	20
SM1280	12	80	19	20



Neoprene tipped adjustment spindle

Order Code	A	B	C	D	E
NM645	6	45	15	12	12
NM670	6	70	15	12	12
NM875	8	75	20	16	16
NM895	8	95	20	16	16
NM1080	10	100	28	22	22
NM1280	12	80	30	24	24
NM12100	12	100	30	24	24



Neoprene caps

Order Code	A	B	C	D
NP6	6	10	15	12
NP8	8	13	19	16
NP10	10	14	24	20

