



CLAMPING PRODUCTS

INTRODUCTION

Since 1926, Brauer has been providing industry with the finest engineered products, expert technical support, on time deliveries and unparalleled customer service. Our brands are now recognised world-wide as products of the highest quality, and the breadth of our product portfolio provides our demanding customers with a tooling solution for a wide variety of problems.

Brauer continues to be committed to bringing new innovative tooling products to the market place, and to updating and improving existing product ranges wherever possible. This

new clamping products catalogue updates our long standing, and successful range of clamping products which have led the market for over 50

years. In addition, this catalogue introduces a large number of innovative additions to our clamping products range, all designed and manufactured to the very highest standards.

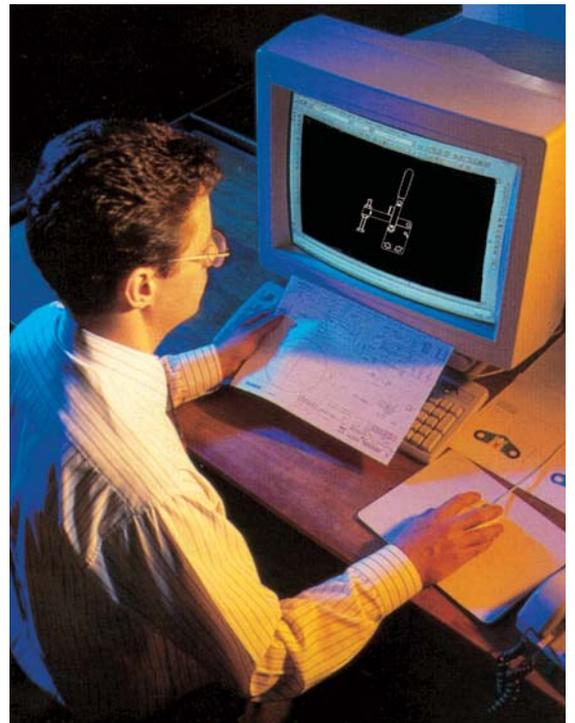
Our team of highly talented engineers is backed by the latest computer aided design facilities including three dimensional feature based parametric solid modelling. Manufacturing is carried out in our modern, well equipped factory accredited with ISO 9001 certification and situated in Milton Keynes, some 40 miles north of London.



At Brauer, we continue to be motivated by working with our customers in providing innovative solutions for their particular tooling requirements. These working partnerships, built by many years of unparalleled customer service, will ensure that Brauer tooling, and clamping products in particular, will remain at the forefront of their markets.

To view the complete tooling portfolio manufactured by the Brauer Technologies group of companies, please consult our web site at www.brauer.co.uk.

If, after considering our standard range of products, you are unable to find a solution to suit your particular application, then please consult our sales and design engineers who will be only too pleased to progress the design and manufacture of a **custom**, specially designed item to meet your particular needs.



BRAUER®

DAWSON ROAD MOUNT FARM MILTON KEYNES MK1 1JP ENGLAND

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WEB: www.brauer.co.uk

CAD FORMATS FOR BRAUER CLAMPS

The Brauer range of clamping products is available for design engineers in a number of CAD formats whilst all of the Brauer catalogues can be provided on a CD. Brauer clamps are available as either 2D or 3D models (including Catia), and compatible with the very latest design software.

2D:

- AutoCad
- dxf
- iges



3D:

- AutoCad (dwg)
- ACIS (.sat)
- Iges
- Catia v4
- Catia v5
- MDT (dwg)

Foreign language versions of our clamping products catalogue are available in French, German, Spanish, Italian and Swedish. A catalogue showing 'inch' dimensions is also available for our USA customers. All catalogue formats can be viewed and downloaded from our website: www.brauer.co.uk

'SPECIAL OR CUSTOM PRODUCTS'
IF NONE OF THE STANDARD PRODUCTS SHOWN IN
THIS CATALOGUE MEETS YOUR NEEDS, OUR
ENGINEERS ARE AVAILABLE TO MODIFY A
STANDARD CLAMP OR TO WORK WITH YOU IN
DEVELOPING A BESPOKE DESIGN TO SUIT YOUR
PARTICULAR APPLICATION.



COMMITTED TO: — INNOVATION
— QUALITY
— SERVICE



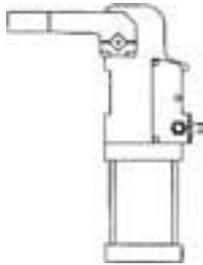
BRAUER CLAMPING PRODUCTS ARE MANUFACTURED IN MILTON KEYNES, ENGLAND

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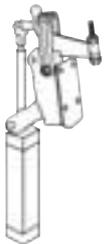
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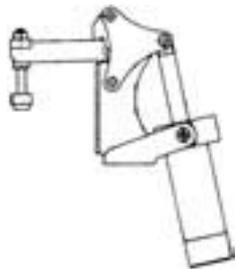
CLAMPING PRODUCTS



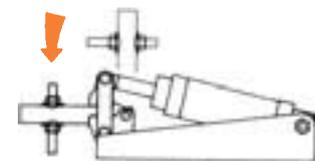
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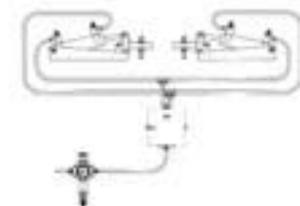
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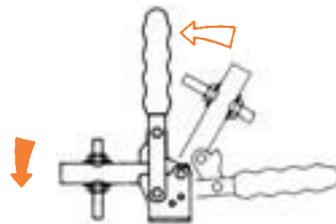
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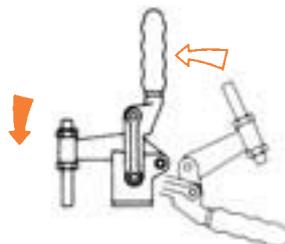
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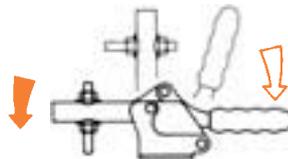
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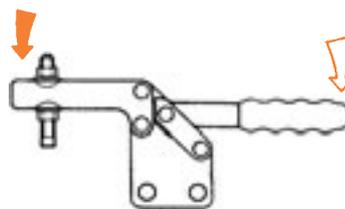
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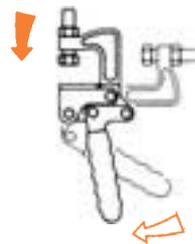
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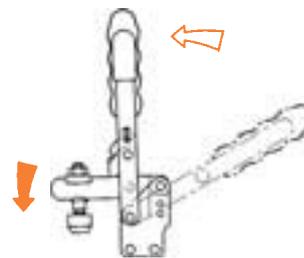
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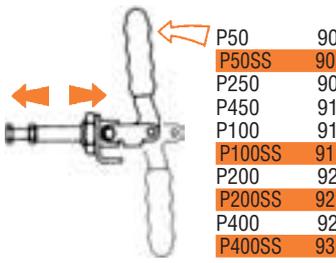


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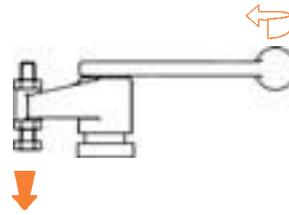
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Denotes stainless steel versions



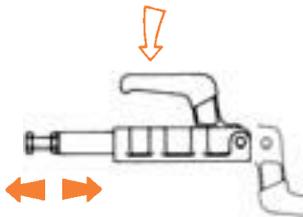
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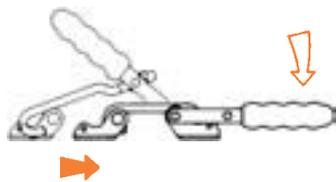
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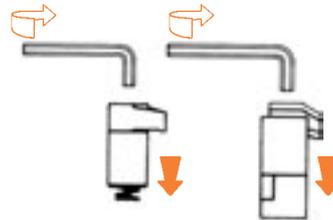
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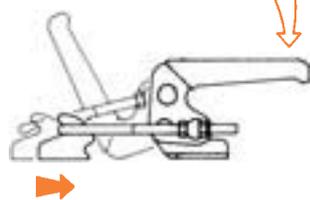
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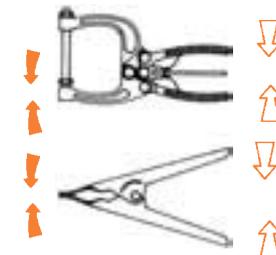
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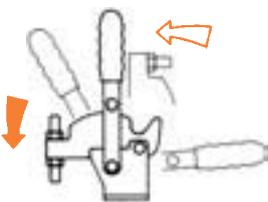
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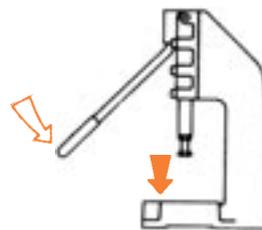
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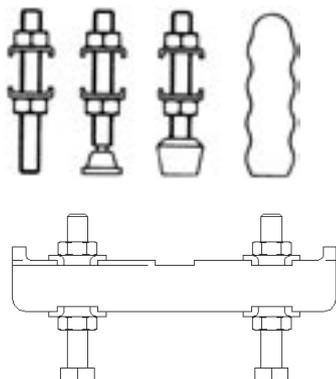
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Denotes stainless steel versions

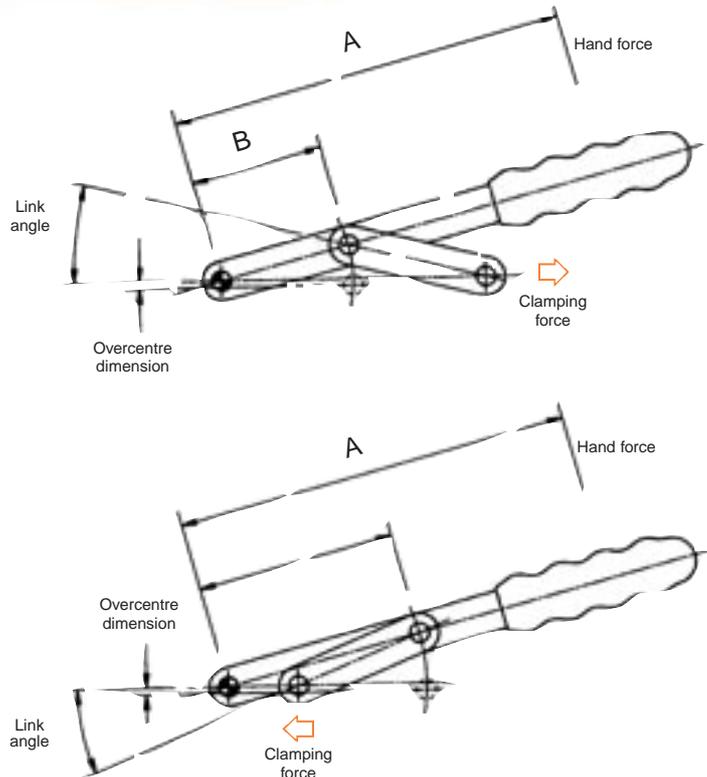
The toggle mechanism in a clamp has three functions:

1. to multiply a hand force at the handle into a high clamping force to hold work.
2. to create an over-centre lock to prevent the clamp from opening and releasing the work until opened by the operator.
3. to rapidly open and close the clamp giving a wide clearance in which to load and unload the workpiece.

The multiplication of input (hand) force to output (clamping) force is created firstly by the leverage of handle length (A) to link length (B), and secondly by the three pivots of the toggle being pushed into alignment.

For example, a clamp with a handle to link leverage of 3 can multiply its hand force to clamping force as follows:

link angle	toggle multiplier	handle leverage multiplier	overall force multiplier
2.0°	14	3	42
1.0°	28	3	84
0.5°	57	3	171
0.25°	114	3	342
0.12°	342	3	1026
0.0°	infinity	-	limited by the elasticity of the clamp



The model numbering system describes the clamp type and strength as shown in the example below:

	V	350	/	2	B
CLAMP SERIES	V = vertical H = horizontal P = straight line (push-pull) action				
HOLDING FORCE	(daN)				
BASE TYPE	/1 = straight /2 = flanged /3 = front mounting				
ARM TYPE	A = straight B = adjustable spindle position C = fixed spindle position				

Note: an 'X' within the model number denotes a pneumatic clamp

Clamping Force — is that which will result from the quoted Hand Force. Clamps with a fixed clamping position have a single Clamping Force quoted. Those where the threaded spindle may be positioned at any point along an arm (arm type B) and those with solid arms to be cut and welded as required (arm type A) have clamping forces quoted at the inner and outer ends of the arm.

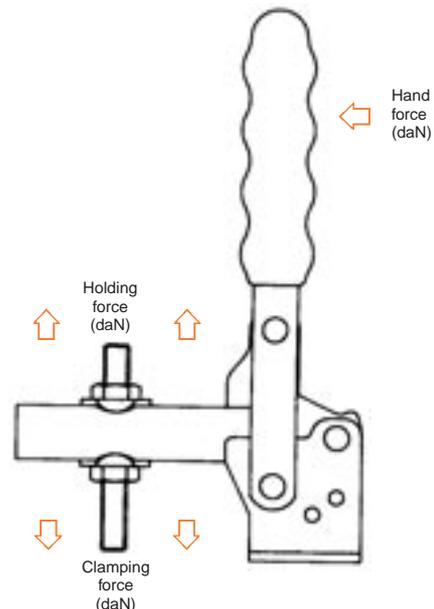
Holding Force — is that which the clamp can withstand after being closed without damage to the clamp and without the toggle unlocking due to distortion of the clamp.

The overcentre dimension is carefully chosen in relation to the elasticity of the clamp to maximise clamping force while ensuring that the clamp locks closed even under vibration or intermittent loading.

Hand Force — has been chosen as being that which might be applied in frequent operation.

Forces are given in decaNewtons (daN)

- 1 daN = approximately 1kg.
- = approximately 2.2 lb.



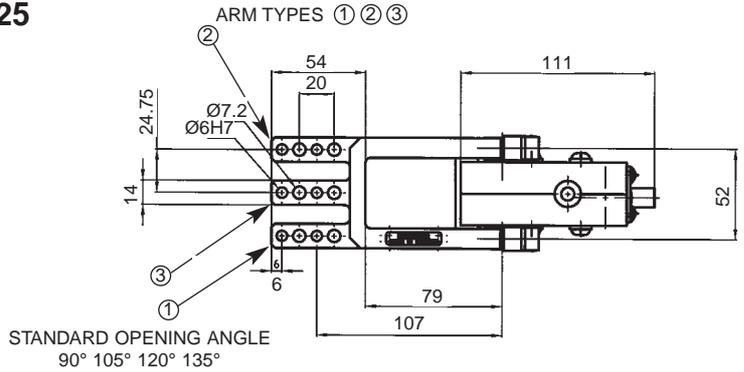


PNEUMATIC COMPACT POWER CLAMPS

- New compact, slim body design, with oval cylinder
- Fully enclosed patented mechanism
- Steel or aluminium body construction
- Self positioning clamping arm featuring weld immune integrated sensing
- 3D CAD formats including dwg, IGES, ACIS and Catia
- Cycle tested through 5 million cycles

PNEUMATIC POWER CLAMPS - UK AND INTERNATIONAL PATENTS PENDING

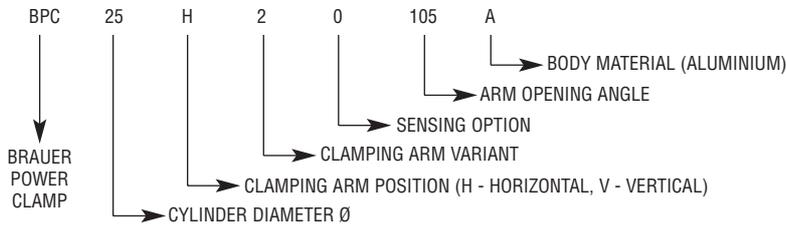
MODEL BPC25



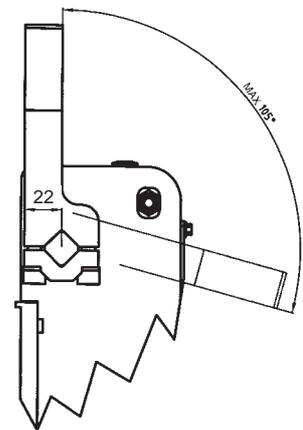
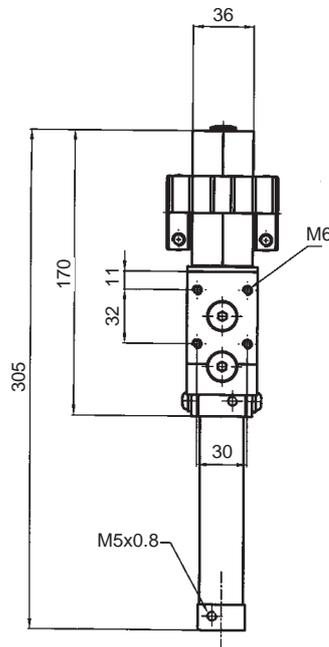
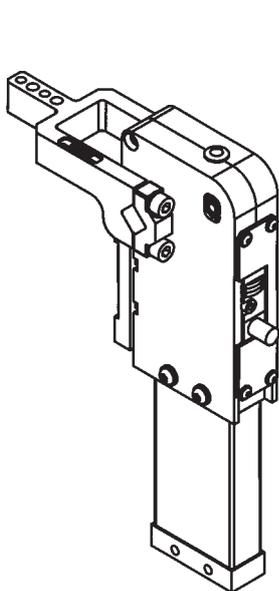
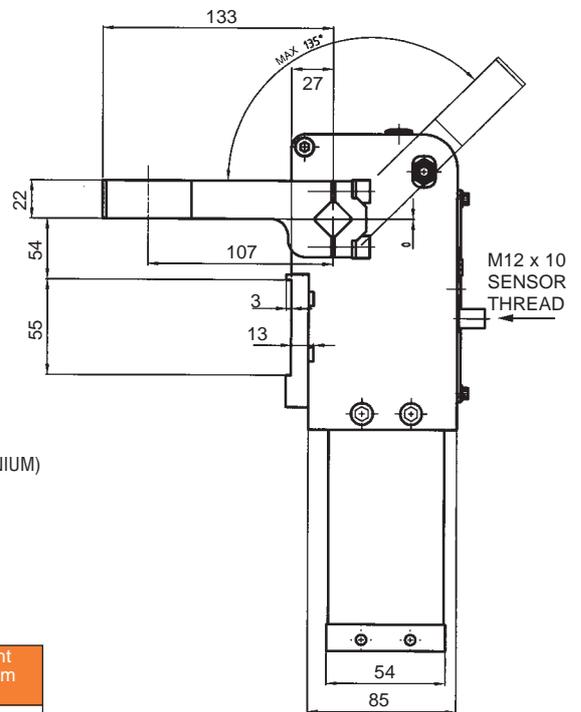
Features

- Mounting face hole patterns can be modified to suit customer requirements.
- Enclosed body.
- No reduction of clamping torque as clamp locks.
- Flat, 'slim line' construction.
- Variety of arm types.
- Opening angles up to 135°.
- Long service life.
- Air cylinders max. 8 bar with oil free dry running design.
- Reed switches on cylinder (magnetic piston) (R).
- **Sensing Options:**
 ... O = without sensing
 ... I = supplied with inductive sensing 10-30V weld immune and isolated

ORDER EXAMPLE

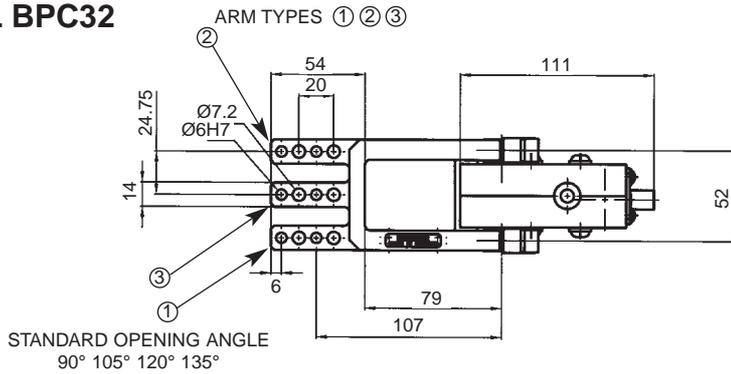


Type	Holding moment Max (Nm)	Clamping moment at 5 bar	Piston \varnothing	Cylinder Port	Weight inc. arm [kg]
BPC 25	200 Nm	65 Nm	25	M5	2.4



PNEUMATIC POWER CLAMPS - UK AND INTERNATIONAL PATENTS PENDING

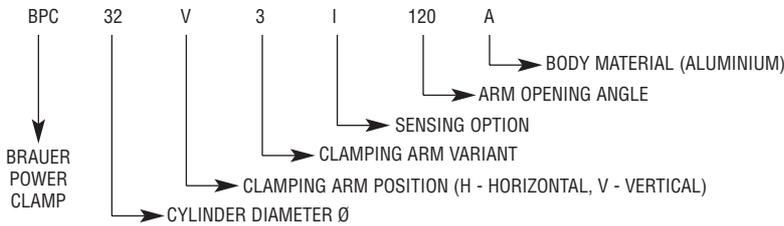
MODEL BPC32



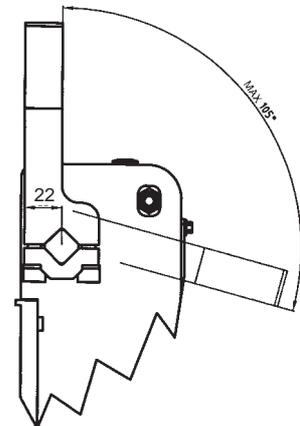
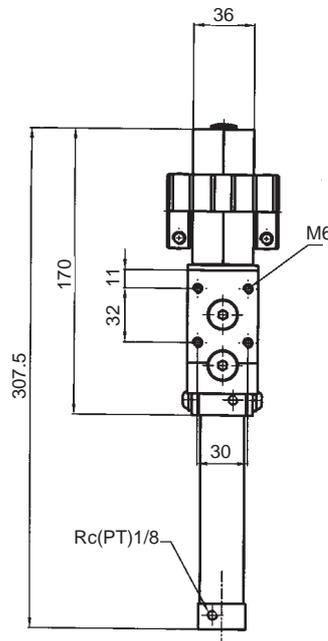
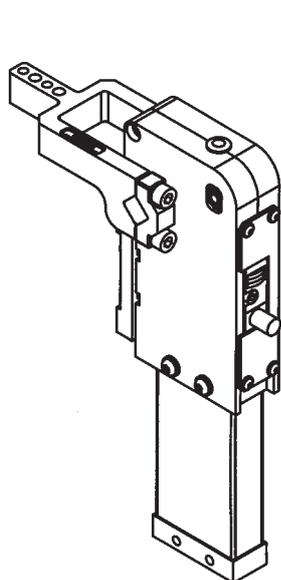
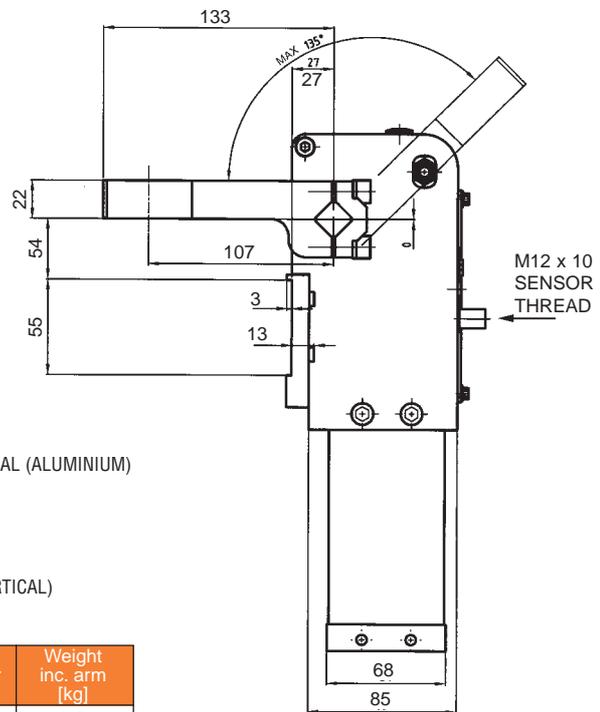
Features

- Mounting face hole patterns can be modified to suit customer requirements.
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- Reed switches on cylinder (magnetic piston) (R).
- Sensing Options:
 ... O = without sensing
 ... I = supplied with inductive sensing 10-30V
 weld immune and isolated

ORDER EXAMPLE

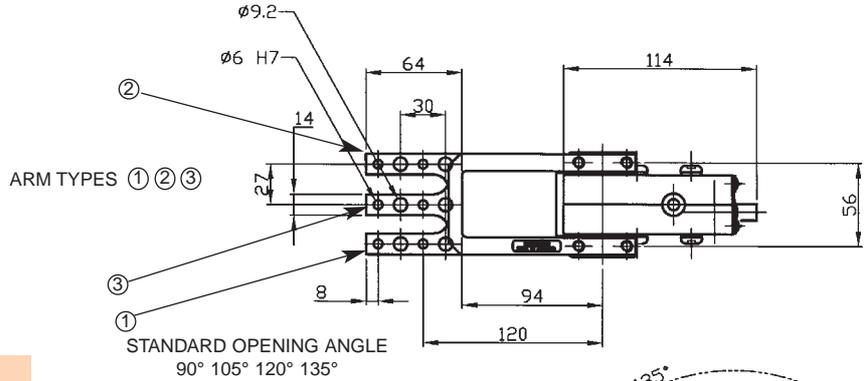


Type	Holding moment Max (Nm)	Clamping moment at 5 bar	Piston	Cylinder Port	Weight inc. arm [kg]
BPC 32	400 Nm	140 Nm	32	G1/8	2.6



PNEUMATIC POWER CLAMPS - UK AND INTERNATIONAL PATENTS PENDING

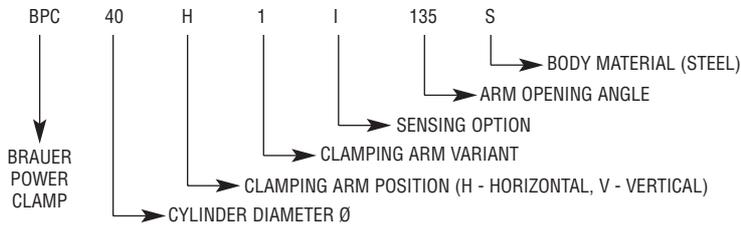
MODEL BPC40



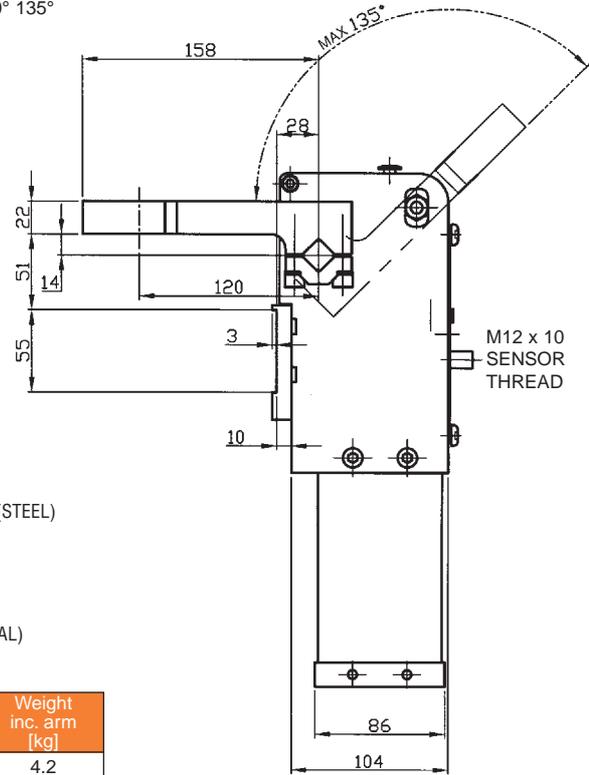
Features

- Mounting face hole patterns can be modified to suit customer requirements.
- Enclosed body.
- No reduction of clamping torque as clamp locks.
- Flat, 'slim line' construction.
- Variety of arm types.
- Opening angles up to 135°.
- Long service life.
- Air cylinders max. 8 bar with oil free dry running design.
- Reed switches on cylinder (magnetic piston) (R).
- **Sensing Options:**
 ... O = without sensing
 ... I = supplied with inductive sensing 10-30V weld immune and isolated

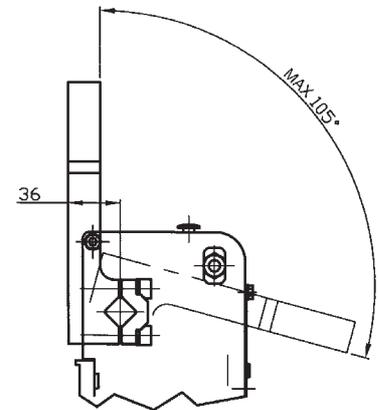
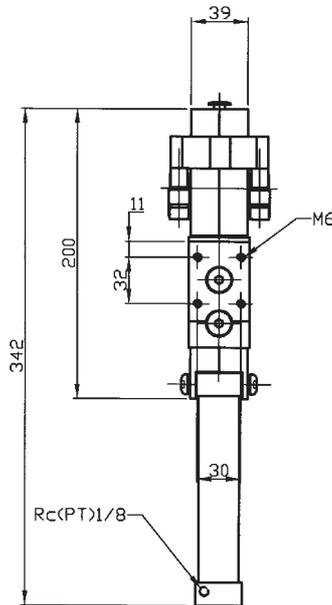
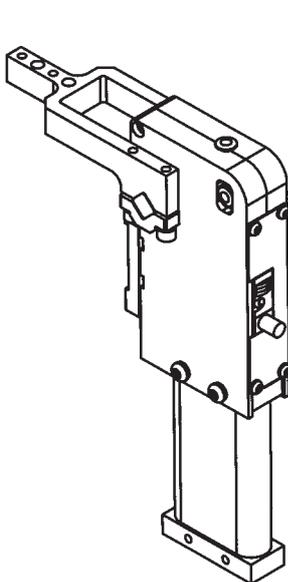
ORDER EXAMPLE



Type	Holding moment Max (Nm)	Clamping moment at 5 bar	Piston C	Cylinder Port	Weight inc. arm [kg]
BPC 40	1000 Nm	225 Nm	40	G1/8	4.2

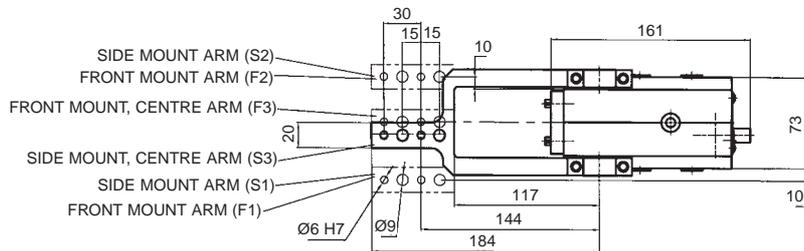


CLAMPING PRODUCTS



PNEUMATIC POWER CLAMPS - UK AND INTERNATIONAL PATENTS PENDING

MODEL BPC50

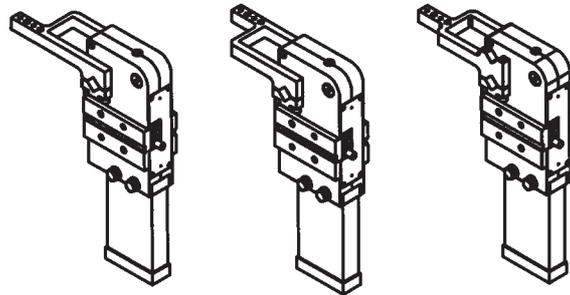


Features

- Clamp can be mounted from the side (s) or from the front (f) of its body.
- Enclosed body.
- No reduction of clamping torque as clamp locks.
- Variety of arm types.
- Opening angles up to 135°.
- Long service life.
- Air cylinders max. 8 bar with oil free dry running design.
- Reed switches on cylinder (magnetic piston) (R).
- **Sensing Options:**
 ... O = without sensing
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STANDARD OPENING ANGLE

90° 105° 120° 135°

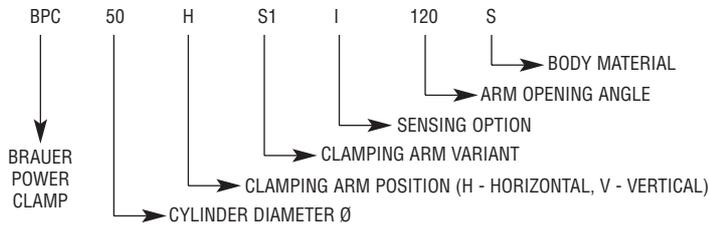


ARM TYPE 1

ARM TYPE 2

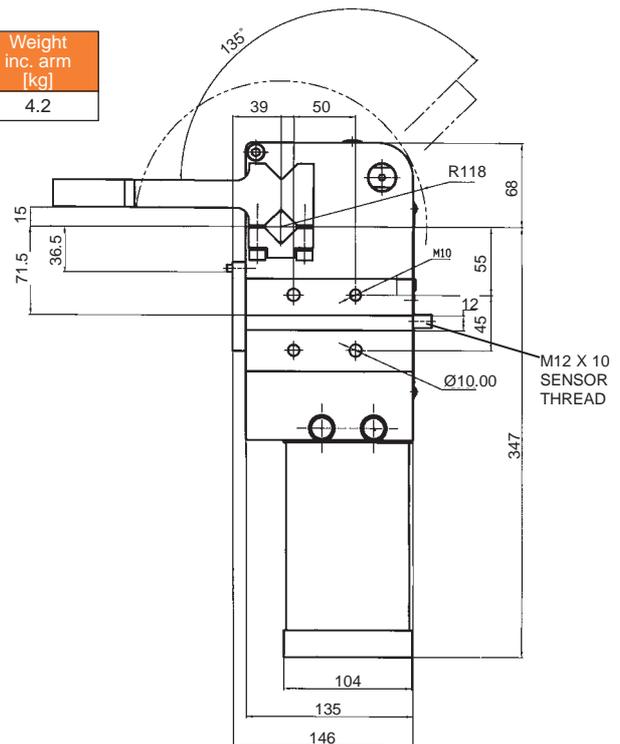
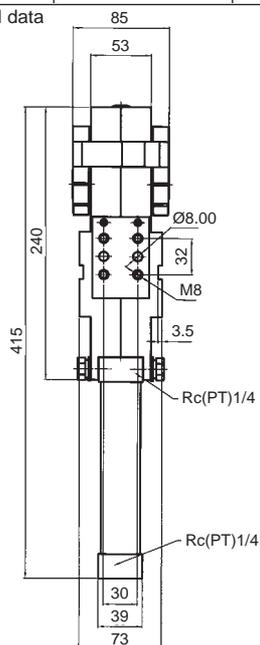
ARM TYPE 3

ORDER EXAMPLE



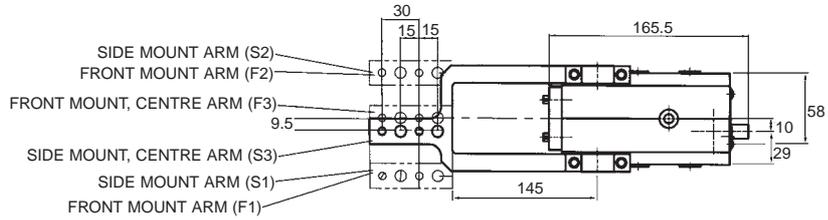
Type	Holding moment Max (Nm)	Clamping moment at 5 bar	Piston	Cylinder Port	Weight inc. arm [kg]
BPC 50	*1500 Nm	*285	50		4.2

*Theoretical data



PNEUMATIC POWER CLAMPS - UK AND INTERNATIONAL PATENTS PENDING

MODEL BPC63

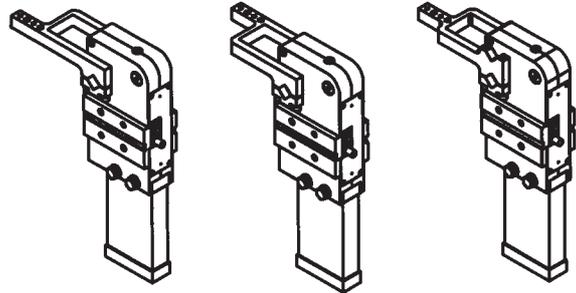


Features

- Clamp can be mounted from the side (s) or from the front (f) of its body.
- Enclosed body.
- No reduction of clamping torque as clamp locks.
- Variety of arm types.
- Opening angles up to 135°.
- Long service life.
- Air cylinders max. 8 bar with oil free dry running design.
- Reed switches on cylinder (magnetic piston) (R).
- **Sensing Options:**
 ... O = without sensing
 ... I = supplied with inductive sensing 10-30V weld immune and isolated

STANDARD OPENING ANGLE

90° 105° 120° 135°

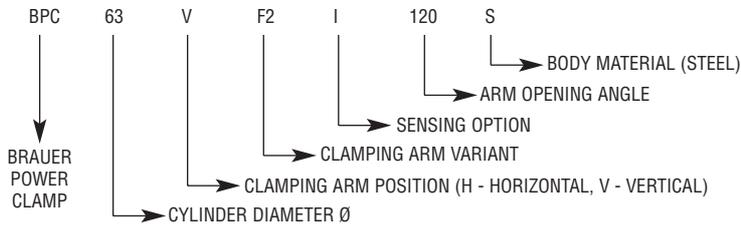


ARM TYPE 1

ARM TYPE 2

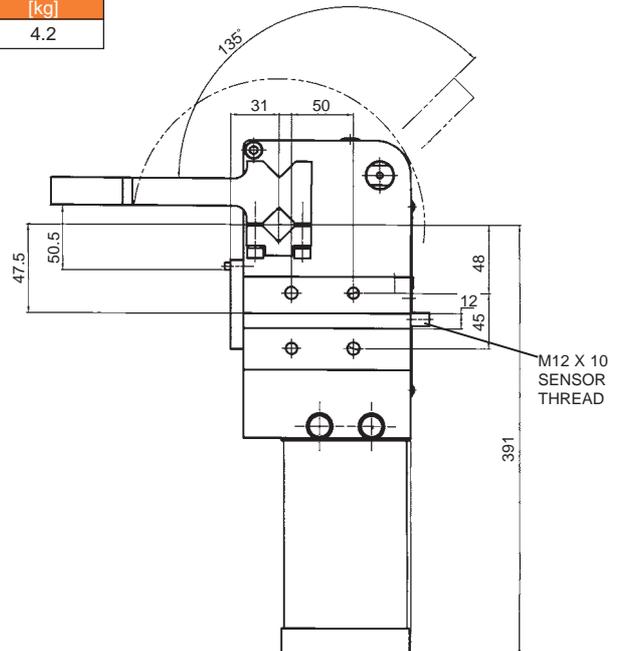
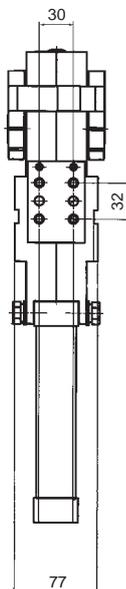
ARM TYPE 3

ORDER EXAMPLE



Type	Holding moment Max (Nm)	Clamping moment at 5 bar	Piston	Cylinder Port	Weight inc. arm [kg]
BPC 63	*2000 Nm	*450	63		4.2

*Theoretical data





VA HEAVY DUTY PNEUMATIC POWER CLAMPS

- Pneumatic powered version of Brauer's acclaimed VA heavy duty range
- Arm types shown are standard
- All leading pneumatic cylinders including SMC, ASCO Joucoumatic and Festo can be fitted

VA HEAVY-DUTY PNEUMATIC POWER CLAMPS

PNEUMATIC POWER CLAMP MODEL VA 300BX

Specifications	VA300 BX
WEIGHTS (Kg)	2.20 Kg
CLAMPING FORCE (daN)	↓ 42 ↓ 54
HOLDING FORCE (daN)	↑ 250 ↑ 350



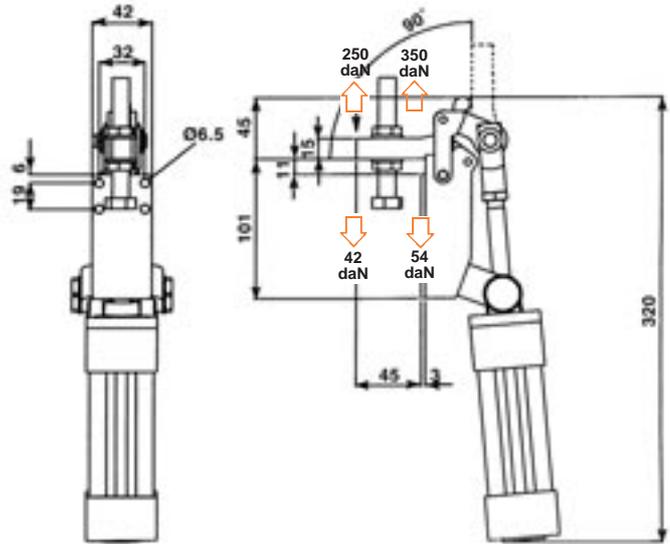
Arm:
The spindle is adjustable along the arm.

Base:
Front mounting.

Nominal holding force:
250-350 daN.

Weight:
2.20 Kg.

Stroke sensing:
Contact Brauer for further details.



PNEUMATIC POWER CLAMP MODEL VA 700CX

Specifications	VA700 CX
WEIGHTS (Kg)	4.50 Kg
CLAMPING FORCE (daN)	↓ 170
HOLDING FORCE (daN)	↑ 600



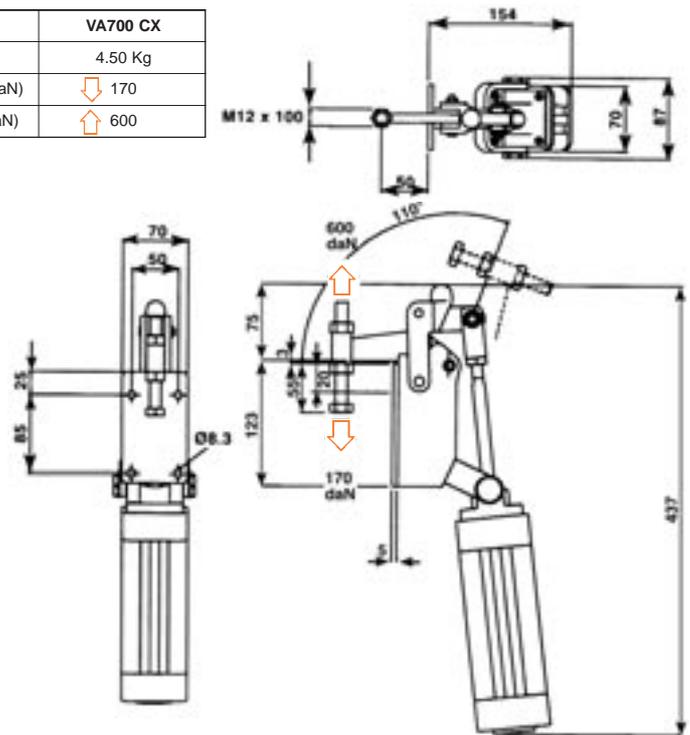
Arm:
The spindle is in a fixed position.

Base:
Front mounting.

Nominal holding force:
700 daN.

Weight:
4.50 Kg.

Stroke sensing:
Contact Brauer for further details.

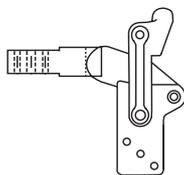


ALTERNATIVE ARM TYPES CAN BE SUPPLIED

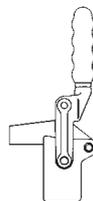
CYLINDERS WITH SCRAPER SEALS ARE AVAILABLE ON REQUEST



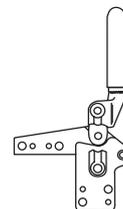
SPECIAL VA2400T



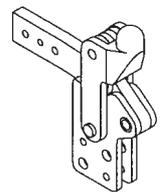
SPECIAL VA1200



SPECIAL VA2400/1A



SPECIAL VA700/1A



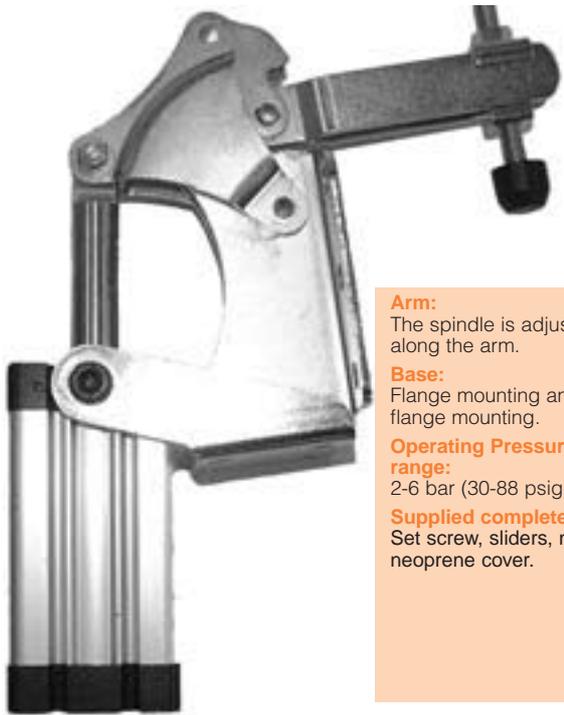
SPECIAL VA700



PNEUMATIC VERTICAL SLIM-LINE TOGGLE CLAMPS

- Space saving design
- Can be mounted vertically or horizontally
- Fitted with double-acting Norgren or Festo pneumatic cylinders
- Replaceable cylinders
- Magnetic piston for sensor-position monitoring
- Adjustable speed
- Clamp zinc-plated and passivated
- Stainless steel rivets running in case-hardened bushes
- Bearings pre-greased
- Complete with heat-treated, zinc-plated pressure screws

PNEUMATIC SLIM LINE TOGGLE CLAMP

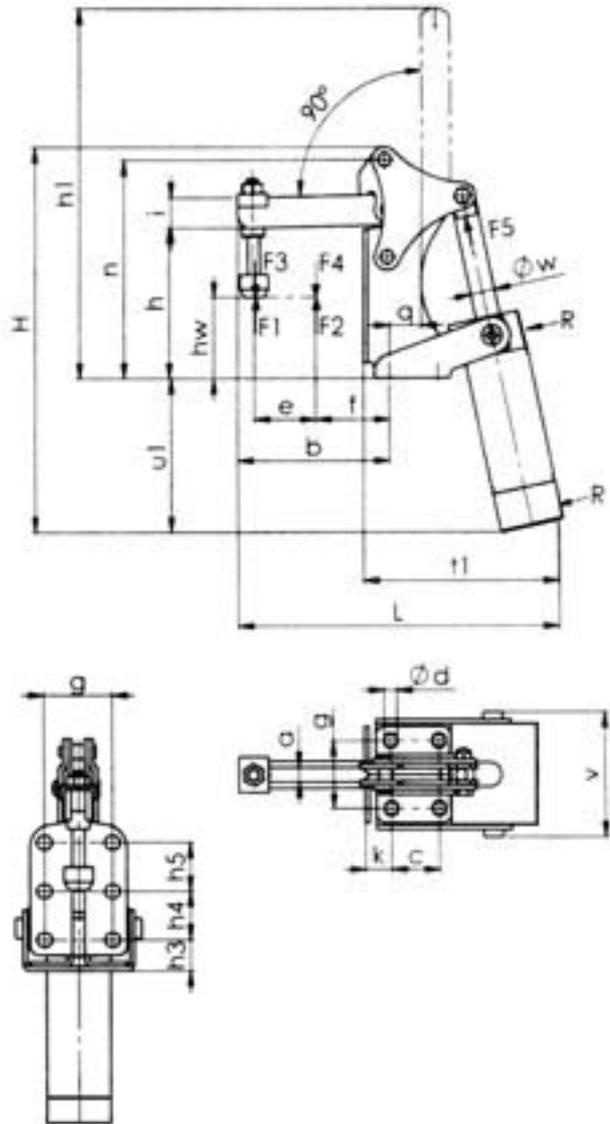


Arm:
The spindle is adjustable along the arm.

Base:
Flange mounting and front flange mounting.

Operating Pressure range:
2-6 bar (30-88 psig)

Supplied complete with:
Set screw, sliders, nuts & neoprene cover.



STROKE SENSING SWITCH		
PART NO.	CYLINDER STROKE	CYLINDER PISTON DIA.
M/50/LSU/CP Ø25	42	25
M/50/LSU/CP Ø32	52	32
M/50/LSU/CP Ø40	62	40

MODEL	F1(kN)	F2(kN)	F3(kN)	F4(kN)	F5(kN)	Vn*	HEIGHT	WIDTH	SCREW	WGT(g)	a	b
V100VX	1.0	1.2	0.7	1.0	0.30	0.26	170	130	M6x35	800	6	40
V200VX	1.4	2.5	0.6	1.1	0.50	0.35	205	160	M8x45	1100	8	65
V300VX	2.0	3.0	1.5	2.2	0.75	0.80	260	220	M8x65	1600	10	85

MODEL	c	dia. d	e	f	g	h	h1	h3	h4	h5	hw	i	k	n	q	t1	u1	v	dia.w
V100VX	12.5	5.5	27	24	27	65	145	16	12.5	12.5	37-46	12	16	94	8	90	70	62	10
V200VX	16	6.5	42	30	25.4	72	185	18	16	-	38-50	18	16	108	13	105	90	70	12
V300VX	32	8.5	52	40	45	100	240	22	32	32	50-79	20	18	144	20	135	105	85	16



PNEUMATIC VERTICAL AND PUSH-PULL CLAMPS

- **Features and Specifications:**

Vertical models V75X, V150X, V250X and V450X are of zinc plated pressed steel construction and have compact cylinders without tie-rods. The heavier duty models V750X, V1750X and V2000X are of fabricated construction with tie-roded cylinders.

The main components of push-pull models P600X, P1200X and P2500X are machined castings for precision of operation and for durability. The plungers are of steel, their precision ground diameter running in a close-toleranced hole in the s.g. iron base casting.

- **Installation:**

While the cylinders of models V75X, V150X, V250X, V450X, P600X, P1200X and P2500X can be operated with dry air, air lubrication will extend cylinder life on these models and is a requirement for models V750X, V1750X and V2000X.

The air pressure operating range of pneumatic clamps is 30-90 psi.

PNEUMATIC VERTICAL AND PUSH-PULL CLAMPS

PNEUMATIC VERTICAL CLAMPS

MODEL V75X



Arm:
The spindle position is adjustable along the arm.

Base:
Flanged.

Nominal Holding Force:
75 daN

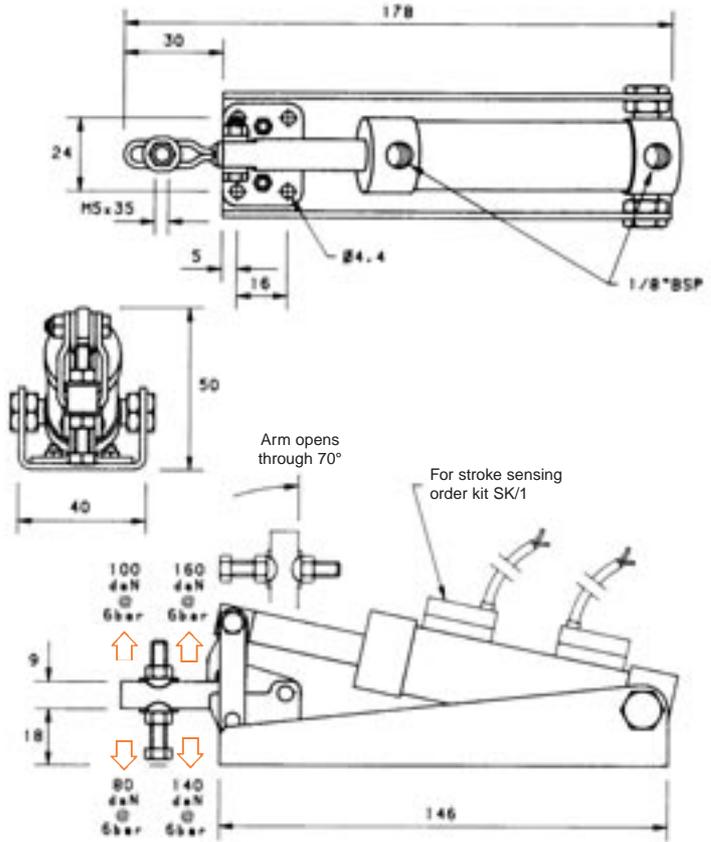
Operating pressure range:
2-6 bar (30-88 p.s.i.g.)

Max. cycles/min. at 6 bar:
40.

Swept volume per cycle:
0.02 L³ (1.2 cu. in.)

Weight:
0.40 Kg

Supplied complete with:
MB0535 Setscrew & nuts.
FW05/10 Flanged washers.
For stroke sensing order SK/1 Sensing Kit.
See "Accessories" for other items.



PNEUMATIC VERTICAL CLAMPS

MODEL V150X



Arm:
The spindle position is adjustable along the arm.

Base:
Flanged.

Nominal Holding Force:
150 daN

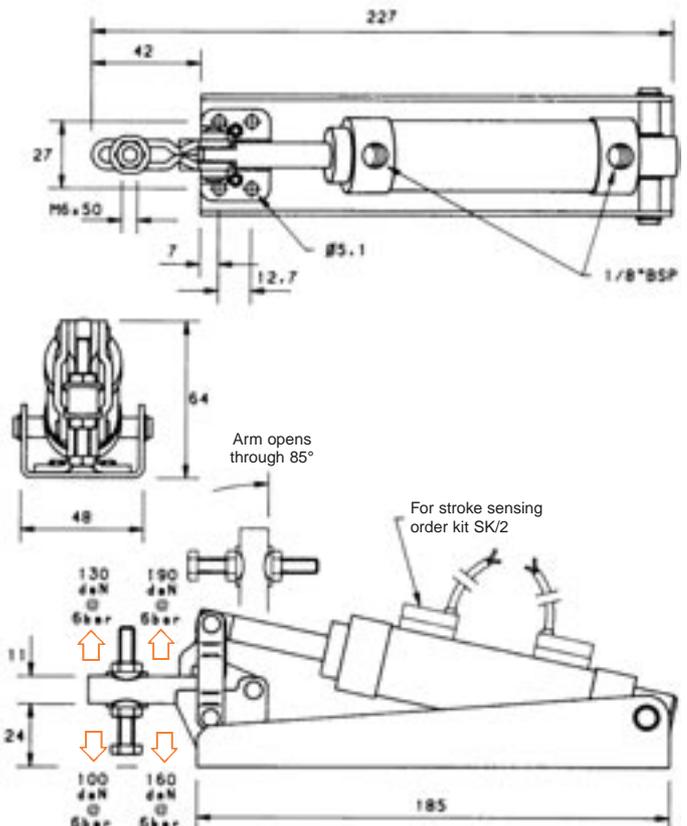
Operating pressure range:
2-6 bar (30-88 p.s.i.g.)

Max. cycles/min. at 6 bar:
60.

Swept volume per cycle:
0.04 L³ (2.4 cu. in.)

Weight:
0.65 Kg

Supplied complete with:
MB0650 Setscrew & nuts.
FW06/12 Flanged washers.
For stroke sensing order SK/2 Sensing Kit.
See "Accessories" for other items.



PNEUMATIC VERTICAL AND PUSH-PULL CLAMPS

PNEUMATIC VERTICAL CLAMPS

MODEL V250X



Arm:
The spindle position is adjustable along the arm.

Base:
Flanged.

Nominal Holding Force:
250 daN

Operating pressure range:
2-6 bar (30-88 p.s.i.g.)

Max. cycles/min. at 6 bar:
55.

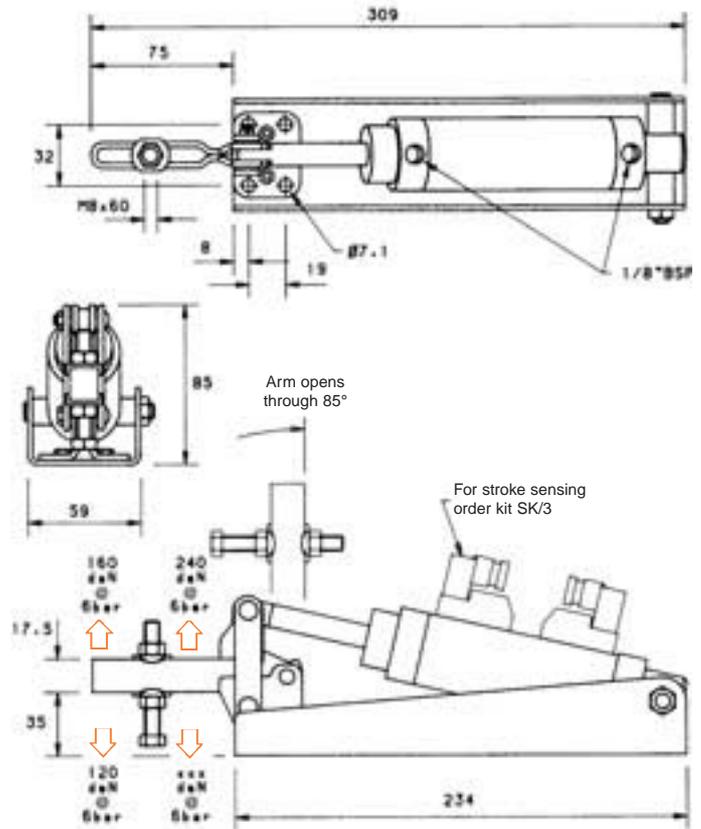
Swept volume per cycle:
0.09 L³ (5.5 cu. in.)

Weight:
1.20 Kg

Supplied complete with:
MB0860 Setscrew & nuts
FW08/15 Flanged washers.

For stroke sensing order SK/3 Sensing Kit.

See "Accessories" for other items.



PNEUMATIC VERTICAL CLAMPS

MODEL V450X



Arm:
The spindle position is adjustable along the arm.

Base:
Flanged.

Nominal Holding Force:
450 daN

Operating pressure range:
2-6 bar (30-88 p.s.i.g.)

Max. cycles/min. at 6 bar:
55.

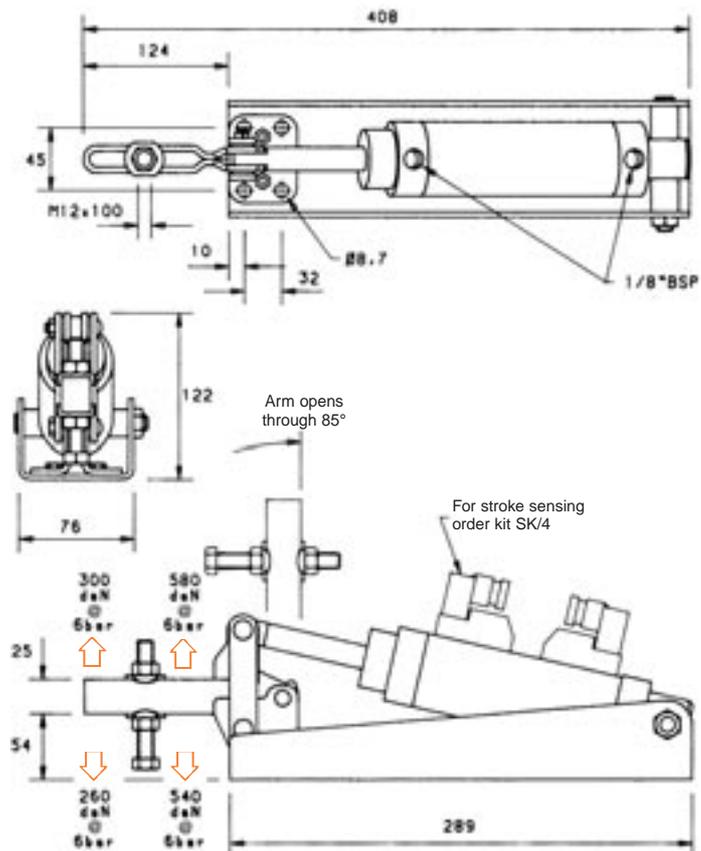
Swept volume per cycle:
0.27 L³ (16.8 cu. in.)

Weight:
2.75 Kg

Supplied complete with:
MB12100 Setscrew & nuts.
FW12/23 Flanged washers.

For stroke sensing order SK/4 Sensing Kit.

See "Accessories" for other items.



PNEUMATIC VERTICAL AND PUSH-PULL CLAMPS

PNEUMATIC VERTICAL CLAMPS

MODEL V750X



Arm:
Solid —no spindle supplied.

Base:
Front mounting.

Operating pressure range:
2-6 bar (30-88 p.s.i.g.)

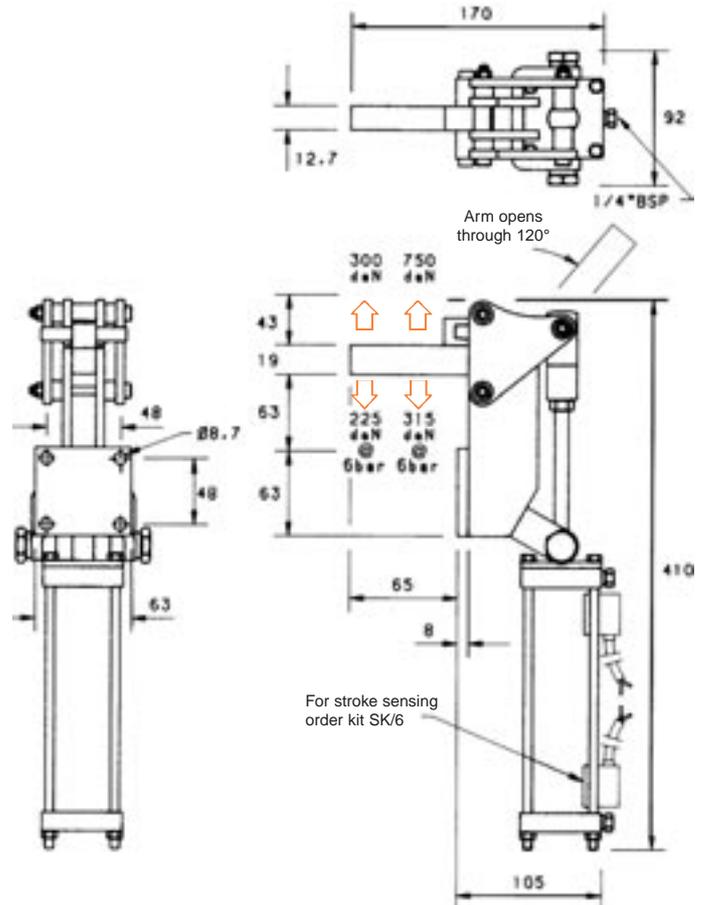
Max. cycles/min. at 6 bar:
30.

Swept volume per cycle:
0.27 L³ (16.5 cu. in.)

Nominal Holding Force:
750 daN

Weight:
3.85 Kg

For stroke sensing order SK/6 Sensing Kit.
See "Accessories" for other items.



PNEUMATIC VERTICAL CLAMPS

MODEL V1750X



Arm:
Solid — no spindle supplied.

Base:
Front mounting.

Operating pressure range:
2-6 bar (30-88 p.s.i.g.)

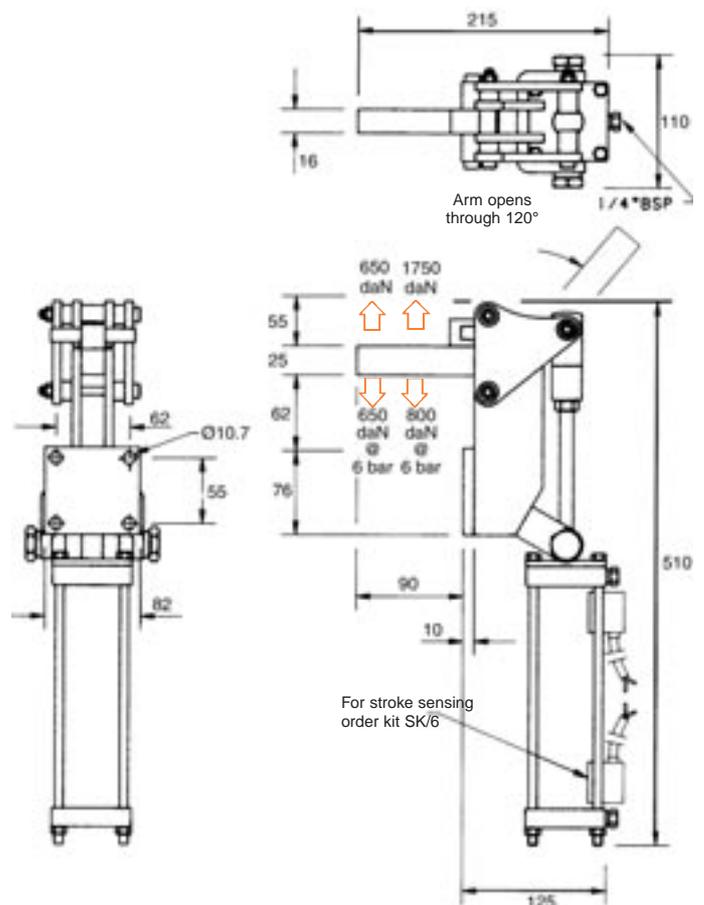
Max. cycles/min. at 6 bar:
15.

Swept volume per cycle:
0.75 L³ (45.7 cu. in.)

Nominal Holding Force:
1750 daN

Weight:
6.80 Kg

For stroke sensing order SK/6 Sensing Kit.
See "Accessories" for other items.



PNEUMATIC VERTICAL AND PUSH-PULL CLAMPS

PNEUMATIC VERTICAL CLAMPS

MODEL V2000X



Arm:
The spindle position is adjustable along the arm.

Base:
Flanged.

Nominal Holding Force:
2000 daN

Operating pressure range:
2-6 bar (30-88 p.s.i.g.)

Max. cycles/min. at 6 bar:
10.

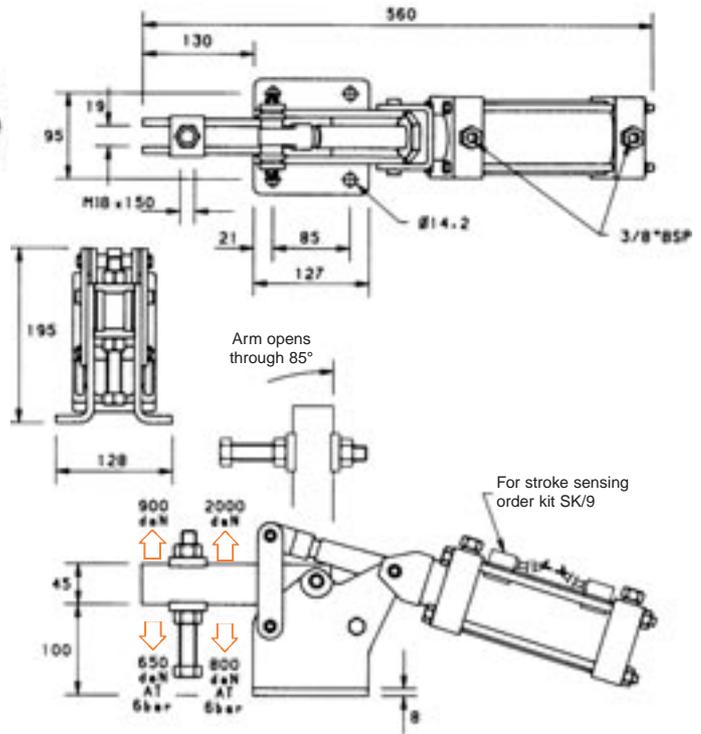
Swept volume per cycle:
0.76 L³ (46.4 cu. in.)

Weight:
10.30 Kg

Supplied complete with:
MB18 Setscrew & nuts.
Flanged washers.

For stroke sensing order SK/9 Sensing Kit.

See "Accessories" for other items.



PNEUMATIC PUSH-PULL CLAMPS

MODEL P600X



Plunger:
Locks in fully extended position only.

Base:
Body mounting.

Nominal Holding Force:
600 daN

Operating pressure range:
2-6 bar (30-88 p.s.i.g.)

Max. cycles/min. at 6 bar:
60.

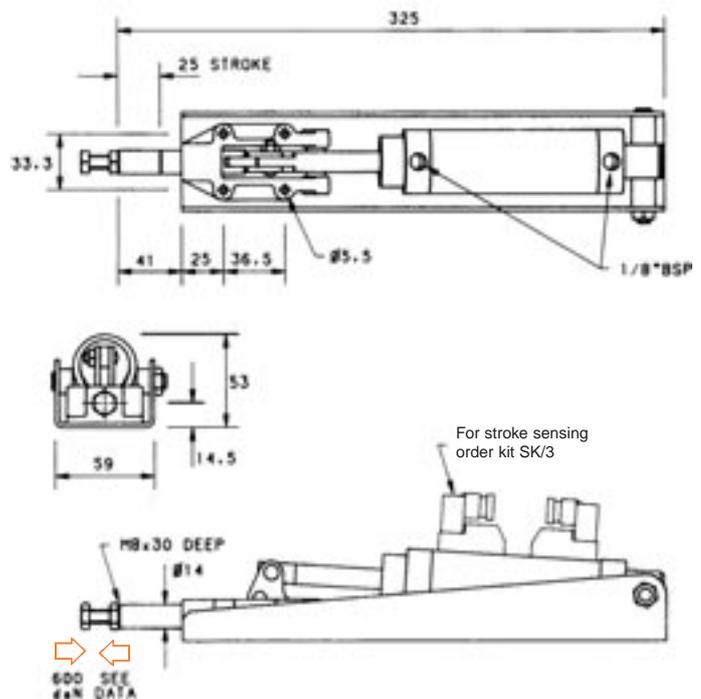
Swept volume per cycle:
0.09 L³ (5.5 cu. in.)

Weight:
1.45 Kg

Supplied complete with:
MB0840 Setscrew & nut.

For stroke sensing order SK/3 Sensing Kit.

See "Accessories" for other items.



DATA

With 6 bar air supply pressure the output force is:	daN
Fully retracted	20
5 mm extended	32
10 mm "	43
15 mm "	65
20 mm "	87
22 mm "	100
24 mm "	150
Fully extended	253

PNEUMATIC VERTICAL AND PUSH-PULL CLAMPS

PNEUMATIC PUSH-PULL CLAMPS

MODEL P1200X



Plunger:
Locks in fully extended position only.

Base:
Body mounting.

Nominal Holding Force:
1200 daN

Operating pressure range:
2-6 bar (30-88 p.s.i.g.)

Max. cycles/min. at 6 bar:
50.

Swept volume per cycle:
0.28 L³ (16.8 cu. in.)

Weight:
3.70 Kg

Supplied complete with:
MB1050 Setscrew & nut.

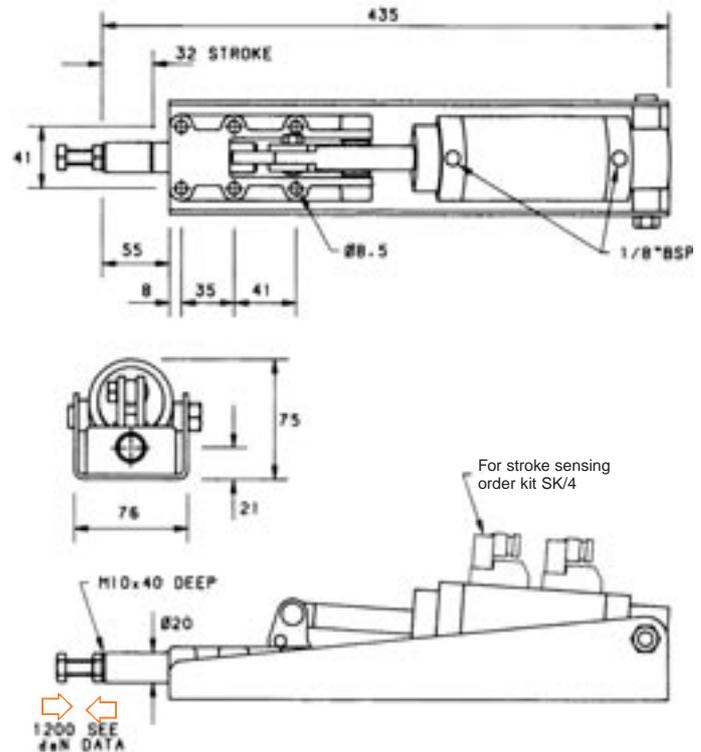
For stroke sensing order SK/4 Sensing Kit.

See "Accessories" for other items.

DATA

With 6 bar air supply pressure the output force is:

Stroke	daN
Fully retracted	110
5 mm extended	120
10 mm "	140
15 mm "	165
20 mm "	195
25 mm "	230
27 mm "	255
29 mm "	300
31 mm "	430
Fully extended	1150



PNEUMATIC PUSH-PULL CLAMPS

MODEL P2500X



Plunger:
Locks in fully extended position only.

Base:
Body mounting.

Nominal Holding Force:
2500 daN

Operating pressure range:
2-6 bar (30-88 p.s.i.g.)

Max. cycles/min. at 6 bar:
45.

Swept volume per cycle:
0.6 L³ (36.6 cu. in.)

Weight:
7.40 Kg

Supplied complete with:
MB1250 Setscrew & nut.

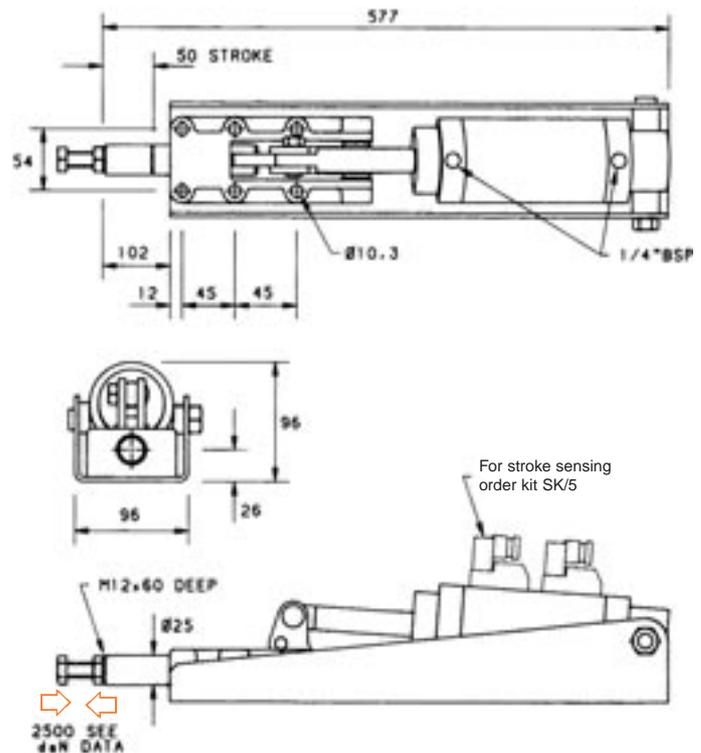
For stroke sensing order SK/5 Sensing Kit.

See "Accessories" for other items.

DATA

With 6 bar air supply pressure the output force is:

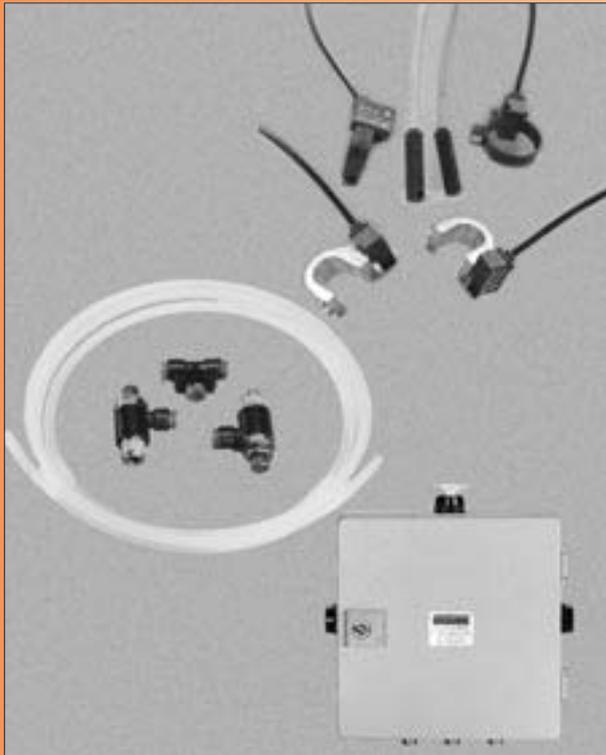
Stroke	daN
Fully retracted	130
5 mm extended	140
10 mm "	160
15 mm "	175
20 mm "	200
25 mm "	210
30 mm "	245
35 mm "	265
40 mm "	325
45 mm "	420
47 mm "	490
49 mm "	700
Fully extended	1450





PNEUMATIC SWING CLAMPS

- 90° Swing angle over workpiece
- Holding forces from 20 daN to 280 daN
- Clamping strokes of 10mm and 20mm
- Operating pressure range 2-10 bar

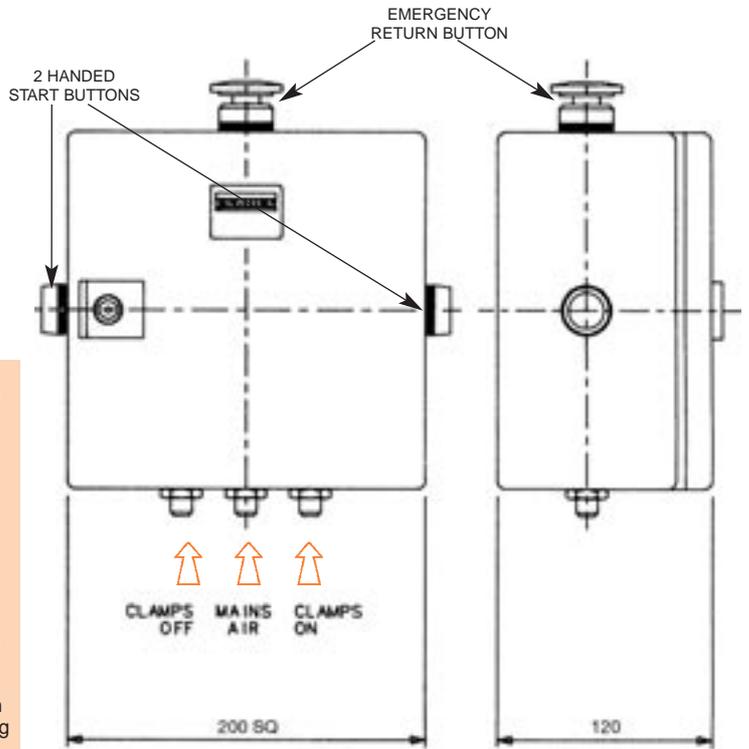


PNEUMATIC ACCESSORIES

PNEUMATIC ACCESSORIES

PNEUMATIC TWO HAND SAFETY CONTROL MODULE

MODEL PN SS1



The two-handed safety start device is designed specifically for use with Brauer Pneumatic Clamps and Presses. It is built in a robust enclosure with control valves to control a number of pneumatic products. Combined with simple installation and safety it is the ideal control device for Pneumatic Clamps and Pneumatic Press Actuation.

Principle

To provide operator protection from the dangerous operating cycle of pneumatic clamps and presses by ensuring both hands are away from the danger zone when the operating cycle is initiated.

Operation

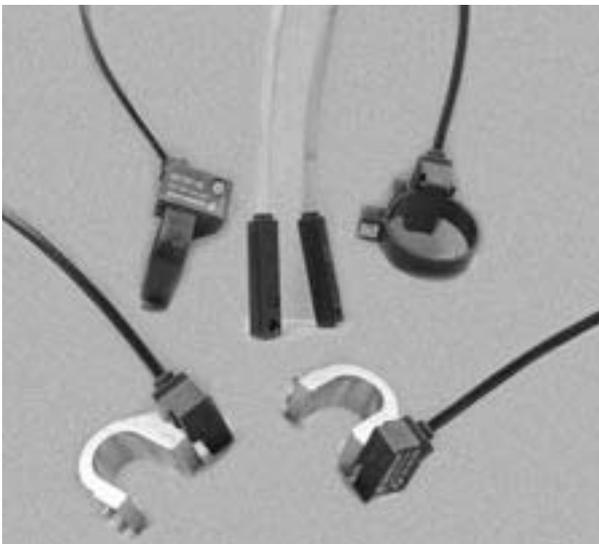
Simultaneously pressing both buttons generates the control signal. The control signal operates a high flow valve in the system which allows air to operate the clamping system or press.

Depressing the mushroom button on top of the system will reset the control device and allow the clamps to return.

SEE CURCUIT LAYOUT DRAWING ON PAGE 25

CLAMPING PRODUCTS

STROKE SENSING KITS



KIT NUMBER	USED CLAMP MODEL
SK/1	V75X
SK/2	V150X
SK/3	V250X, P600X
SK/4	V450X, P1200X
SK/5	P2500X
SK/6	V750X, V1750X
SK/7	PNS20-10A, PNS20-10C
SK/8	PNS32-10A, PNS32-10C PNS40-20A, PNS40-20C PNS50-20A, PNS50-20C PNS63-20A, PNS63-20C
SK/9	V2000X
SK/10	VA300BX, VA700CX VA1200CX, VA2400CX

NOTE: EACH SK KIT INCLUDES 2 INDIVIDUAL SENSORS

PNEUMATIC CYLINDER CONTROL VALVES



Cylinder Exhaust Port Flow Control Valves

PN FC1 – 6mm O/D Push In - M5 Thread

PN FC2 – 6mm O/D Push In - 1/8" BSPT Thread

PN FC3 – 6mm O/D Push In - 1/4" BSPT Thread

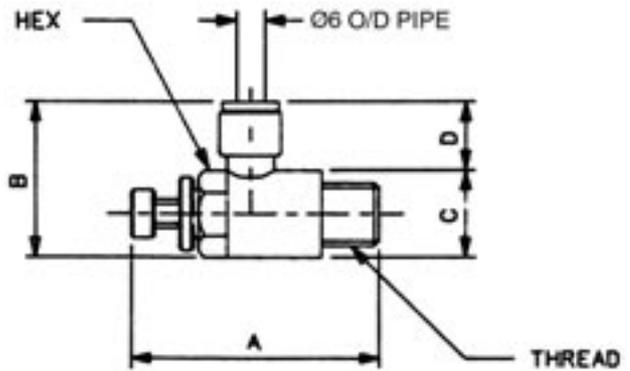
PN FC4 – 6mm O/D Push In - 3/8" BSPT Thread

Tee Connectors

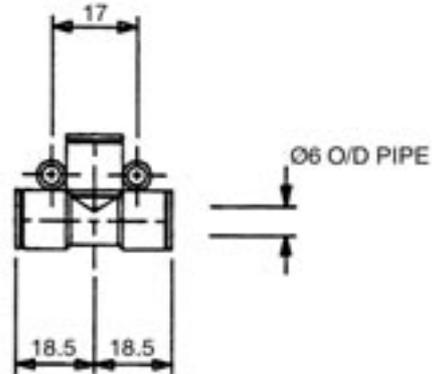
PN T1 – 6mm O/D Push In - Tee Connector

Tubing

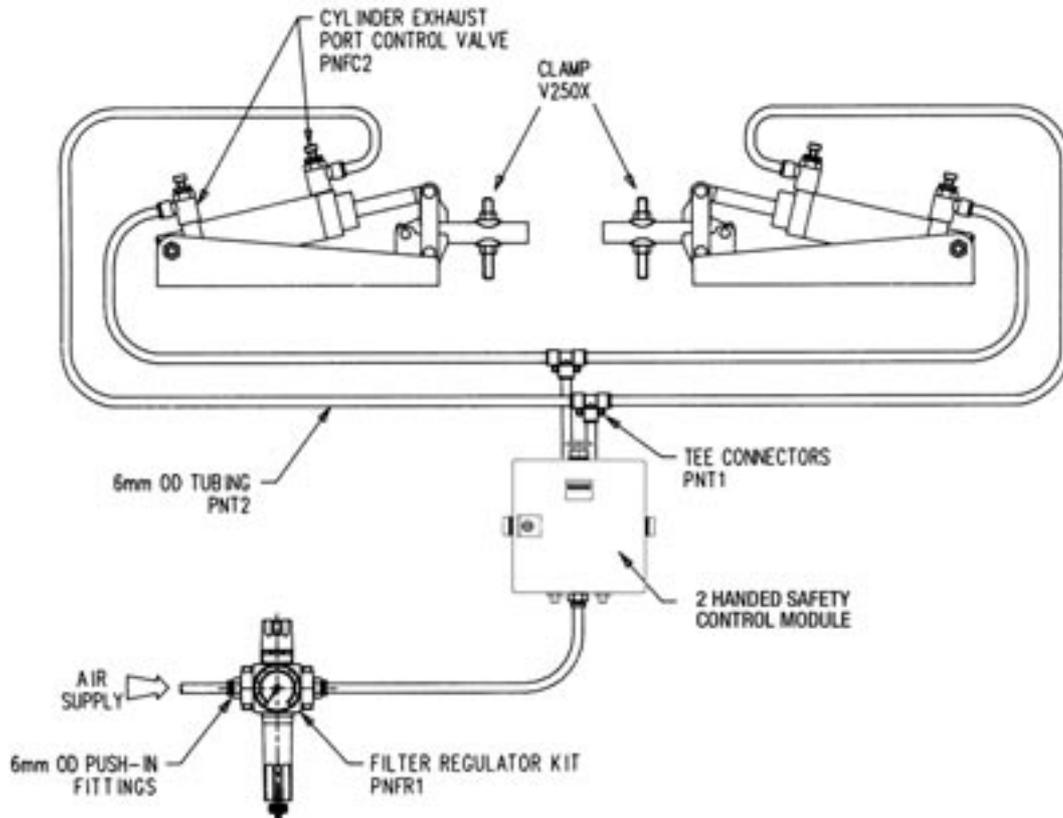
PN T2 – 6mm O/D x 4mm I/D x 30 Metres Natural Colour Nylon Tubing

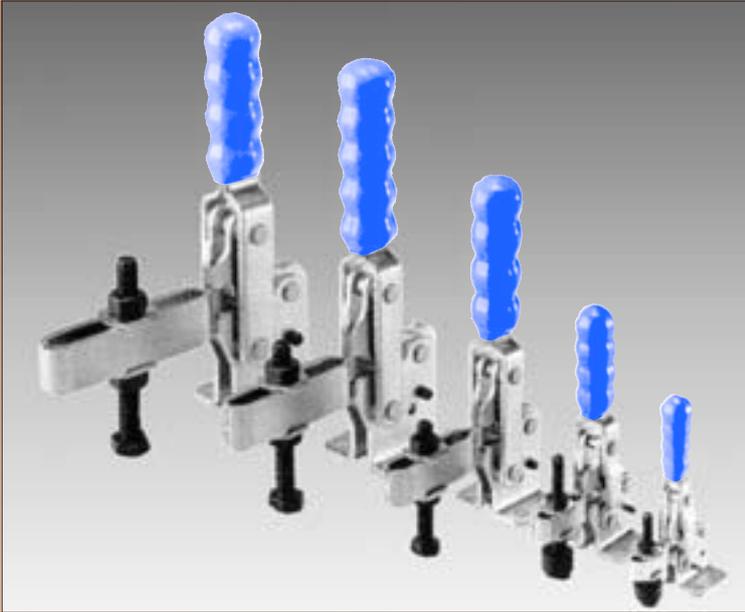


PART No	A	B	C	D	HEX	THREAD
PNFC1	31.0	25.6	10.0	16.8	8.0	M5X0.8
PNFC2	43.0	31.8	15.0	16.8	14.0	1/8
PNFC3	50.5	36.0	19.2	16.8	18.0	1/4
PNFC4	50.5	36.0	19.2	16.8	18.0	3/8



PNEUMATIC DIAGRAM





VERTICAL CLAMPS

- **Features:**

Vertical clamps are the most popular type of toggle clamp, the arm and handle rotating in the same direction when applied and retracted, and high clamping and holding forces being generated.

A comfortable, cushioned PVC handle grip is fitted to all Vertical clamps.

Models V75, V150, V250, V350, V450 and V550 feature a base which accurately guides the clamping arm, and a closed end to the arm for rigidity of construction and to retain the spindle or setscrew if it should loosen.

The angles through which the clamping arm and handle open can be altered by re-positioning or removing the stop pin.

- **Specification:**

The main components are of zinc plated and passivated steel.

Rivets are of stainless steel, which burnishes and work-hardens with use, the rivets rotating in hardened bushes in the larger clamps. Setscrews are of chemi-black coated steel.

VERTICAL CLAMPS

V70 SERIES

MODEL V70/2BT

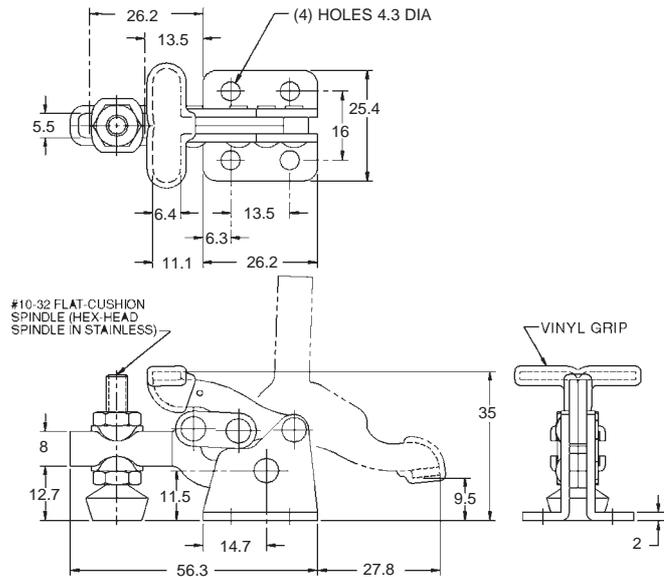


Holding Force:
70 daN

T-Handle:
Miniature hold-down clamp with a unique finger-grip T-handle. Open arm allows spindle adjustment. Arm opens 92° while handle moves 175°.

Shipping weight:
0.1 Kg

Supplied with:
#10-32 flat-cushion spindle 16112-FC.
2 TW flanged washers.



V70 SERIES

MODEL V70/2BTSS

STAINLESS
STEEL



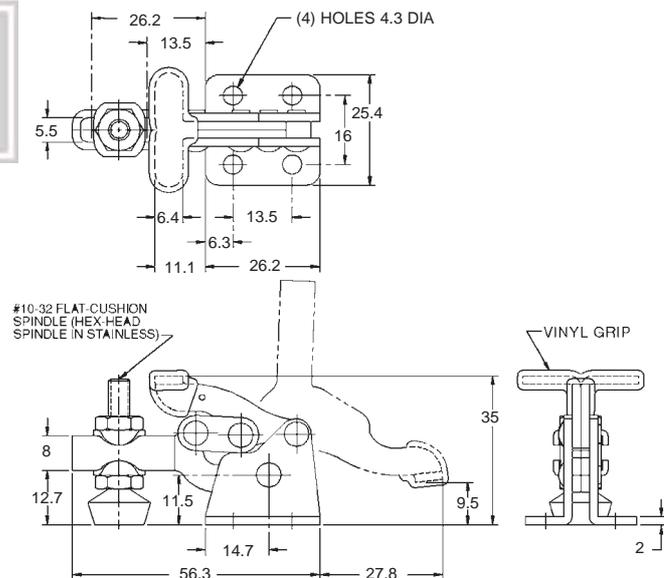
Holding Force:
70 daN

T-Handle:
Miniature hold-down clamp with a unique finger-grip T-handle. Open arm allows spindle adjustment. Arm opens 92° while handle moves 175°.

Shipping weight:
0.1 Kg

Supplied with:
#10-32 flat-cushion spindle 16112-FC.
2 TW flanged washers.

Material: BS 304 S15



V75 SERIES

MODEL V75/1B



Arm:
The spindle position is adjustable along the arm.

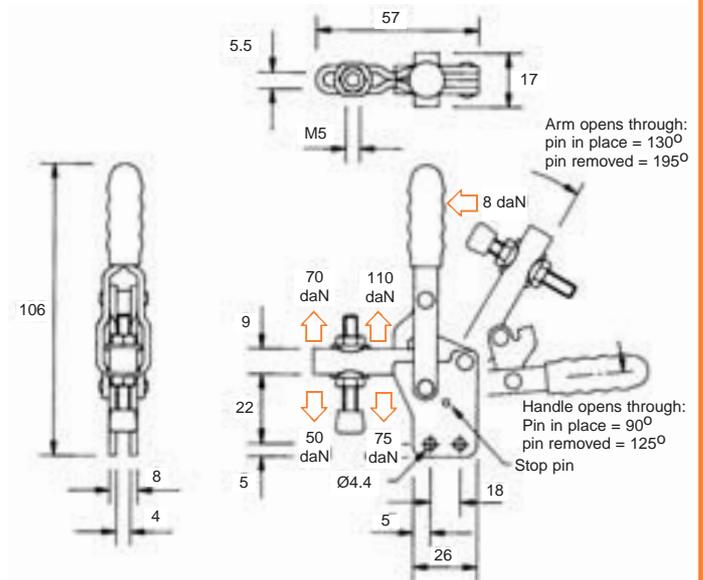
Base:
Straight.

Nominal Holding Force:
75 daN

Weight:
0.05 Kg

Supplied complete with:
MB0535 Setscrew & nuts.
NC/05 Neoprene cover.
FW05/10 Flanged washers.

See "Accessories" for other items.



VERTICAL CLAMPS

V75 SERIES

MODEL V75/1BSS

NEW

STAINLESS
STEEL



Arm:
The spindle position is adjustable along the arm.

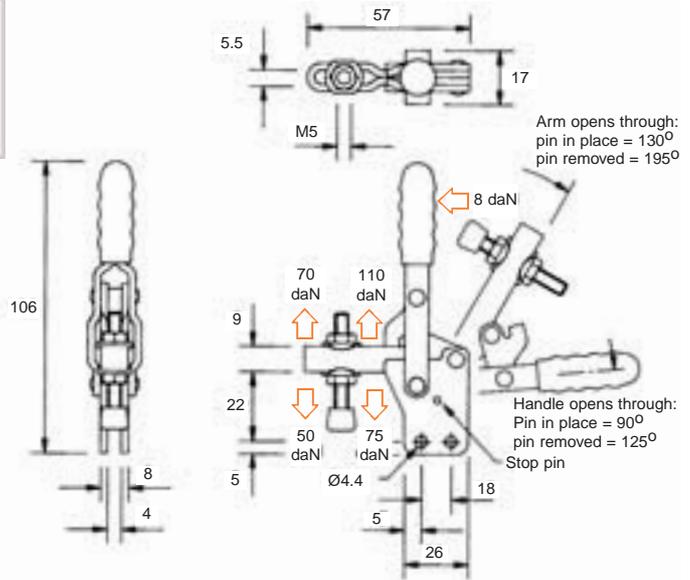
Base:
Straight.

Nominal Holding Force:
75 daN

Weight:
0.05 Kg

Supplied complete with:
MB0535 Setscrew & nuts.
NC/05 Neoprene cover.
FW05/10 Flanged washers.

Material: BS 304 S15

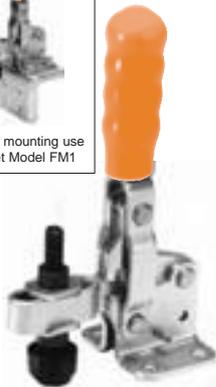


V75 SERIES

MODEL V75/2B



for front mounting use
bracket Model FM1



Arm:
The spindle position is adjustable along the arm.

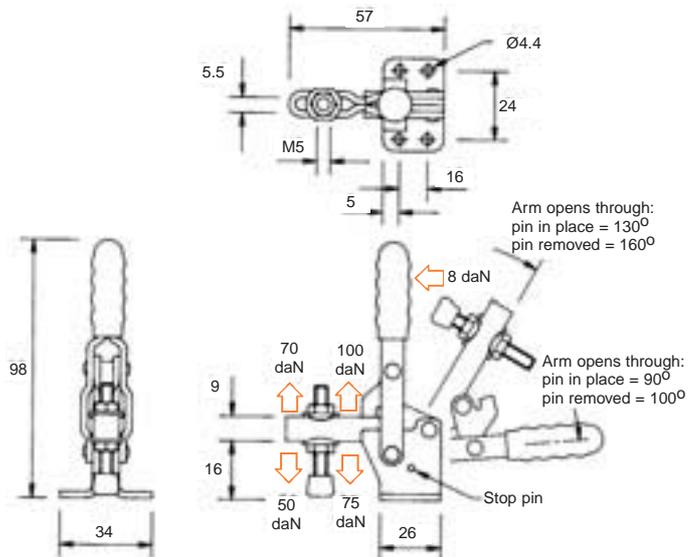
Base:
Flanged.

Nominal Holding Force:
75 daN

Weight:
0.05 Kg

Supplied complete with:
MB0535 Setscrew & nuts.
NC/05 Neoprene cover.
FW05/10 Flanged washers.

See "Accessories" for other items.



V75 SERIES

MODEL V75/2BSS

STAINLESS
STEEL



Arm:
The spindle position is adjustable along the arm.

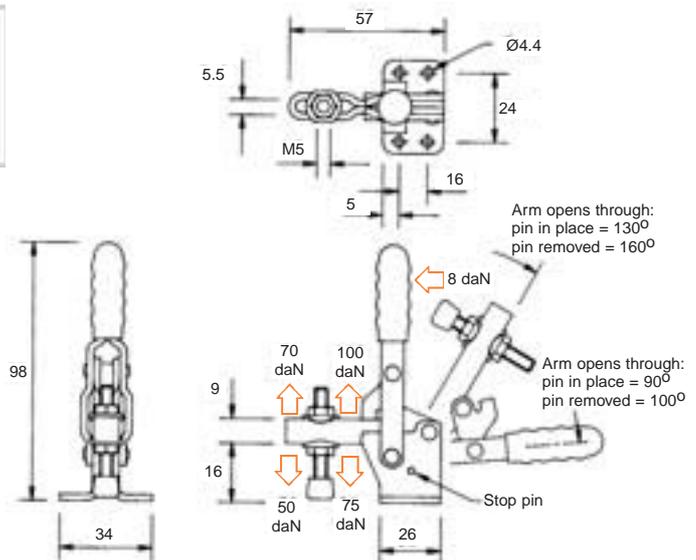
Base:
Flanged.

Nominal Holding Force:
75 daN

Weight:
0.05 Kg

Supplied complete with:
Setscrew & nuts.
Neoprene cover.
Flanged washers.

Material:
BS 304 S15



VERTICAL CLAMPS

V100 SERIES

MODEL V100/1B



Arm:
The spindle position is adjustable along the arm.

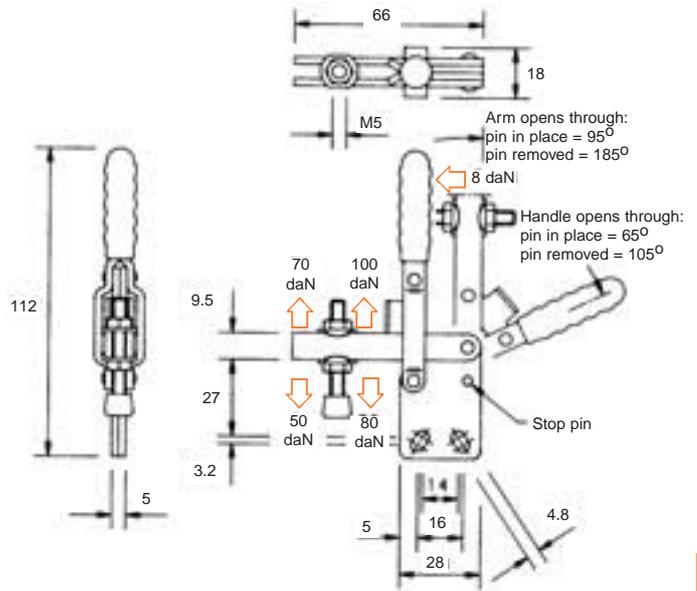
Base:
Straight.

Nominal Holding Force:
100 daN

Weight:
1.10 Kg

Supplied complete with:
MB0535 Setscrew & nuts.
NC/05 Neoprene cover.
FW05/10 Flanged washers.

See "Accessories" for other items.



V100 SERIES

MODEL V100/1C



Arm:
The spindle is in a fixed position.

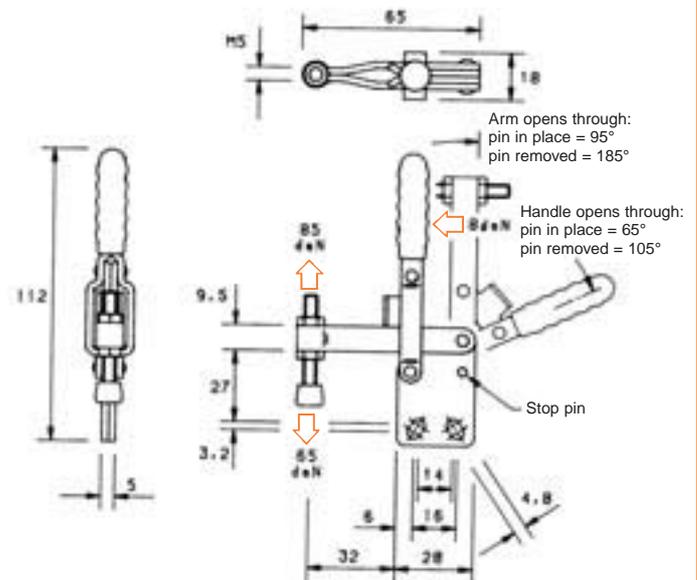
Base:
Straight.

Nominal Holding Force:
100 daN

Weight:
0.10 Kg

Supplied complete with:
MB0535 Setscrew & nuts.
NC/05 Neoprene cover.

See "Accessories" for other items.



V100 SERIES

MODEL V100/2B



Arm:
The spindle position is adjustable along the arm.

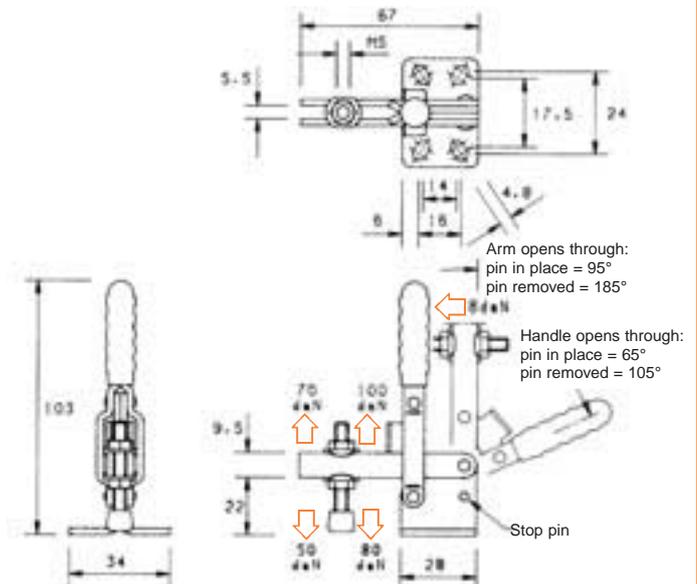
Base:
Flanged.

Nominal Holding Force:
100 daN

Weight:
0.10 Kg

Supplied complete with:
MB0535 Setscrew & nuts.
NC/05 Neoprene cover.
FW05/10 Flanged washers.

See "Accessories" for other items.



VERTICAL CLAMPS

V100 SERIES

MODEL V100/2C



Arm:
The spindle is in a fixed position.

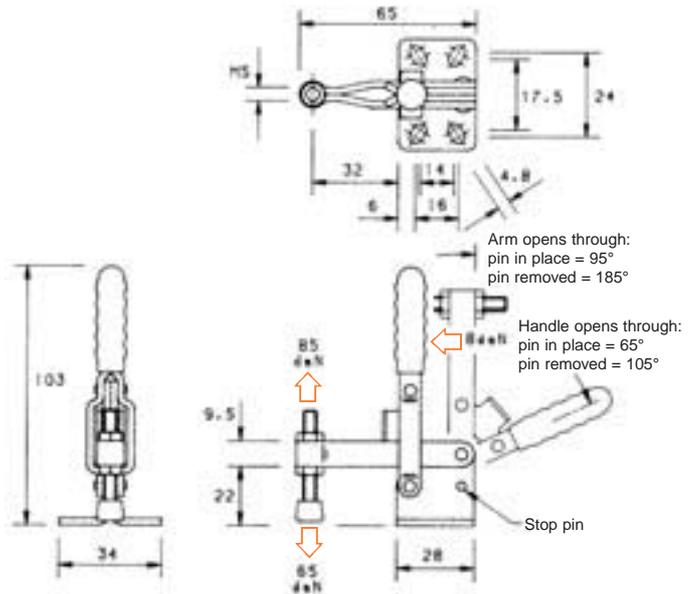
Base:
Flanged.

Nominal Holding Force:
100 daN

Weight:
0.10 Kg

Supplied complete with:
MB0535 Setscrew & nuts.
NC/05 Neoprene cover.

See "Accessories" for other items.



V100 SERIES

MODEL V100/3B



Arm:
The spindle position is adjustable along the arm.

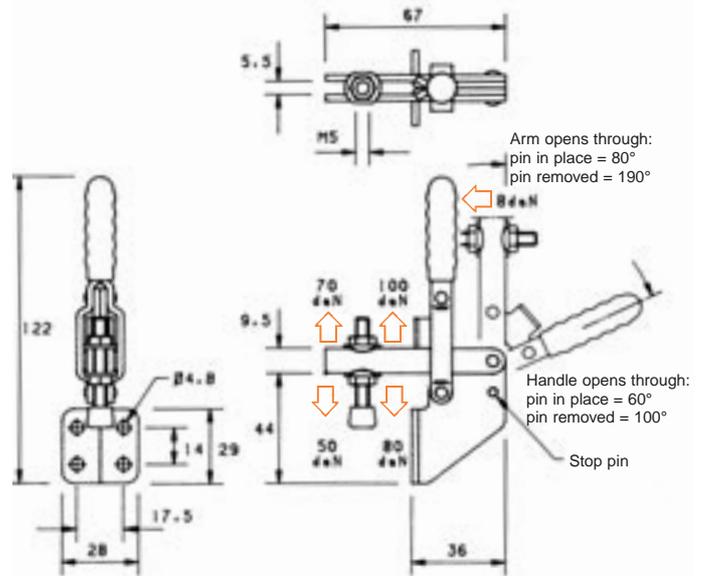
Base:
Front mounting.

Nominal Holding Force:
100 daN

Weight:
0.11 Kg

Supplied complete with:
MB0535 Setscrew & nuts.
NC/05 Neoprene cover.
FW05/10 Flanged washers.

See "Accessories" for other items.



V100 SERIES

MODEL V100/3C



Arm:
The spindle is in a fixed position.

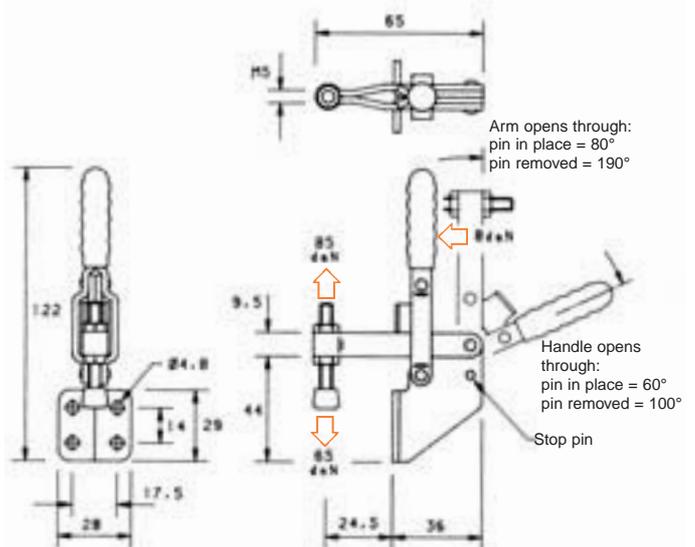
Base:
Front mounting.

Nominal Holding Force:
100 daN

Weight:
0.11 Kg

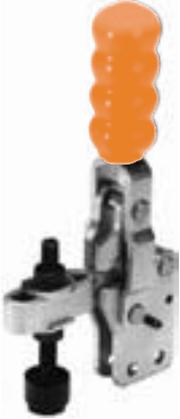
Supplied complete with:
MB0535 Setscrew & nuts.
NC/05 Neoprene cover.

See "Accessories" for other items.



VERTICAL CLAMPS

V150 SERIES MODEL V150/1B



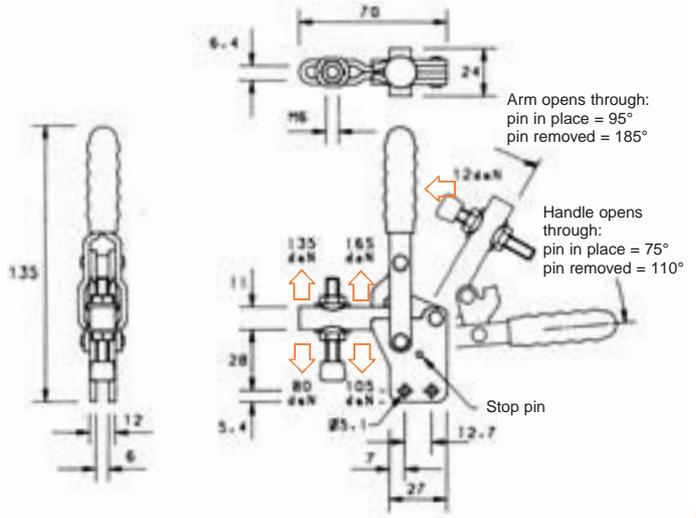
Arm:
The spindle position is adjustable along the arm.

Base:
Straight.

Nominal Holding Force:
150 daN

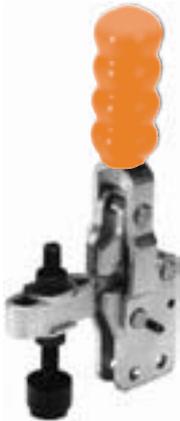
Weight:
0.15 Kg

Supplied complete with:
MB0650 Setscrew & nuts.
NC/06 Neoprene cover.
FW06/12 Flanged washers.
See "Accessories" for other items.



V150 SERIES MODEL V150/1BL

NEW



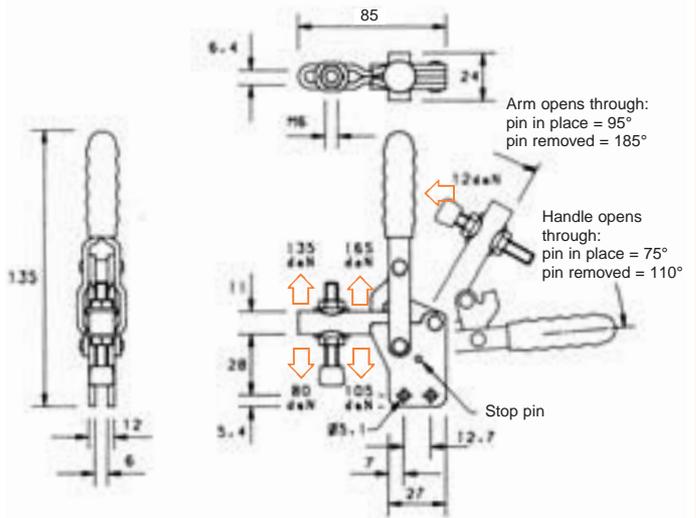
Arm:
The spindle position is adjustable along the arm. 15mm added to arm length over V150/1B model.

Base:
Straight.

Nominal Holding Force:
150 daN

Weight:
0.15 Kg

Supplied complete with:
MB0650 Setscrew & nuts.
NC/06 Neoprene cover.
FW06/12 Flanged washers.
See "Accessories" for other items.



V150 SERIES MODEL V150/1BSS

NEW



**STAINLESS
STEEL**

Arm:
The spindle position is adjustable along the arm.

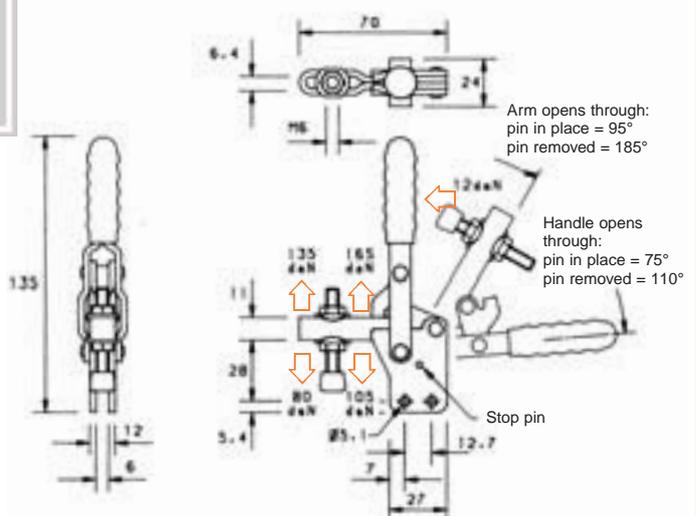
Base:
Straight.

Nominal Holding Force:
150 daN

Weight:
0.15 Kg

Supplied complete with:
MB0650 Setscrew & nuts.
NC/06 Neoprene cover.

Material: BS 304 S15



VERTICAL CLAMPS

V150 SERIES
MODEL V150/1C



Arm:
The spindle is in a fixed position.

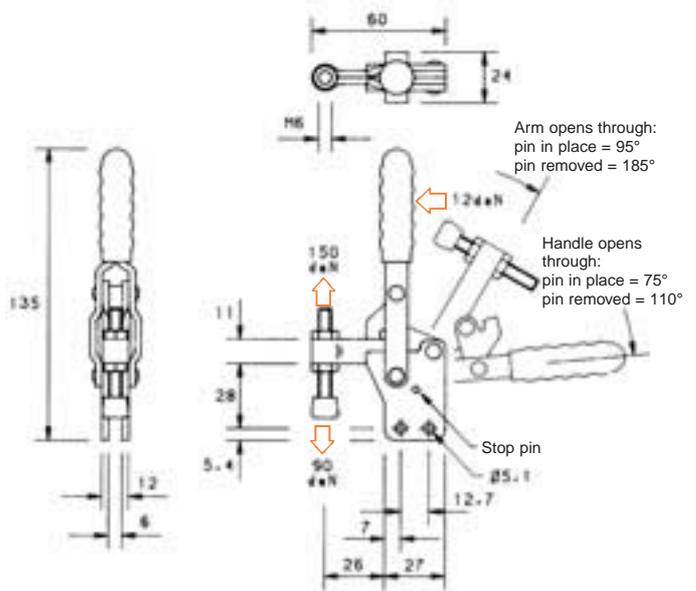
Base:
Straight.

Nominal Holding Force:
150 daN

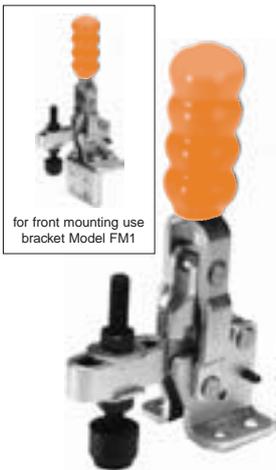
Weight:
0.15 Kg

Supplied complete with:
MB0650 Setscrew & nuts.
NC/06 Neoprene cover.

See "Accessories" for other items.



V150 SERIES
MODEL V150/2B



Arm:
The spindle position is adjustable along the arm.

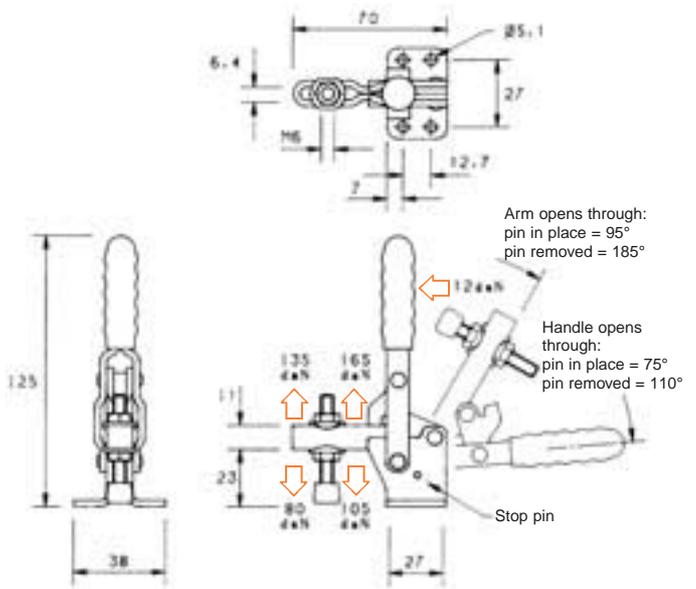
Base:
Flanged.

Nominal Holding Force:
150 daN

Weight:
0.15 Kg

Supplied complete with:
MB0650 Setscrew & nuts.
NC/06 Neoprene cover.
FW06/12 Flanged washers.

See "Accessories" for other items.



V150 SERIES
MODEL V150/2BL

NEW



Arm:
The spindle position is adjustable along the arm. 15mm added to arm length over V150/2B model.

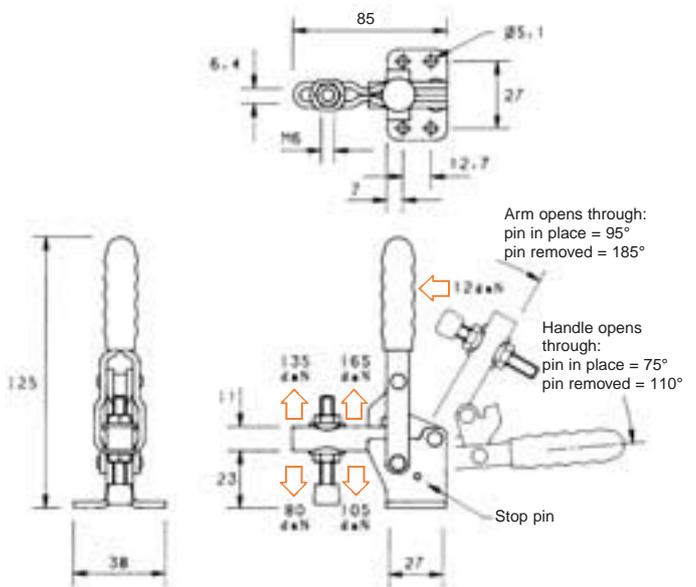
Base:
Flanged.

Nominal Holding Force:
150 daN

Weight:
0.15 Kg

Supplied complete with:
MB0650 Setscrew & nuts.
NC/06 Neoprene cover.
FW06/12 Flanged washers.

See "Accessories" for other items.



VERTICAL CLAMPS

V200 SERIES

MODEL V200/1C



Arm:
The spindle is in a fixed position.

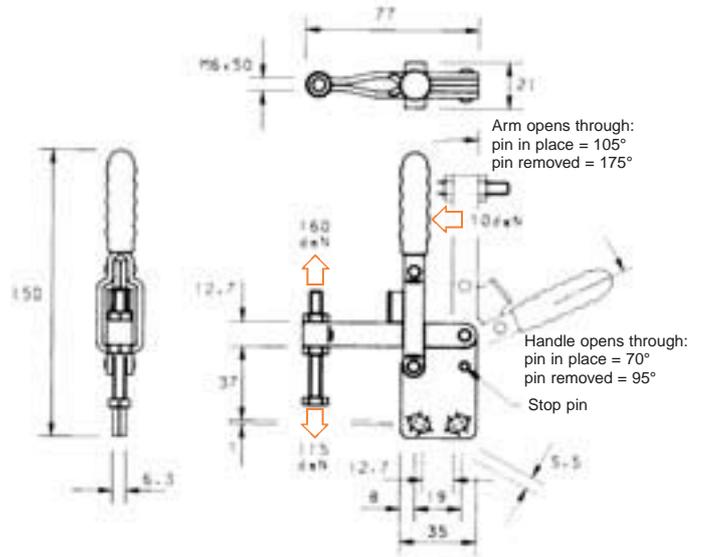
Base:
Straight.

Nominal Holding Force:
200 daN

Weight:
0.20 Kg

Supplied complete with:
MB0650 Setscrew & nuts.

See "Accessories" for other items.



V200 SERIES

MODEL V200/2B



Arm:
The spindle position is adjustable along the arm.

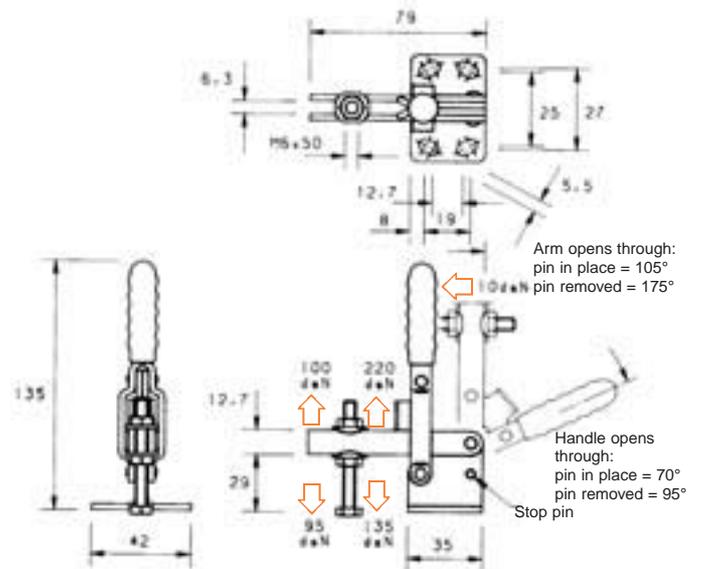
Base:
Flanged.

Nominal Holding Force:
200 daN

Weight:
0.20 Kg

Supplied complete with:
MB0650 Setscrew & nuts.
FW06/12 Flanged washers.

See "Accessories" for other items.



V200 SERIES

MODEL V200/2C



Arm:
The spindle is in a fixed position.

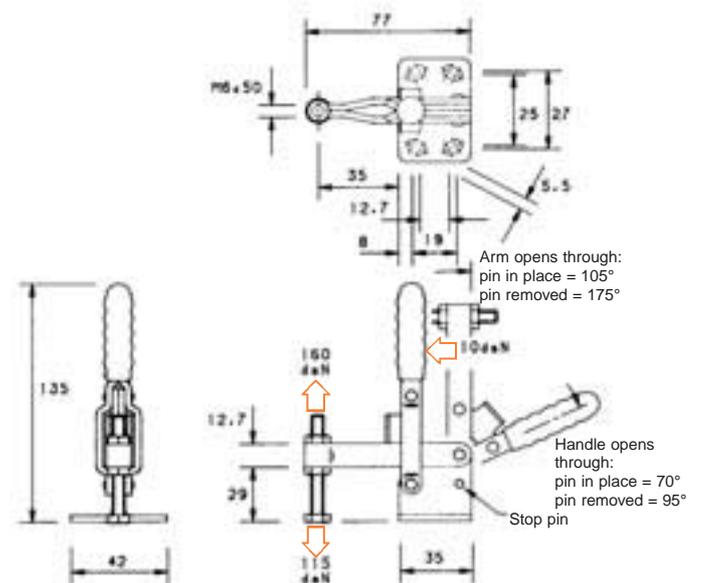
Base:
Flanged.

Nominal Holding Force:
200 daN

Weight:
0.20 Kg

Supplied complete with:
MB0650 Setscrew & nuts.
FW06/12 Flanged washers.

See "Accessories" for other items.



VERTICAL CLAMPS

V200 SERIES

MODEL V200/3B



Arm:
The spindle position is adjustable along the arm.

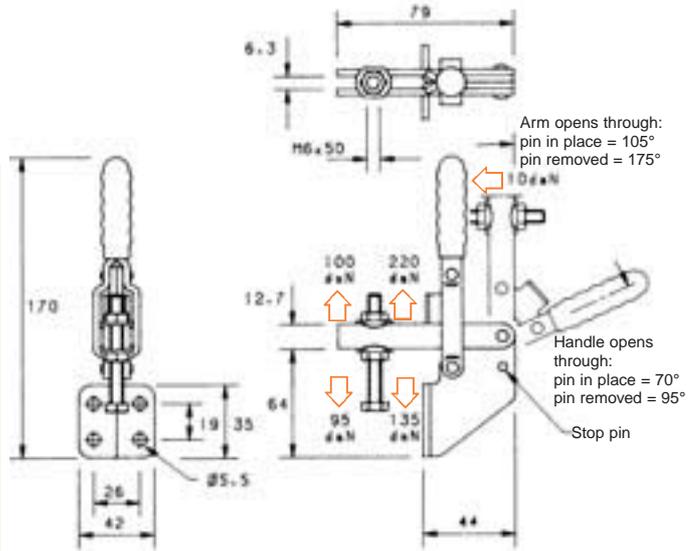
Base:
Front mounting.

Nominal Holding Force:
200 daN

Weight:
0.25 Kg

Supplied complete with:
MB0650 Setscrew & nuts.
FW06/12 Flanged washers.

See "Accessories" for other items.



V200 SERIES

MODEL V200/3C



Arm:
The spindle is in a fixed position.

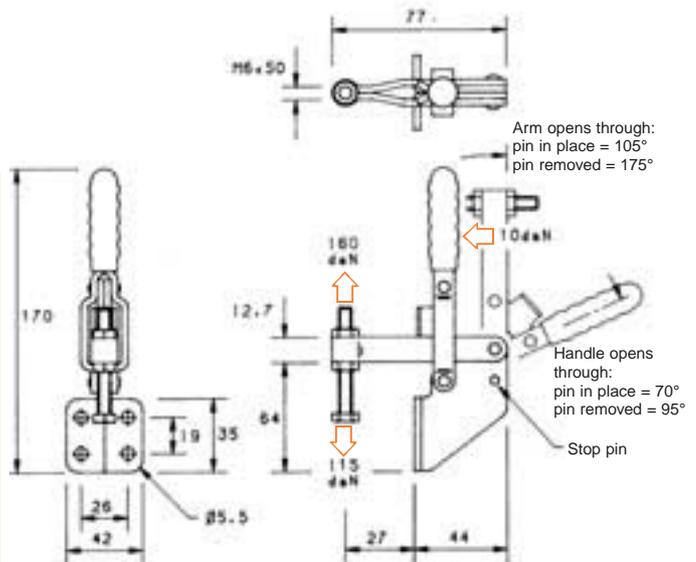
Base:
Front mounting.

Nominal Holding Force:
200 daN

Weight:
0.25 Kg

Supplied complete with:
MB0650 Setscrew & nuts.

See "Accessories" for other items.



V250 SERIES

MODEL V250/1A



Arm:
2-piece "solid" arm with spindle retainer supplied loose for welding in the desired position.

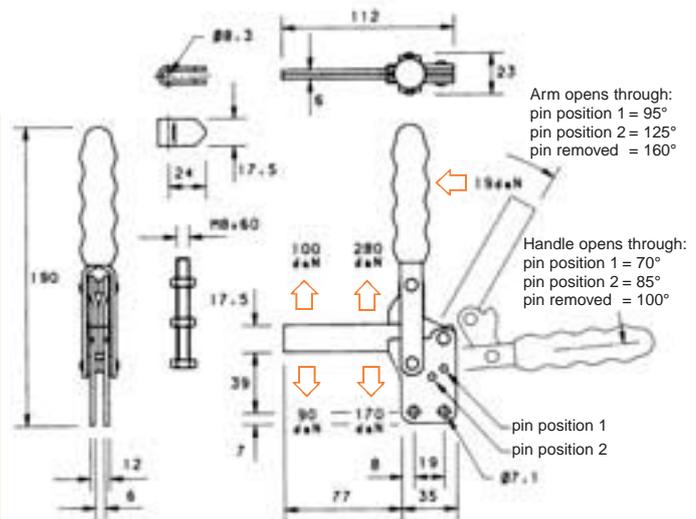
Base:
Straight.

Nominal Holding Force:
250 daN

Weight:
0.38 Kg

Supplied complete with:
MB0860 Setscrew & nuts.
R/08 Spindle retainer.

See "Accessories" for other items.



VERTICAL CLAMPS

V250 SERIES

MODEL V250/1AL

NEW



Arm:
Solid arm with spindle retainer supplied loose for welding in the desired position. 10mm added to arm length over V250/1A model.

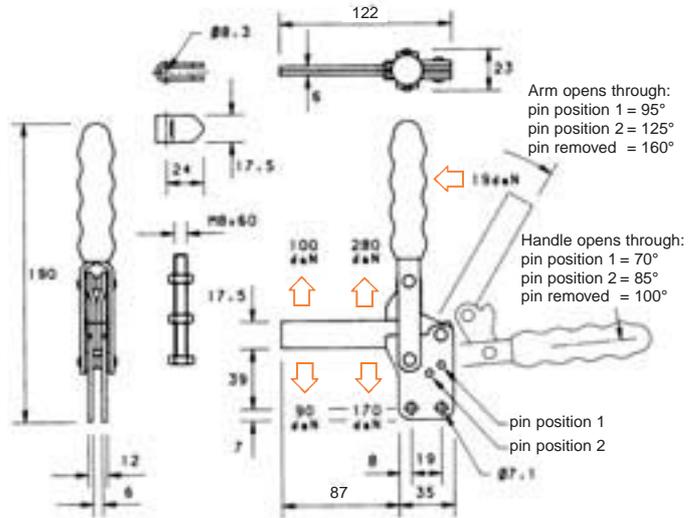
Base:
Straight.

Nominal Holding Force:
250 daN

Weight:
0.38 Kg

Supplied complete with:
MB0860 Setscrew & nuts.
R/08 Spindle retainer.

See "Accessories" for other items.



V250 SERIES

MODEL V250/1B



for "T" Bar Accessory order Model T250



Arm:
The spindle position is adjustable along the arm.

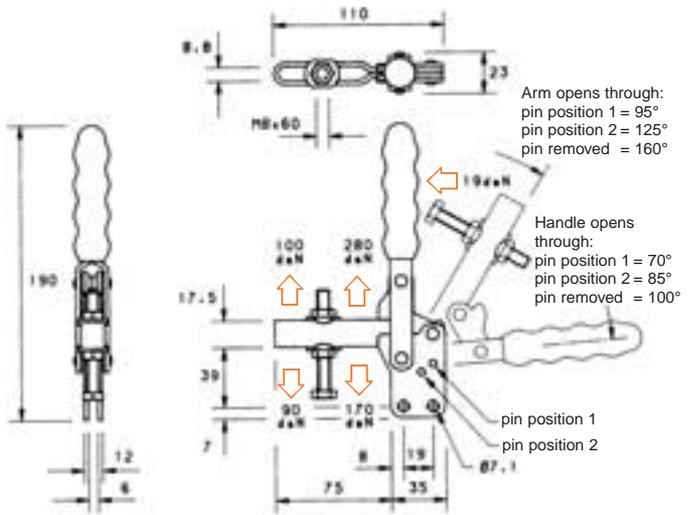
Base:
Straight.

Nominal Holding Force:
250 daN

Weight:
0.38 Kg

Supplied complete with:
MB0860 Setscrew & nuts.
FW08/15 Flanged washers.

See "Accessories" for other items.



V250 SERIES

MODEL V250/1BSS

NEW

**STAINLESS
STEEL**



Arm:
The spindle position is adjustable along the arm.

Base:
Straight.

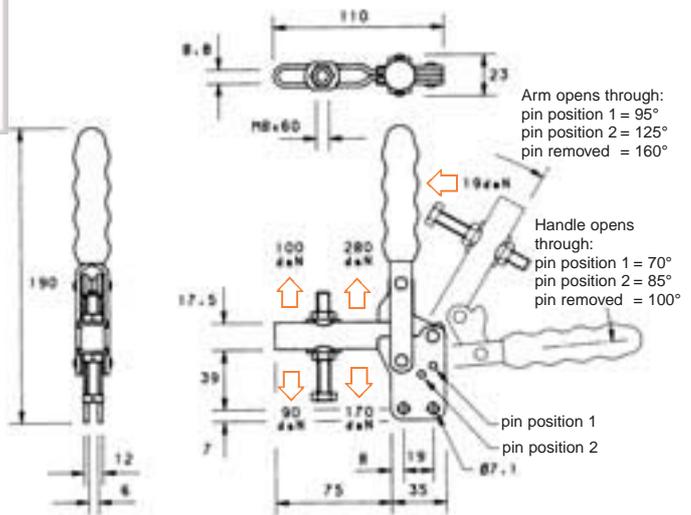
Nominal Holding Force:
250 daN

Weight:
0.38 Kg

Supplied complete with:
MB0860 Setscrew & nuts.
FW08/15 Flanged washers.

Material:
BS 304 S15

See "Accessories" for other items.



VERTICAL CLAMPS

V250 SERIES MODEL V250/1C



Arm:
The spindle is in a fixed position.

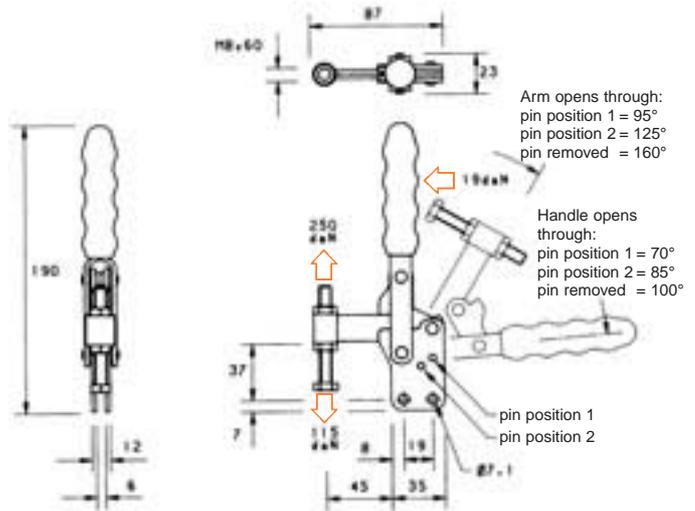
Base:
Straight.

Nominal Holding Force:
250 daN

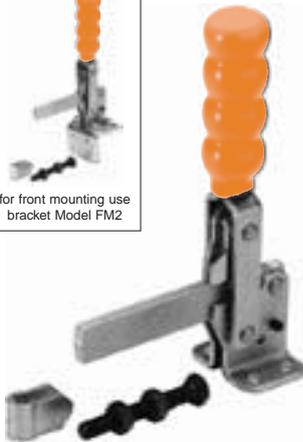
Weight:
0.38 Kg

Supplied complete with:
MB0860 Setscrew & nuts.

See "Accessories" for other items.



V250 SERIES MODEL V250/2A



Arm:
2-piece "solid" arm with spindle retainer supplied loose for welding in the desired position.

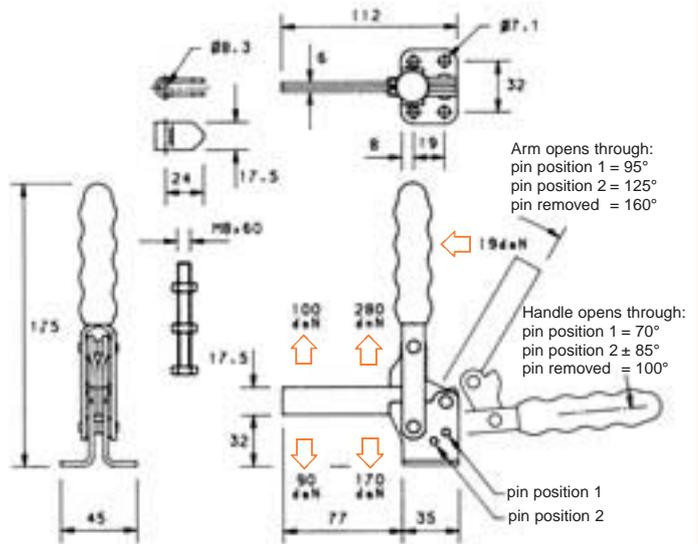
Base:
Flanged.

Nominal Holding Force:
250 daN

Weight:
0.38 Kg

Supplied complete with:
MB0860 Setscrew & nuts.
R/08 Spindle retainer.

See "Accessories" for other items.



V250 SERIES MODEL V250/2AL

NEW



Arm:
Solid arm with spindle retainer supplied loose for welding in the desired position. 10mm added to arm length over V250/2A model.

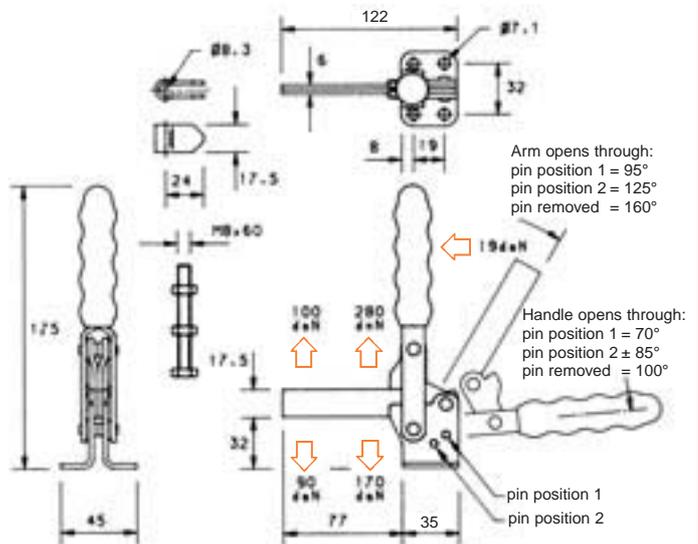
Base:
Flanged.

Nominal Holding Force:
250 daN

Weight:
0.38 Kg

Supplied complete with:
MB0860 Setscrew & nuts.
R/08 Spindle retainer.

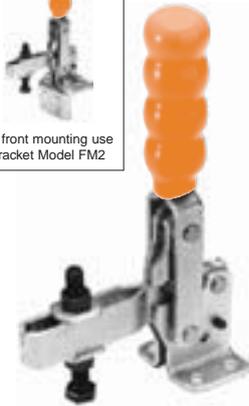
See "Accessories" for other items.



VERTICAL CLAMPS

V250 SERIES

MODEL V250/2B



Arm:
The spindle position is adjustable along the arm.

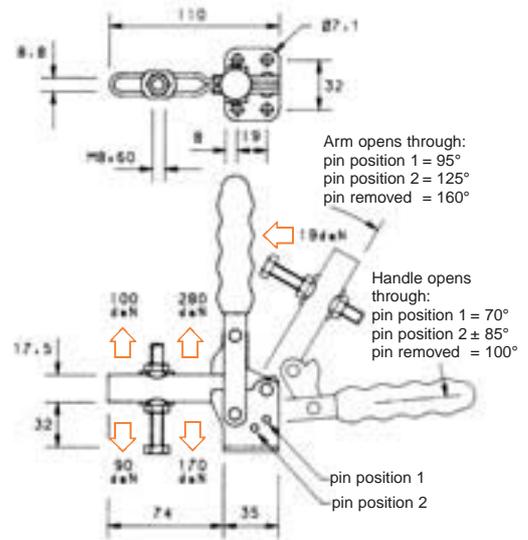
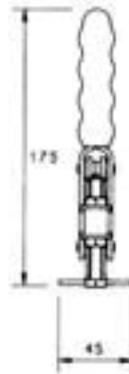
Base:
Flanged.

Nominal Holding Force:
250 daN

Weight:
0.38 Kg

Supplied complete with:
MB0860 Setscrew & nuts.
FW08/15 Flanged washers.

See "Accessories" for other items.



V250 SERIES

MODEL V250/2BSS

**STAINLESS
STEEL**



Arm:
The spindle position is adjustable along the arm.

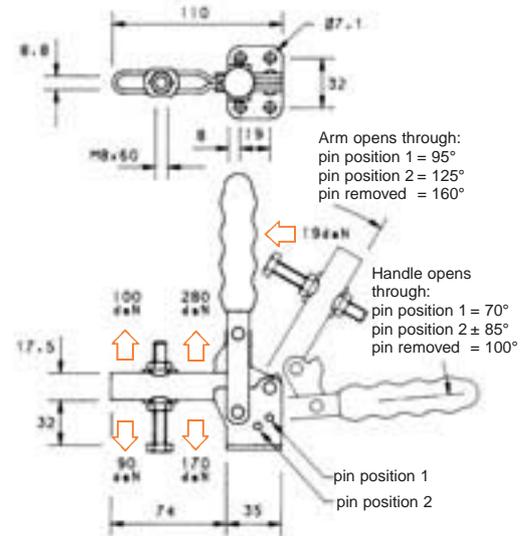
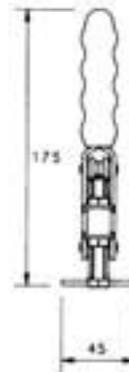
Base:
Flanged.

Nominal Holding Force:
250 daN

Weight:
0.38 Kg

Supplied complete with:
Setscrew & nuts.
Flanged washers.

Material:
BS 304 S15



V250 SERIES

MODEL V250/2C



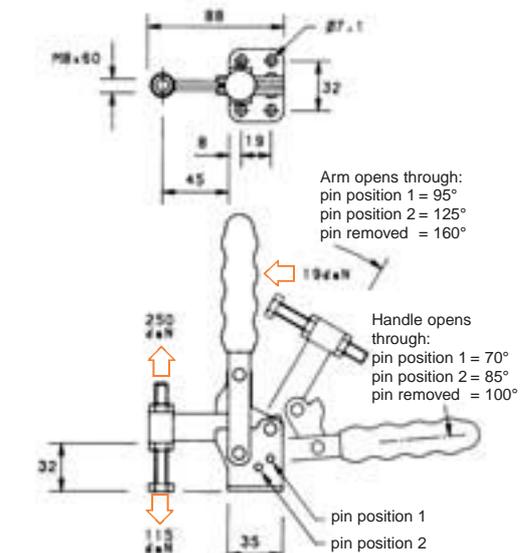
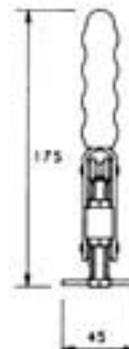
Arm:
The spindle is in a fixed position.

Base:
Flanged.

Nominal Holding Force:
250 daN

Weight:
0.38 Kg

Supplied complete with:
MB0860 Setscrew & nuts.
See "Accessories" for other items.



VERTICAL CLAMPS

V300 SERIES

MODEL V300/1A



Arm:
Solid with spindle retainer supplied loose for welding in the desired position.

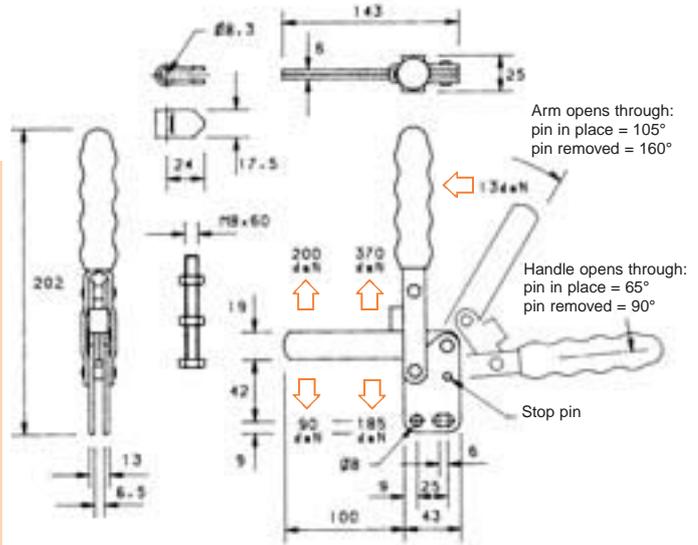
Base:
Straight.

Nominal Holding Force:
300 daN

Weight:
0.48 Kg

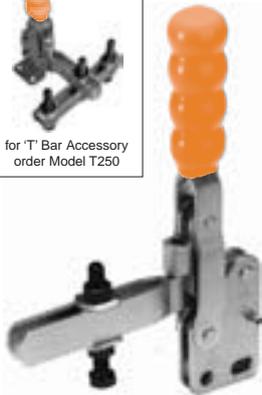
Supplied complete with:
MB0860 Setscrew & nuts.
R/08 Spindle retainer.

See "Accessories" for other items.



V300 SERIES

MODEL V300/1B



Arm:
The spindle position is adjustable along the arm.

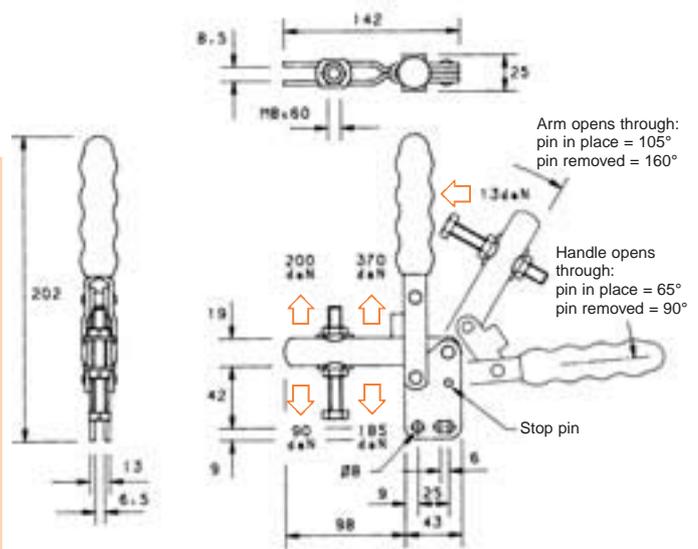
Base:
Straight.

Nominal Holding Force:
300 daN

Weight:
0.48 Kg

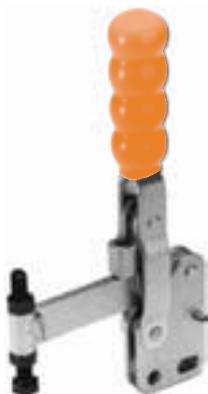
Supplied complete with:
MB0860 Setscrew & nuts.
FW08/15 Flanged washers.

See "Accessories" for other items.



V300 SERIES

MODEL V300/1C



Arm:
The spindle is in a fixed position.

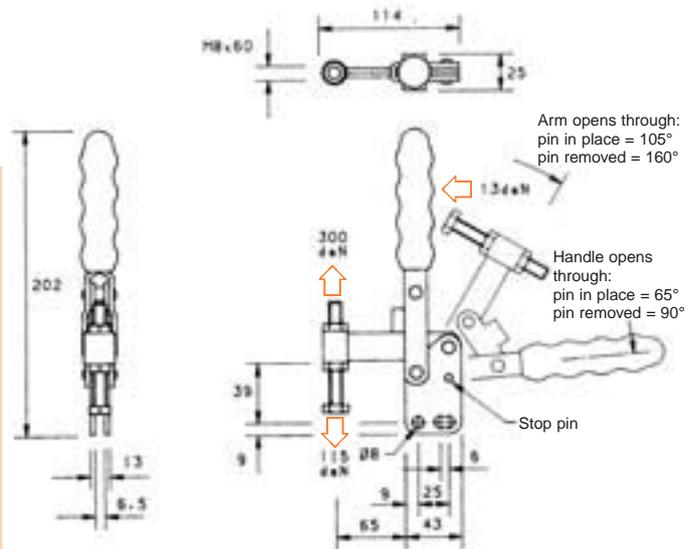
Base:
Straight.

Nominal Holding Force:
300 daN

Weight:
0.48 Kg

Supplied complete with:
MB0860 Setscrew & nuts.

See "Accessories" for other items.



VERTICAL CLAMPS

V300 SERIES

MODEL V300/2A



Arm:
Solid with spindle retainer supplied loose for welding in the desired position.

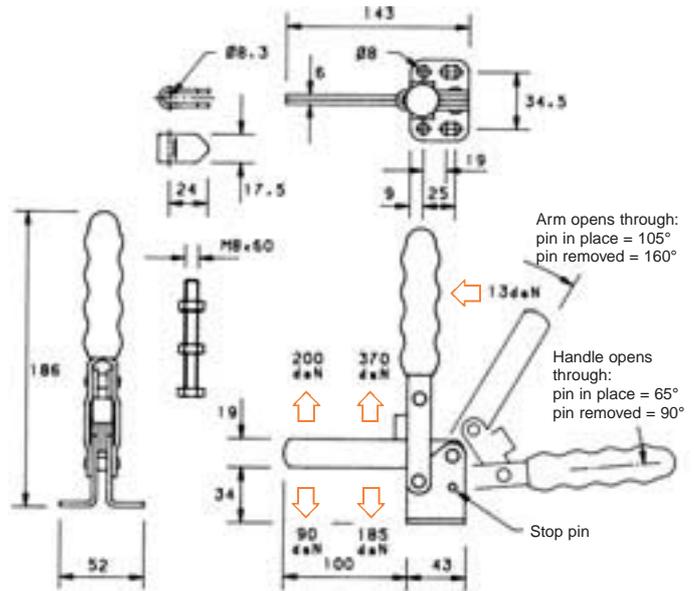
Base:
Flanged.

Nominal Holding Force:
300 daN

Weight:
0.48 Kg

Supplied complete with:
MB0860 Setscrew & nuts.
R/08 Spindle retainer.

See "Accessories" for other items.



V300 SERIES

MODEL V300/2B



Arm:
The spindle is adjustable along the arm.

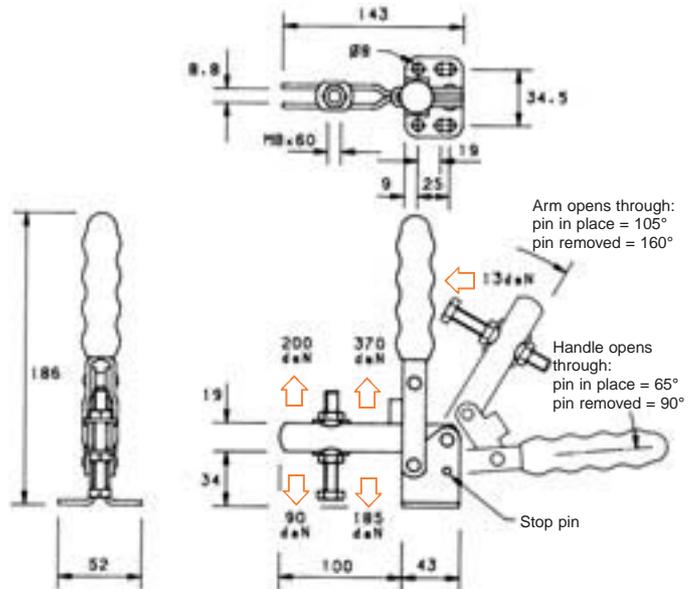
Base:
Flanged.

Nominal Holding Force:
300 daN

Weight:
0.48 Kg

Supplied complete with:
MB0860 Setscrew & nuts.
FW08/15 Flanged washers.

See "Accessories" for other items.



V300 SERIES

MODEL V300/2C



Arm:
The spindle is in a fixed position.

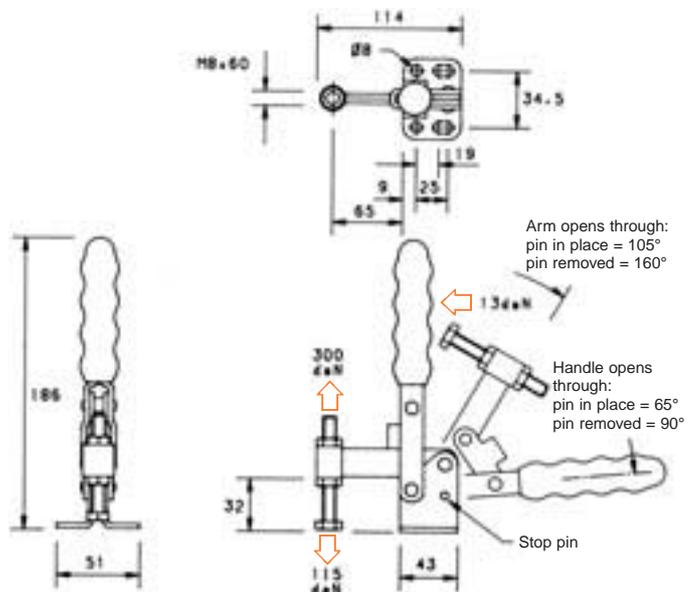
Base:
Flanged.

Nominal Holding Force:
300 daN

Weight:
0.48 Kg

Supplied complete with:
MB0860 Setscrew & nuts.

See "Accessories" for other items.



VERTICAL CLAMPS

V350 SERIES

MODEL V350/1A



Arm:
Solid with spindle retainer supplied loose for welding in the desired position.

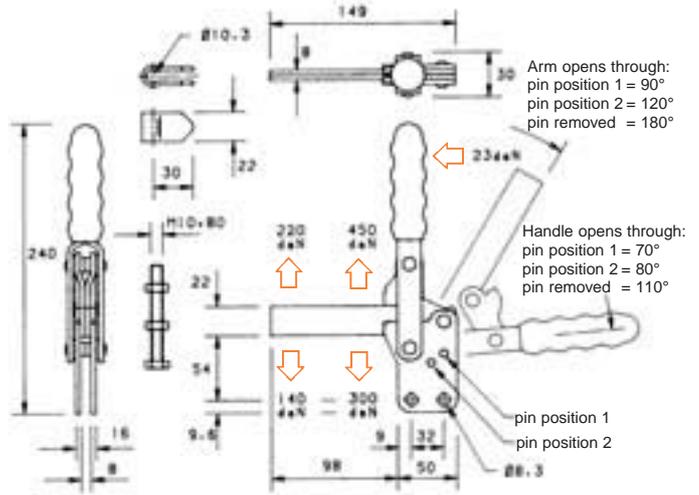
Base:
Straight.

Nominal Holding Force:
350 daN

Weight:
0.80 Kg

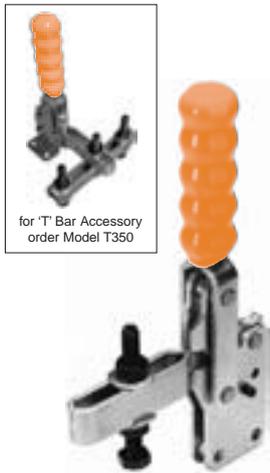
Supplied complete with:
MB1080 Setscrew & nuts.
R/10 Spindle retainer.

See "Accessories" for other items.



V350 SERIES

MODEL V350/1B



Arm:
The spindle position is adjustable long the arm.

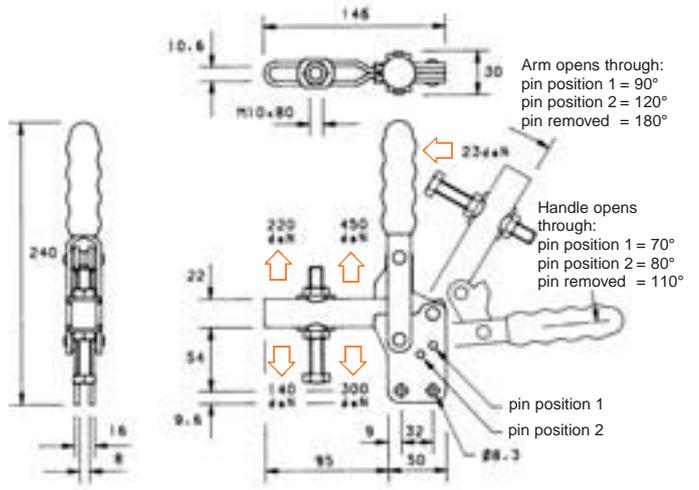
Base:
Straight.

Nominal Holding Force:
350 daN

Weight:
0.80 Kg

Supplied complete with:
MB1080 Setscrew & nuts.
FW10/20 Flanged washers.

See "Accessories" for other items.



V350 SERIES

MODEL V350/1C



Arm:
The spindle is in a fixed position.

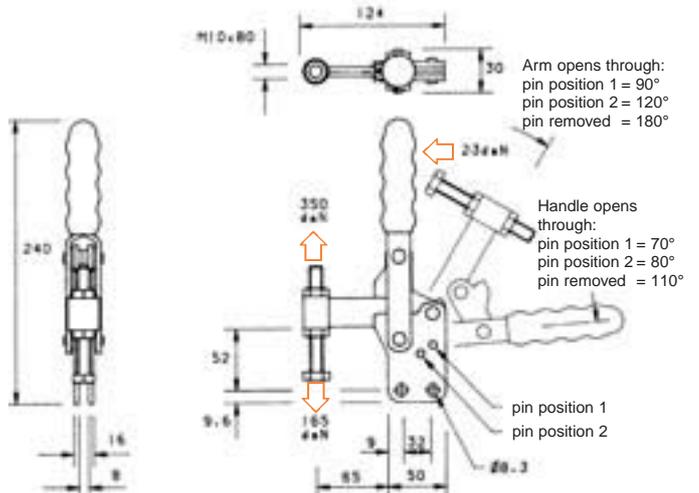
Base:
Straight.

Nominal Holding Force:
350 daN

Weight:
0.75 Kg

Supplied complete with:
MB1080 Setscrew & nuts.

See "Accessories" for other items.



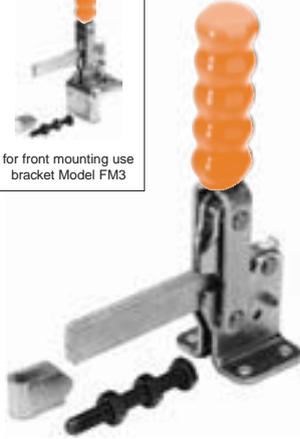
VERTICAL CLAMPS

V350 SERIES

MODEL V350/2A



for front mounting use bracket Model FM3



Arm:
Solid with spindle retainer supplied loose for welding in the desired position.

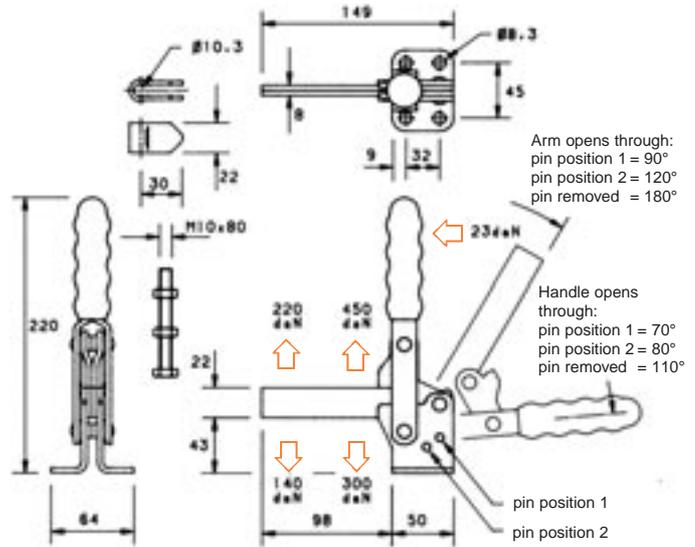
Base:
Flanged.

Nominal Holding Force:
350 daN

Weight:
0.80 Kg

Supplied complete with:
MB1080 Setscrew & nuts.
R/10 Spindle retainer.

See "Accessories" for other items.

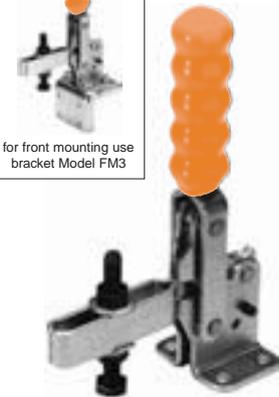


V350 SERIES

MODEL V350/2B



for front mounting use bracket Model FM3



Arm:
The spindle position is adjustable along the arm.

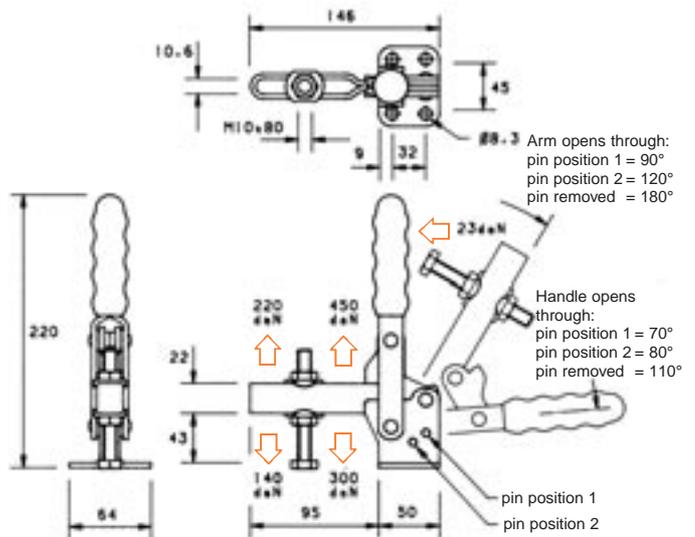
Base:
Flanged.

Nominal Holding Force:
350 daN

Weight:
0.80 Kg

Supplied complete with:
MB1080 Setscrew & nuts.
FW10/20 Flanged washers.

See "Accessories" for other items.



V350 SERIES

MODEL V350/2C



for front mounting use bracket Model FM3



Arm:
The spindle is in a fixed position.

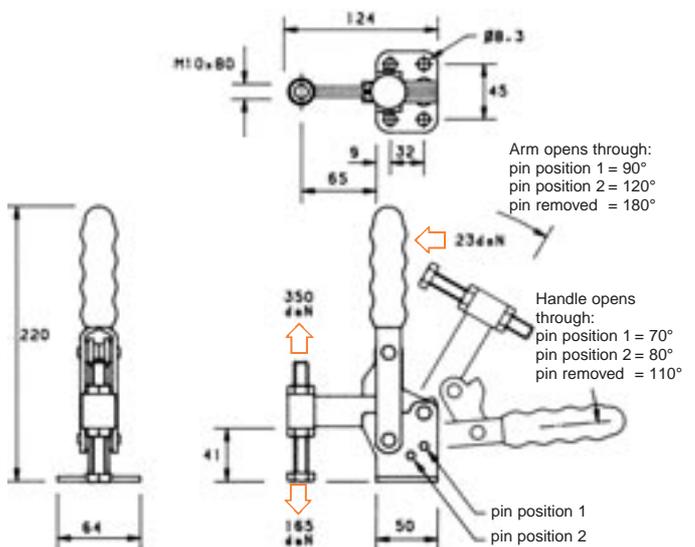
Base:
Flanged.

Nominal Holding Force:
350 daN

Weight:
0.75 Kg

Supplied complete with:
MB1080 Setscrew & nuts.

See "Accessories" for other items.



VERTICAL CLAMPS

V450 SERIES

MODEL V450/1A



Arm:
Solid with spindle retainer supplied loose for welding in the desired position.

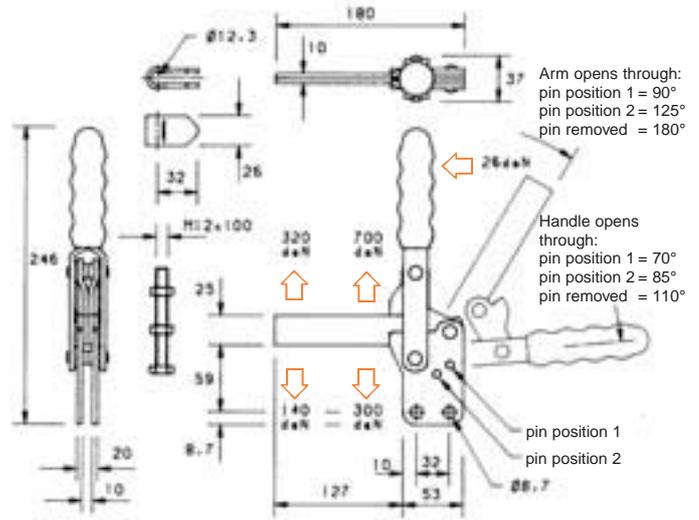
Base:
Straight.

Nominal Holding Force:
450 daN

Weight:
1.25 Kg

Supplied complete with:
MB12100 Setscrew & nuts.
R/12 Spindle retainer.

See "Accessories" for other items.



V450 SERIES

MODEL V450/1B



for "T" Bar Accessory
order Model T450



Arm:
The spindle position is adjustable along the arm.

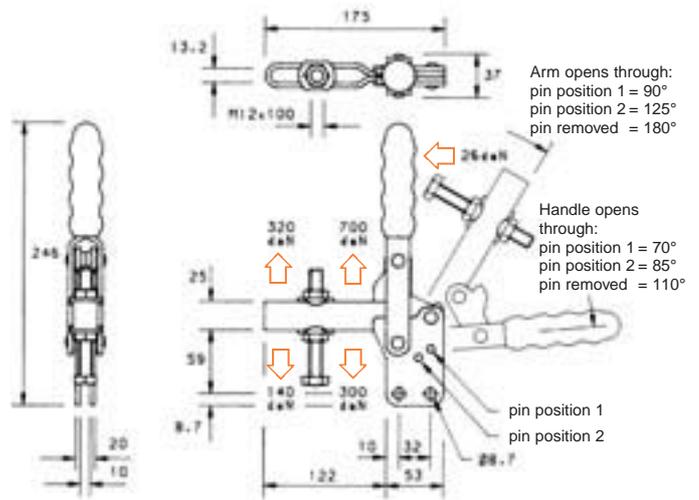
Base:
Straight.

Nominal Holding Force:
450 daN

Weight:
1.35 Kg

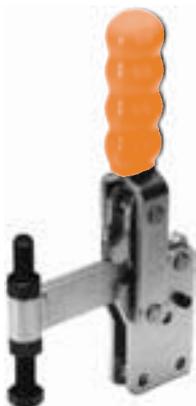
Supplied complete with:
MB12100 Setscrew & nuts.
FW12/23 Flanged washers.

See "Accessories" for other items.



V450 SERIES

MODEL V450/1C



Arm:
The spindle is in a fixed position.

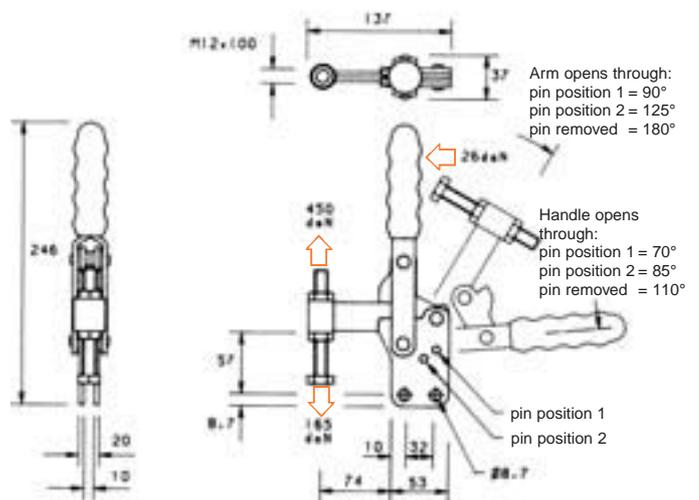
Base:
Straight.

Nominal Holding Force:
450 daN

Weight:
1.30 Kg

Supplied complete with:
MB12100 Setscrew & nuts.

See "Accessories" for other items.



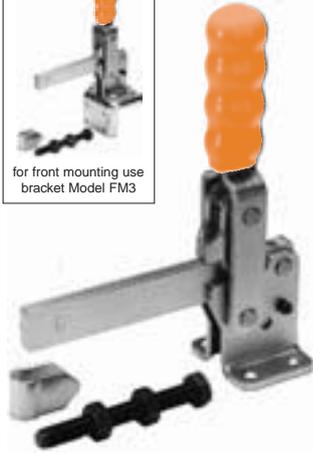
VERTICAL CLAMPS

V450 SERIES

MODEL V450/2A



for front mounting use bracket Model FM3



Arm:
Solid with spindle retainer supplied loose for welding in the desired position.

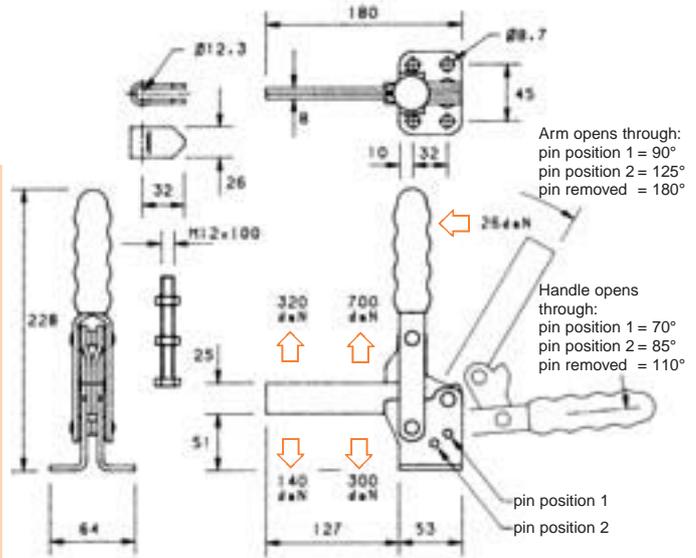
Base:
Flanged.

Nominal Holding Force:
450 daN

Weight:
1.25 Kg

Supplied complete with:
MB12100 Setscrew & nuts.
R/12 Spindle retainer.

See "Accessories" for other items.

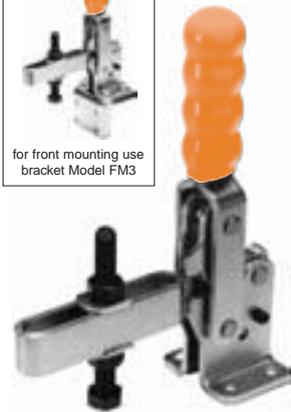


V450 SERIES

MODEL V450/2B



for front mounting use bracket Model FM3



Arm:
The spindle position is adjustable along the arm.

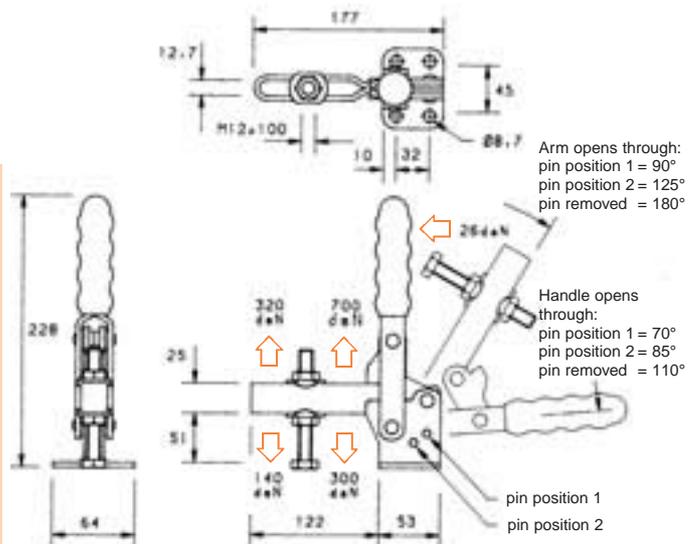
Base:
Flanged.

Nominal Holding Force:
450 daN

Weight:
1.35 Kg

Supplied complete with:
MB12100 Setscrew & nuts.
FW12/23 Flanged washers.

See "Accessories" for other items.



V450 SERIES

MODEL V450/2C



for front mounting use bracket Model FM3



Arm:
The spindle is in a fixed position.

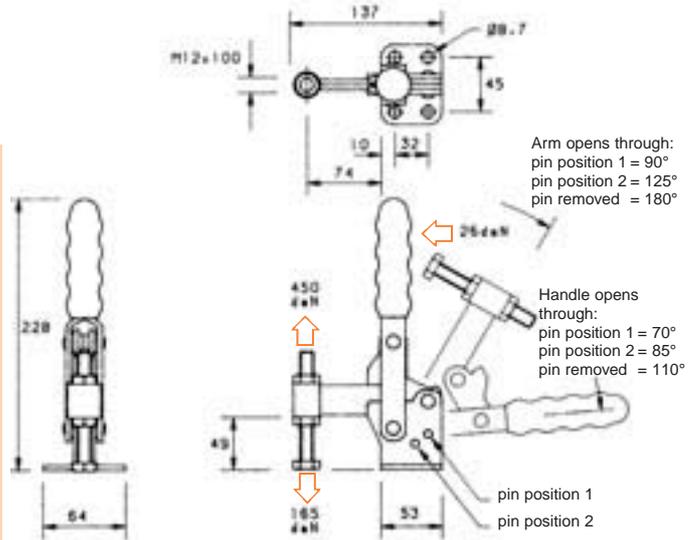
Base:
Flanged.

Nominal Holding Force:
450 daN

Weight:
1.30 Kg

Supplied complete with:
MB12100 Setscrew & nuts.

See "Accessories" for other items.



VERTICAL CLAMPS

V550 SERIES

MODEL V550/2A



Arm:
Solid with spindle retainer supplied loose for welding in the desired position.

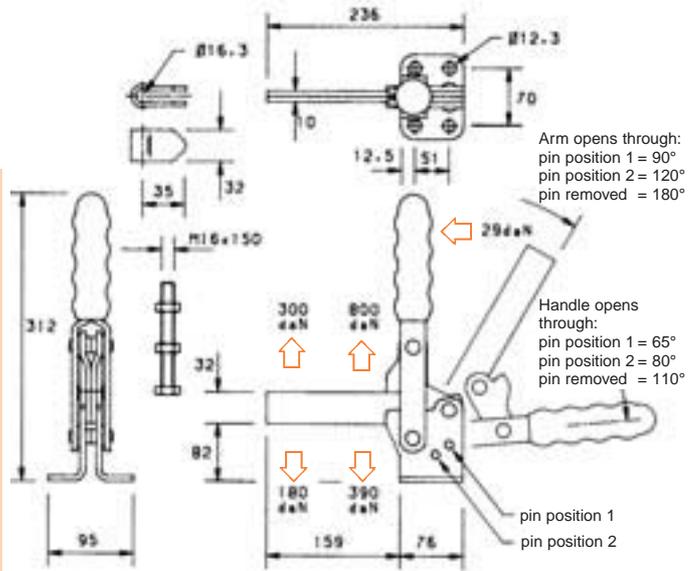
Base:
Flanged.

Nominal Holding Force:
550 daN

Weight:
2.20 Kg

Supplied complete with:
MB16150 Setscrew & nuts.
R/16 Spindle retainer.

See "Accessories" for other items.



V550 SERIES

MODEL V550/2B



Arm:
The spindle is adjustable along the arm.

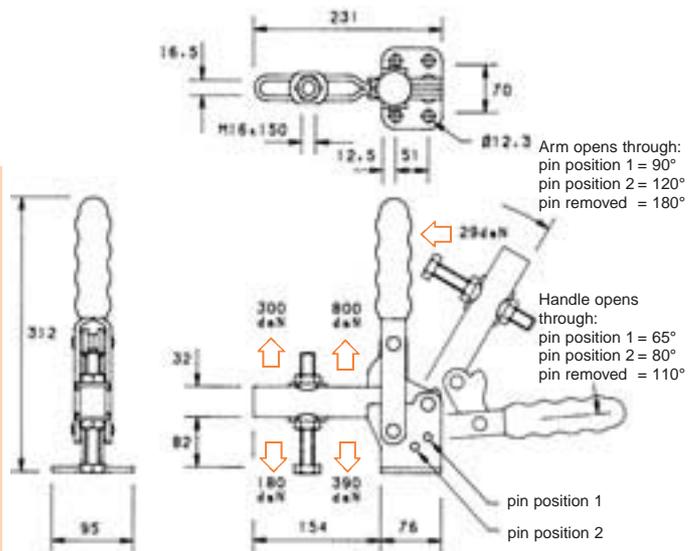
Base:
Flanged.

Nominal Holding Force:
550 daN

Weight:
2.40 Kg

Supplied complete with:
MB16150 Setscrew & nuts.
FW16/27 Flanged washer.

See "Accessories" for other items.



V550 SERIES

MODEL V550/2C



Arm:
The spindle is in a fixed position.

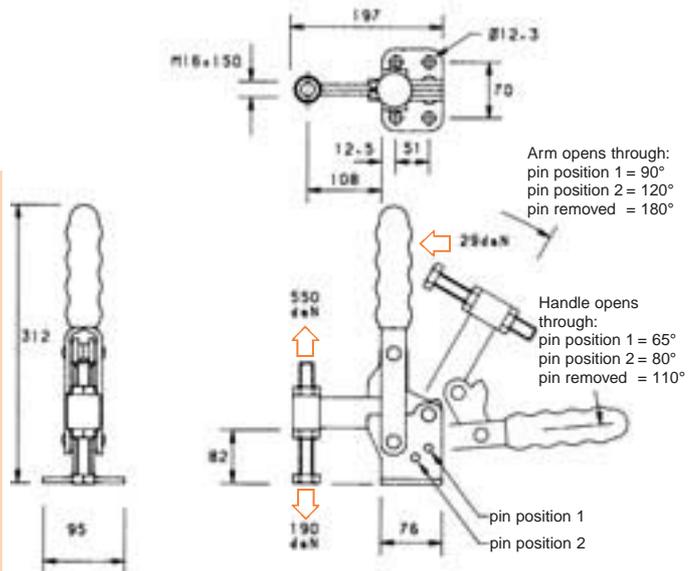
Base:
Flanged.

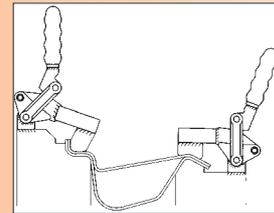
Nominal Holding Force:
550 daN

Weight:
2.30 Kg

Supplied complete with:
MB16150 Setscrew & nuts.

See "Accessories" for other items.





VA SERIES HEAVY DUTY VERTICAL CLAMPS

- **Features:**

All VA series clamps are designed to be adaptable and durable, and to withstand abuse in heavy duty applications.

The new VA300 series helps fill the gap at the smaller end of the range. Only manufactured at Brauer, they have a phosphated corrosion resistant finish.

Models VA300S, VA700S, VA1200S and VA2400S comprise a basic toggle mechanism onto which can be welded at the desired angle the clamping arm and handle which can be specified as accessories. These models feature a swivel base which is welded at the desired angle to the mechanism, and then welded either directly to a fixture, or alternatively to a base which is offered as an accessory for bolt mounting.

Models VA300T, VA700T, VA1200T, and VA2400T share all the features of the above models, but with a straight base which can be directly bolt mounted or welded to a fixture, or alternatively to the accessory base for bolt mounting.

Models VA300T, VA700/1A, VA1200/1A and VA2400/1A are similar to the type 'T' models, but with a handle with a PVC grip fitted vertically, and a longer stub clamping arm which can be modified and the spindle retainer supplied welded in the desired position.

Models VA300T, VA700/2C, VA1200/2C and VA2400/2C feature a flanged base with holes for bolt mounting, a handle with PVC grip fitted vertically, and a fixed spindle or setscrew position which does not require welding.

- **Specification:**

The main components are of steel, the forked lower handles being precision alloy steel castings, and all axes of hardened steel running in either hardened bushes or directly in the close-toleranced holes of hardened parts. The clamps are finished chemi-black.

- **Installation:**

When welding the swivel base of the type 'S' models to the clamp mechanism ensure that the full length of the adjoining surfaces are welded. Ensure that welding spatter does not enter the slots which form the forward stop of the mechanism.

The handle pivot bolt may be adjusted if required to remove excess free play from the mechanism.

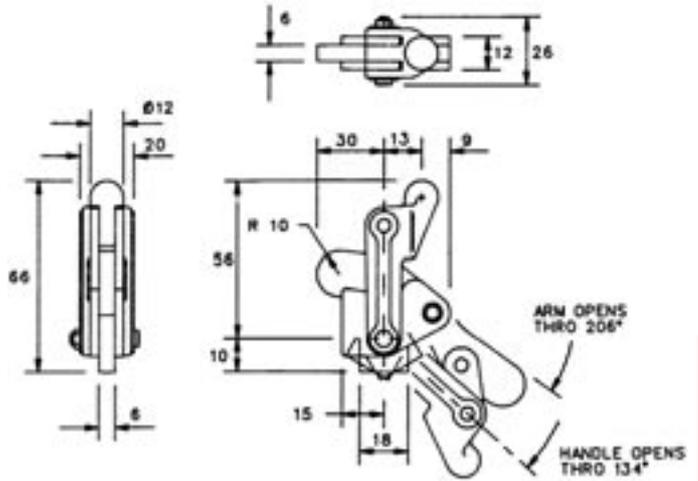
Frequent lubrication will extend the life of the clamp.

HEAVY-DUTY VERTICAL CLAMPS

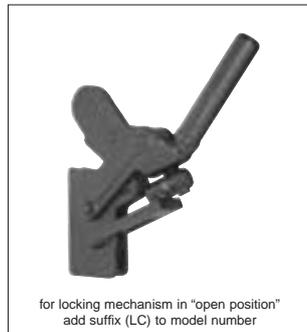
VA300 SERIES MODEL VA300/S



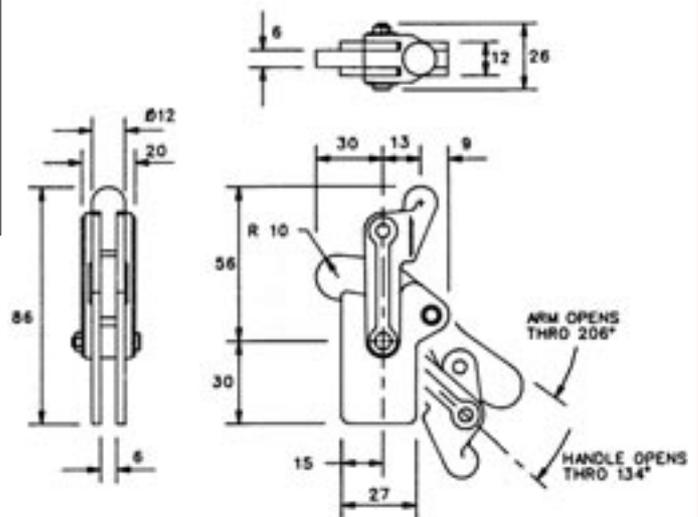
Arm:
Stub nose for welded extension.
Base:
Swivel for welding in the desired position.
Nominal Holding Force:
300 daN
Weight:
0.15 Kg
See "Accessories" for other items.



VA300 SERIES MODEL VA300/T



Arm:
Stub nose for welded extension.
Base:
Straight.
Nominal Holding Force:
300 daN
Weight:
0.15 Kg
See "Accessories" for other items.



HEAVY-DUTY VERTICAL CLAMPS

VA300 SERIES MODEL VA300/2S



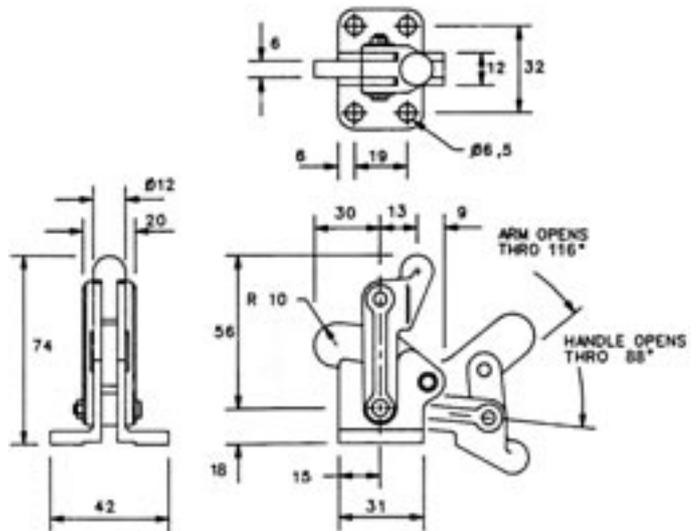
Arm:
Stub nose for welded extension.

Base:
Flanged.

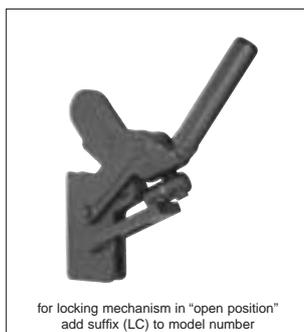
Nominal Holding Force:
300 daN

Weight:
0.20 Kg

See "Accessories" for other items.



VA300 SERIES MODEL VA300/1B



Arm:
The spindle is adjustable along the arm.

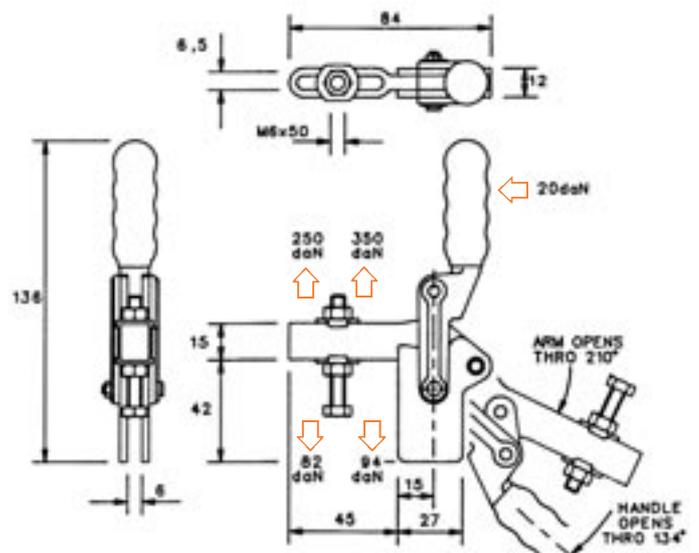
Base:
Straight.

Nominal Holding Force:
300 daN

Weight:
0.25 Kg

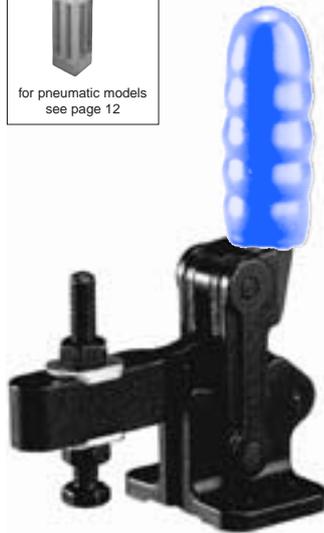
Supplied complete with:
MB0650 Set screw & nuts.
FW 06/12 Flanged washer.

See "Accessories" for other items.



HEAVY-DUTY VERTICAL CLAMPS

VA300 SERIES
MODEL VA300/2B



Arm:
The spindle is adjustable along the arm.

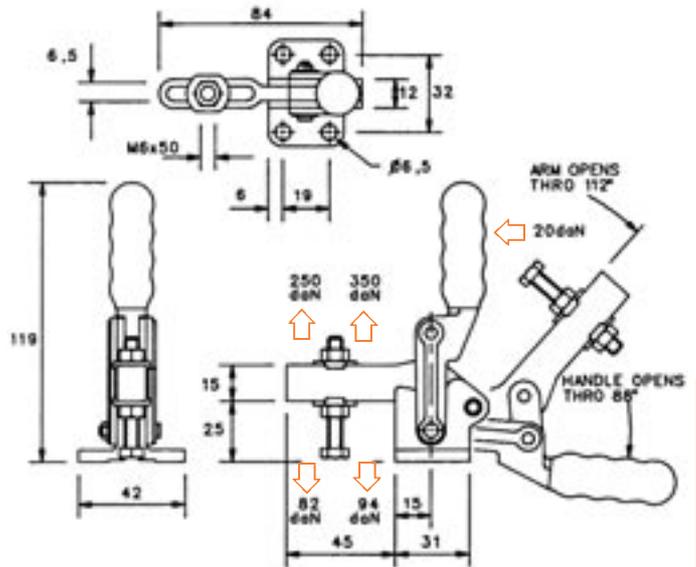
Base:
Flanged.

Nominal Holding Force:
300 daN

Weight:
0.25 Kg

Supplied complete with:
MB0650 Set screw & nuts.
FW 06/12 Flanged washer.

See "Accessories" for other items.



VA300 SERIES
MODEL VA300/2BT



Arm:
The spindle is adjustable along the arm.

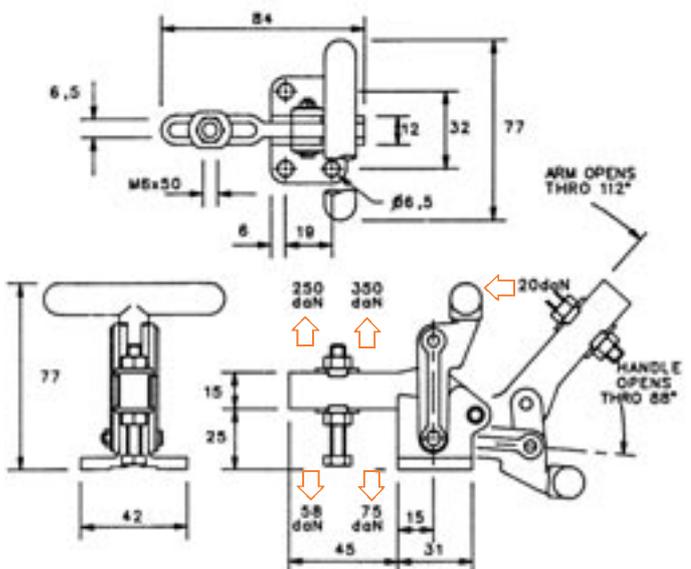
Base:
Flanged.

Nominal Holding Force:
300 daN

Weight:
0.25 Kg

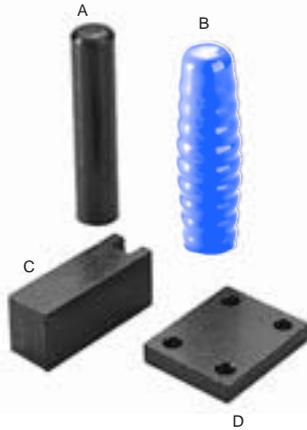
Supplied complete with:
MB0650 Set screw & nuts.
FW 06/12 Flanged washer.

See "Accessories" for other items.



HEAVY-DUTY VERTICAL CLAMPS

VA300 SERIES ACCESSORIES

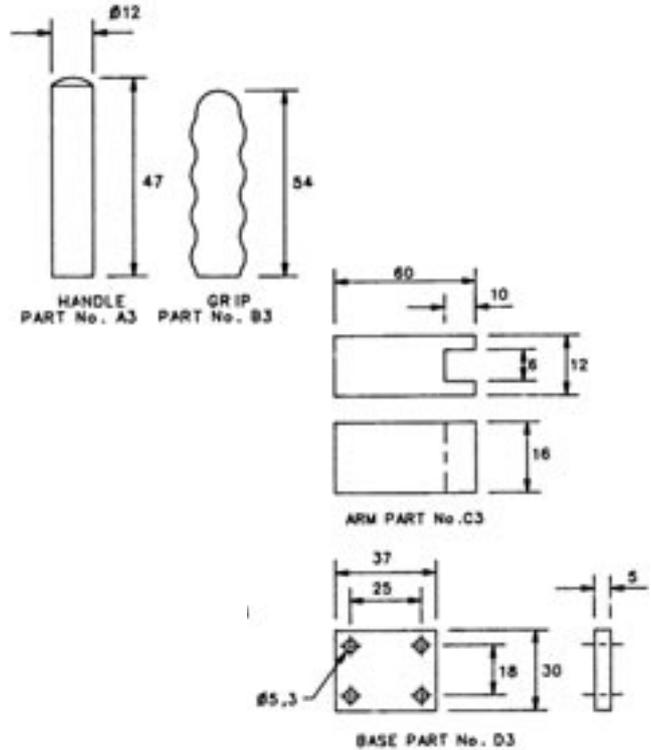


Model A3 Handle: Weight: 0.056 Kg
For welding at the desired angle to VA300S & VA300T.

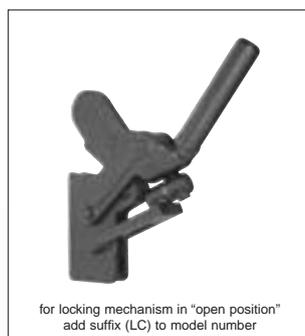
Model B3 Grip: Weight: 0.011 Kg
To fit A3 handle.

Model C3 Arm: Weight: 0.083 Kg
For extending the stub arms of VA300S & VA300T.

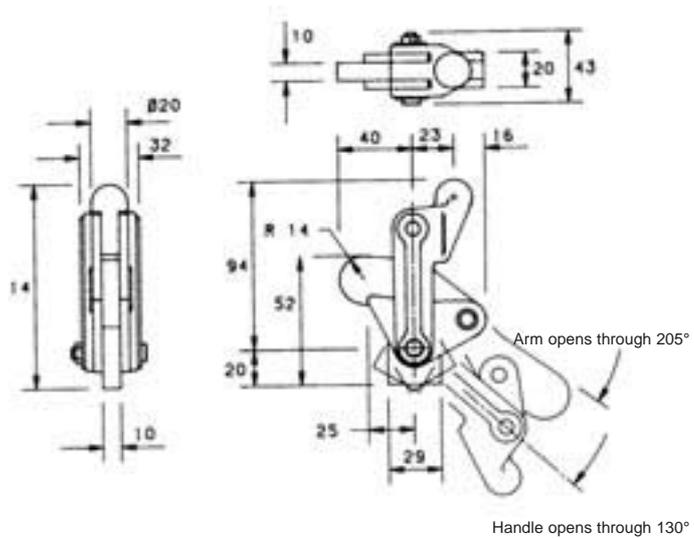
Model D3 Base: Weight: 0.040 Kg
For bolt mounting VA300S & VA300T.



VA700 SERIES MODEL VA700S



Arm: Stub nose for welded extensions.
Base: Swivel for welding in the desired position.
Nominal Holding Force: 700 daN
Weight: 0.70 Kg
See "Features and installation information" page for installation instructions.
See "Accessories" for other items.



HEAVY-DUTY VERTICAL CLAMPS

VA700 SERIES

MODEL VA700T



for pneumatic models
see page 12



for locking mechanism in "open position"
add suffix (LC) to model number

Arm:
Stub nose for welded
extensions.

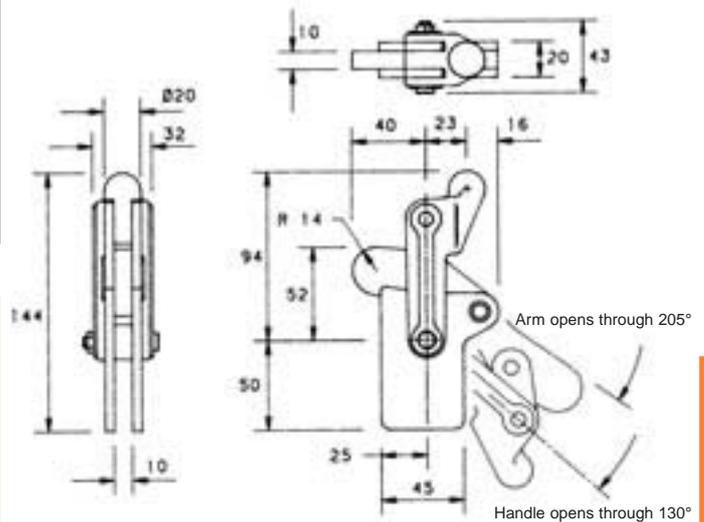
Base:
Straight.

Nominal Holding Force:
700 daN

Weight:
0.80 Kg

See "Features and installation
information" page for installation
instructions.

See "Accessories" for other
items.



VA700 SERIES

MODEL VA700/1A



for pneumatic models
see page 12



for locking mechanism in "open position"
add suffix (LC) to model number

Arm:
Solid arm.

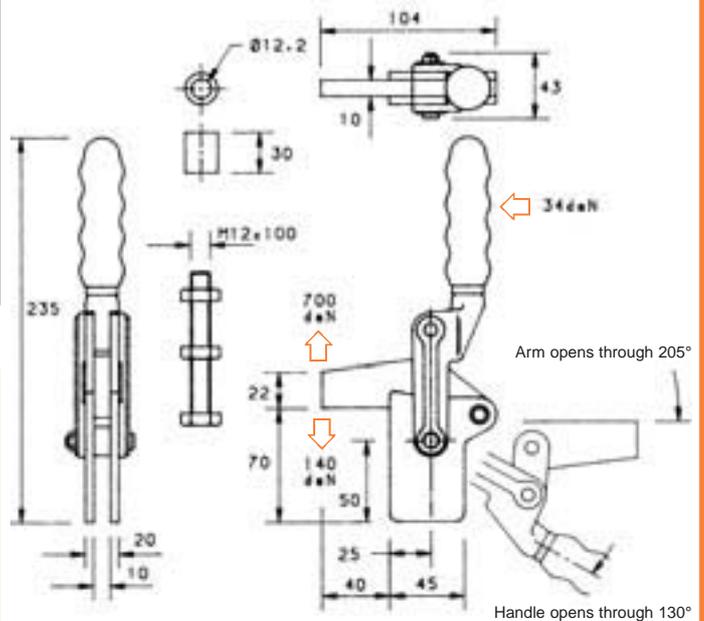
Base:
Straight.

Nominal Holding Force:
700 daN

Weight:
1.10 Kg

Supplied complete with:
Spindle retainer.
MB12100 Setscrew & nuts.

See "Accessories" for other
items.



HEAVY-DUTY VERTICAL CLAMPS

VA700 SERIES MODEL VA700/2C



for pneumatic models
see page 12



for locking mechanism in "open position"
add suffix (LC) to model number



Arm:
The spindle is in a fixed position.

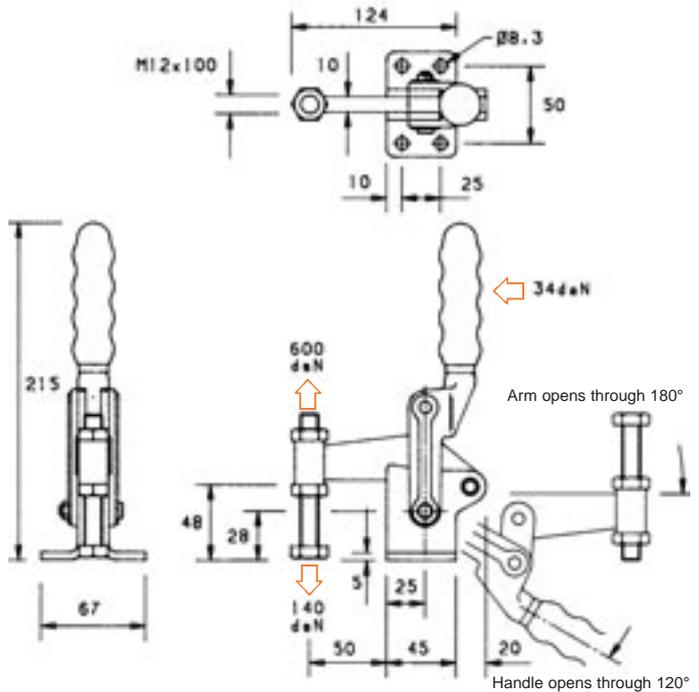
Base:
Flanged.

Nominal Holding Force:
700 daN

Weight:
1.25 Kg

Supplied complete with:
MB12100 Setscrew & nuts.

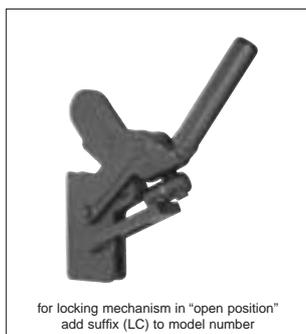
See "Accessories" for other items.



VA700 SERIES MODEL VA700TD



for pneumatic models
see page 12



for locking mechanism in "open position"
add suffix (LC) to model number



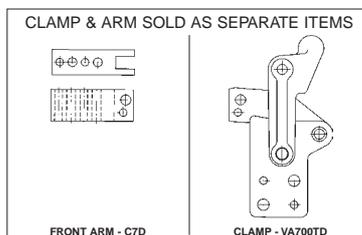
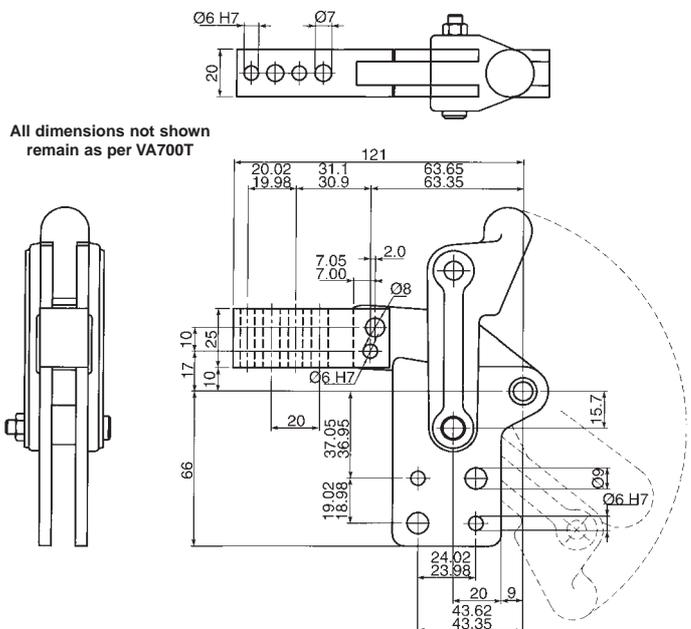
Arm:
Stub nose with mounting holes.

Base:
Straight with mounting holes.

Nominal Holding Force:
700 daN

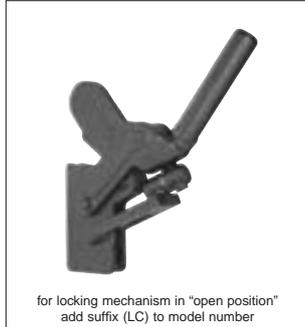
Weight:
1.01kg

See "Accessories" for other items.



HEAVY-DUTY VERTICAL CLAMPS

VA700 SERIES MODEL VA700TP



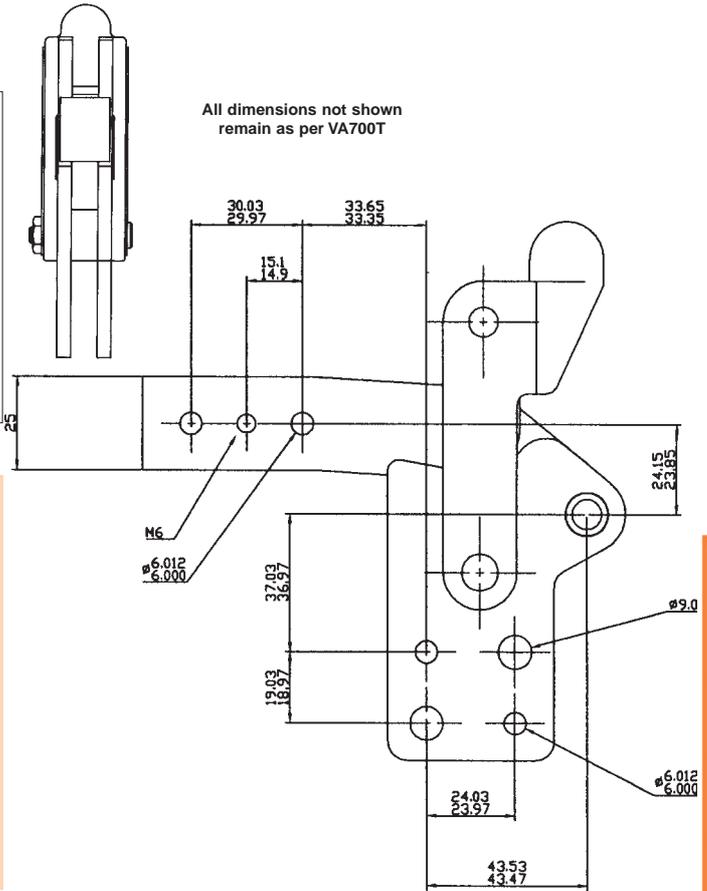
Arm:
Solid arm with mounting holes.

Base:
Straight with mounting holes.

Nominal Holding Force:
700 daN

Weight:
1.01kg

See "Accessories" for other items.



VA700 SERIES MODEL VA700TV



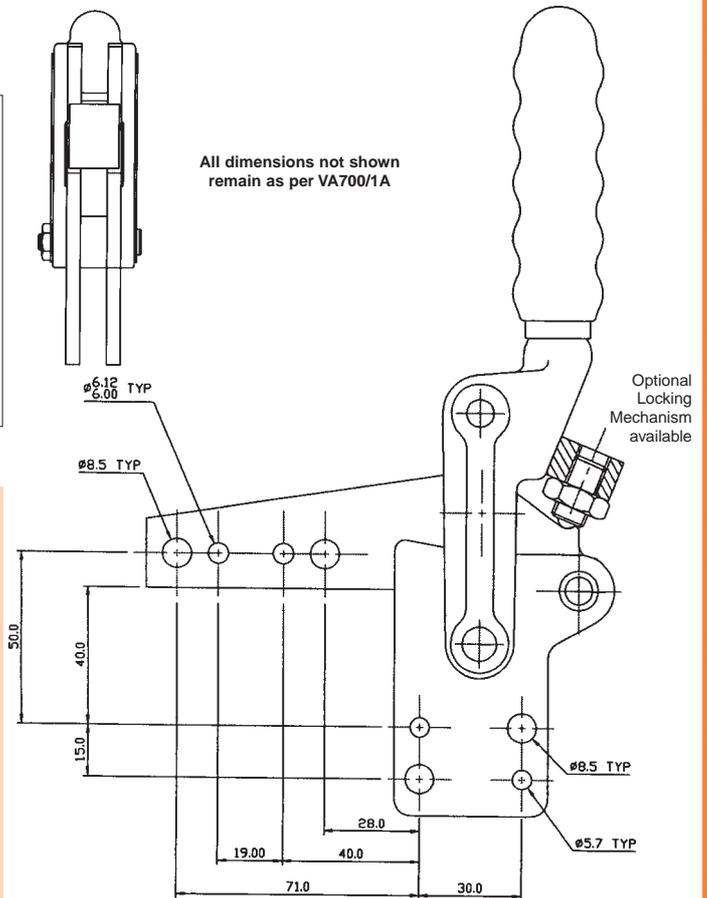
Arm:
Solid arm with mounting holes.

Base:
Straight with mounting holes.

Nominal Holding Force:
700 daN

Weight:
1.01kg

See "Accessories" for other items.



HEAVY-DUTY VERTICAL CLAMPS

VA700 SERIES ACCESSORIES

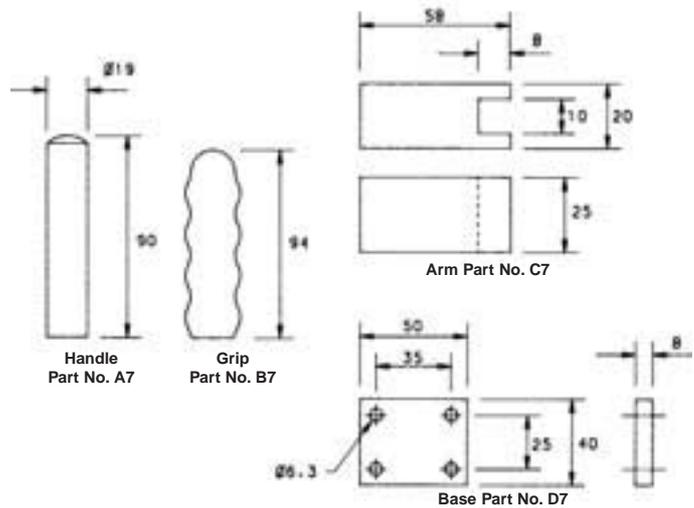


Model A7 Handle: Weight: 0.20 Kg
For welding at the desired angle to VA700S & VA700T.

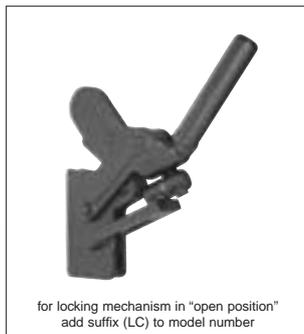
Model B7 Grip: Weight: 0.01 Kg
To fit A7 handle.

Model C7 Arm: Weight: 0.21 Kg
For extending the stub arms of VA700S & VA700T.

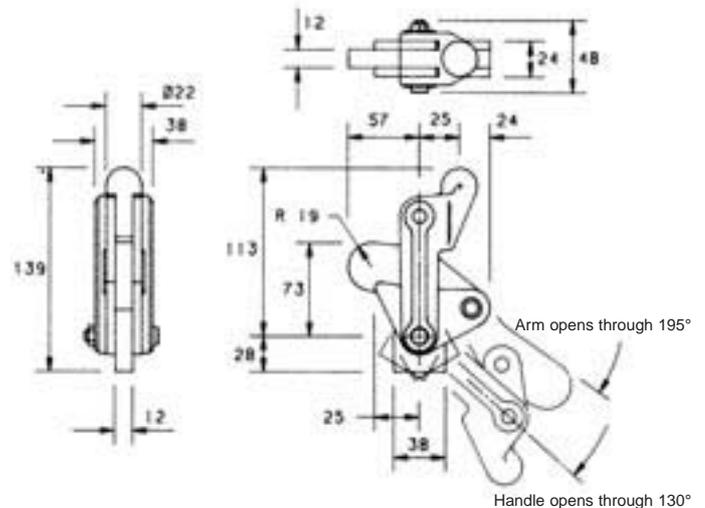
Model D7 Base: Weight: 0.11 Kg
For bolt mounting VA700S and VA700T.



VA1200 SERIES MODEL VA1200S



Arm: Stub nose for welded extensions.
Base: Swivel for welding in the desired position.
Nominal Holding Force: 1200 daN
Weight: 1.30 Kg
See "Accessories" for other items.



HEAVY-DUTY VERTICAL CLAMPS

VA1200 SERIES MODEL VA1200T

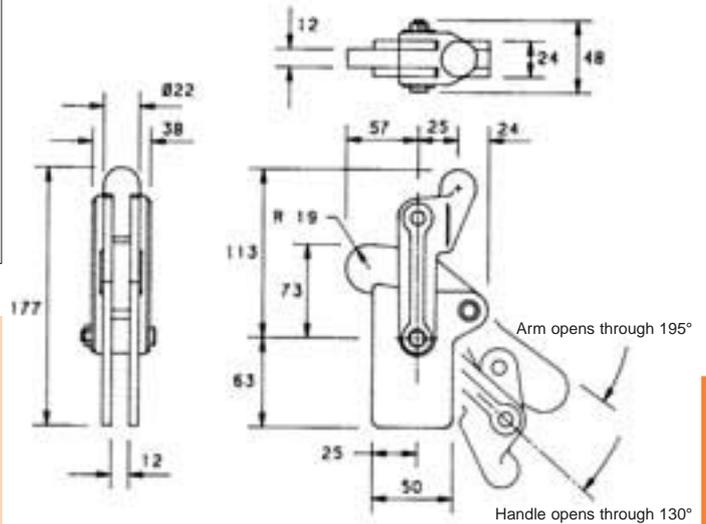


for pneumatic models
see page 13



for locking mechanism in "open position"
add suffix (LC) to model number

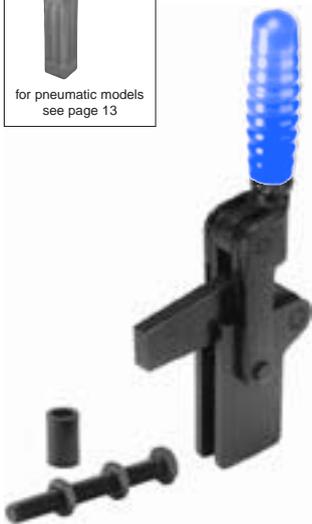
Arm:
Stub nose for welded
extensions.
Base:
Straight.
Nominal Holding Force:
1200 daN
Weight:
1.45 Kg
See "Accessories" for other
items.



VA1200 SERIES MODEL VA1200/1A

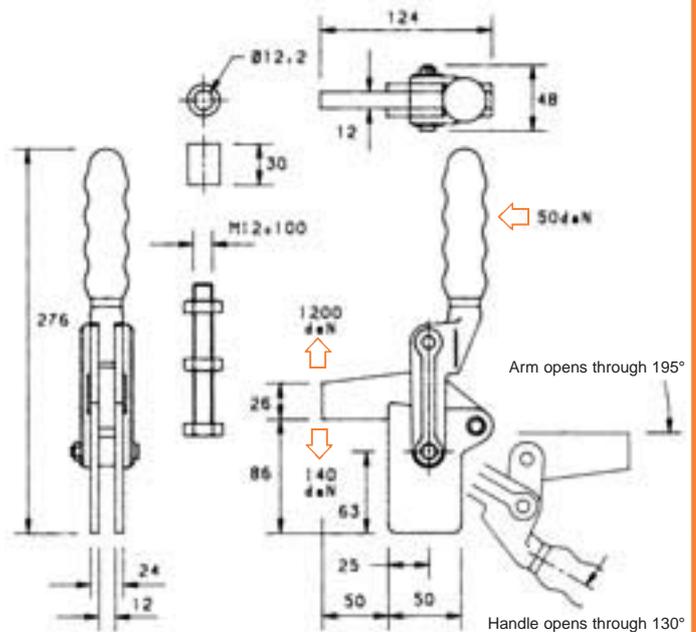


for pneumatic models
see page 13



for locking mechanism in "open position"
add suffix (LC) to model number

Arm:
Solid arm.
Base:
Straight.
Nominal Holding Force:
1200 daN
Weight:
1.80 Kg
Supplied complete with:
Spindle retainer.
MB12100 Setscrew & nuts.
See "Accessories" for other
items.



HEAVY-DUTY VERTICAL CLAMPS

VA1200 SERIES
MODEL VA1200/2C



for pneumatic models
see page 13



for locking mechanism in "open position"
add suffix (LC) to model number

Arm:
The spindle is in a fixed position.

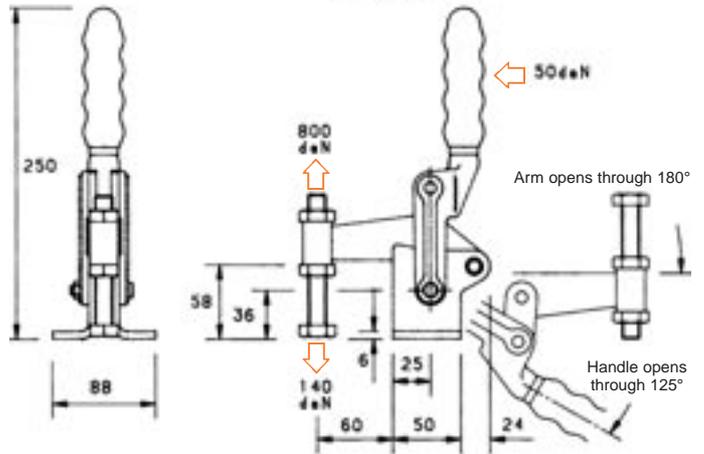
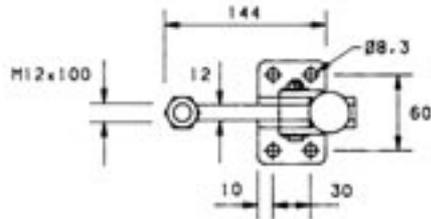
Base:
Flanged.

Nominal Holding Force:
1200 daN

Weight:
1.95 Kg

Supplied complete with:
MB12100 Setscrew & nuts.

See "Accessories" for other items.



VA1200 SERIES
MODEL VA1200TD



for pneumatic models
see page 13



for locking mechanism in "open position"
add suffix (LC) to model number

Arm:
Stub nose with mounting holes.

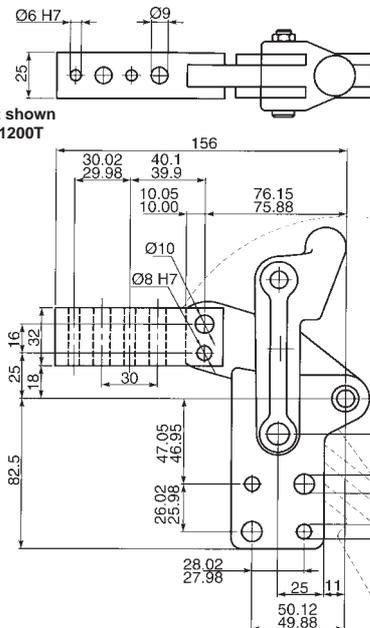
Base:
Straight with mounting holes.

Nominal Holding Force:
1200 daN

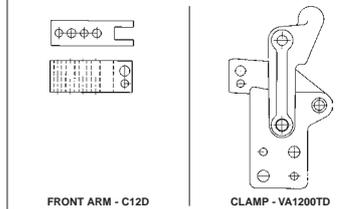
Weight:
1.87kg

See "Accessories" for other items.

All dimensions not shown
remain as per VA1200T



CLAMP & ARM SOLD AS SEPARATE ITEMS

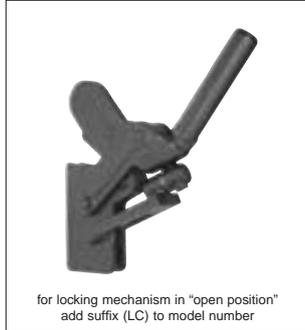


HEAVY-DUTY VERTICAL CLAMPS

VA1200 SERIES
MODEL VA1200TP



for pneumatic models
see page 13



for locking mechanism in "open position"
add suffix (LC) to model number



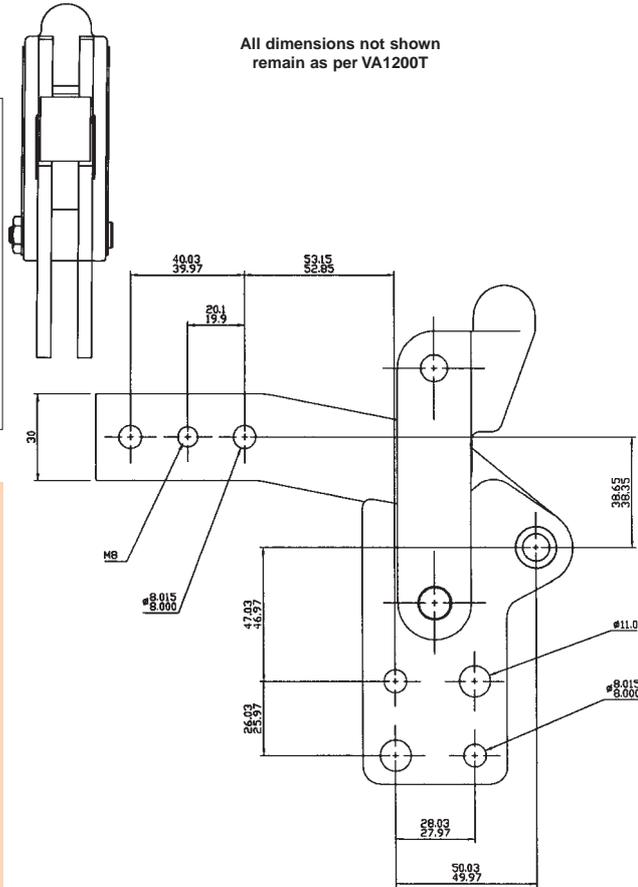
Arm:
Solid arm with mounting holes.

Base:
Straight with mounting holes.

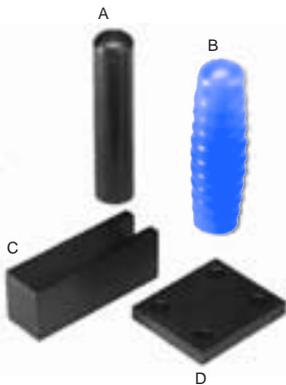
Nominal Holding Force:
1200 daN

Weight:
1.87kg

See "Accessories" for other items.



VA1200 SERIES ACCESSORIES

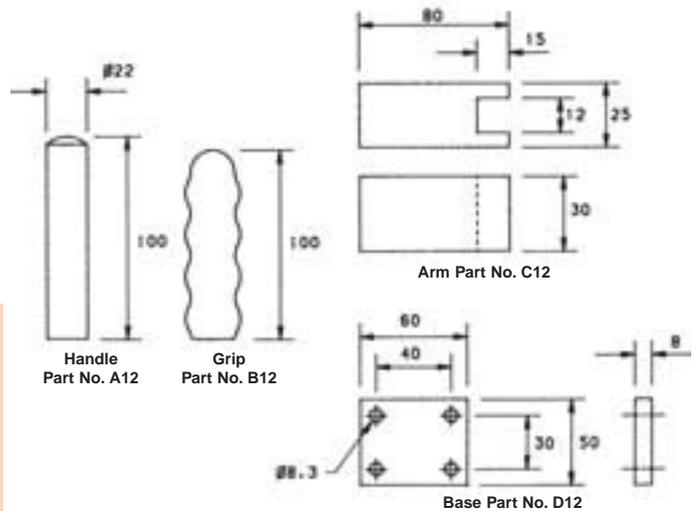


Model A12 Handle: Weight: 0.30 Kg
For welding at the desired angle to VA1200S & VA1200T.

Model B12 Grip: Weight: 0.01 Kg
To fit A12 handle.

Model C12 Arm: Weight: 0.42 Kg
For extending the stub arms of VA1200S & VA1200T.

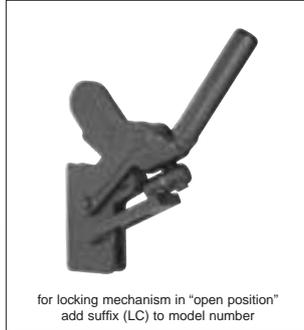
Model D12 Base: Weight: 0.17 Kg
For bolt mounting VA1200S & VA1200T.



HEAVY-DUTY VERTICAL CLAMPS

VA2400 SERIES

MODEL VA2400S



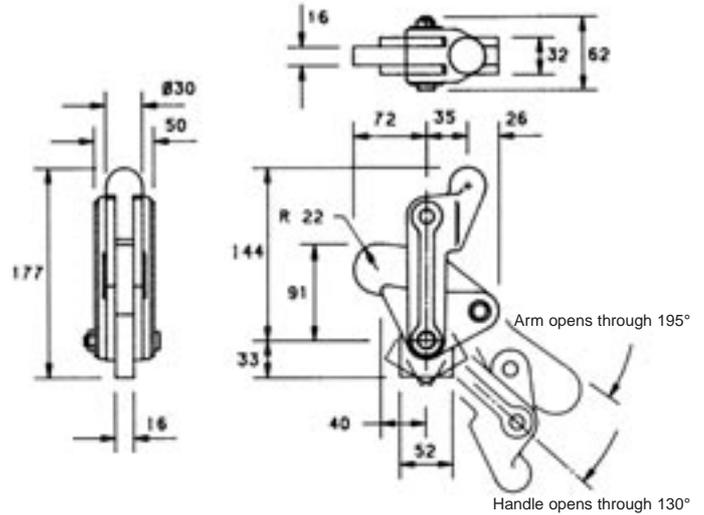
Arm:
Stub nose for welded extensions.

Base:
Swivel for welding in the desired position.

Nominal Holding Force:
2400 daN

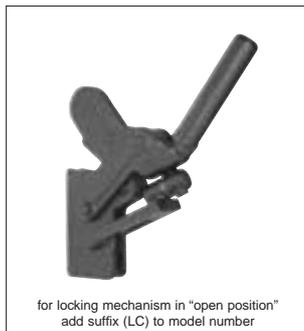
Weight:
2.90 Kg

See "Accessories" for other items.



VA2400 SERIES

MODEL VA2400T



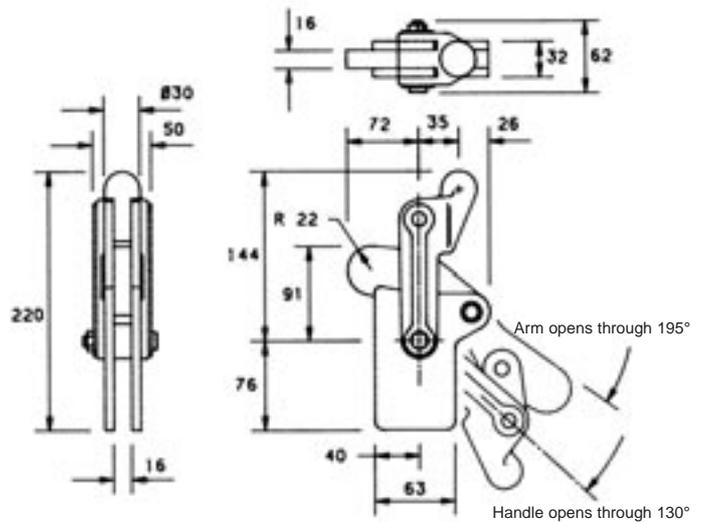
Arm:
Stub nose for welded extensions.

Base:
Straight.

Nominal Holding Force:
2400 daN

Weight:
3.20 Kg

See "Accessories" for other items.

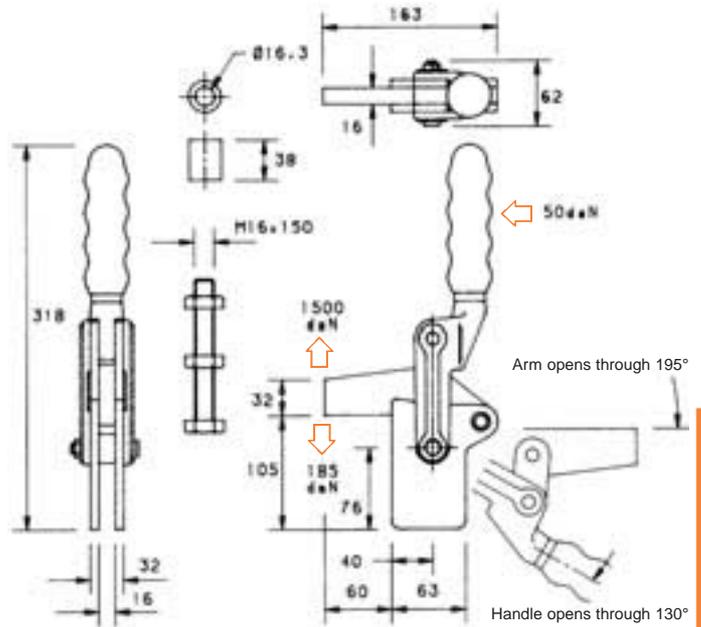


HEAVY-DUTY VERTICAL CLAMPS

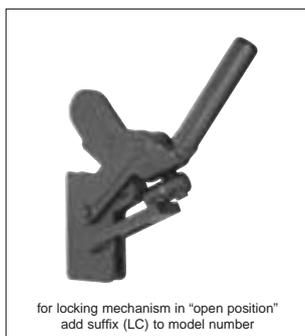
VA2400 SERIES
MODEL VA2400/1A



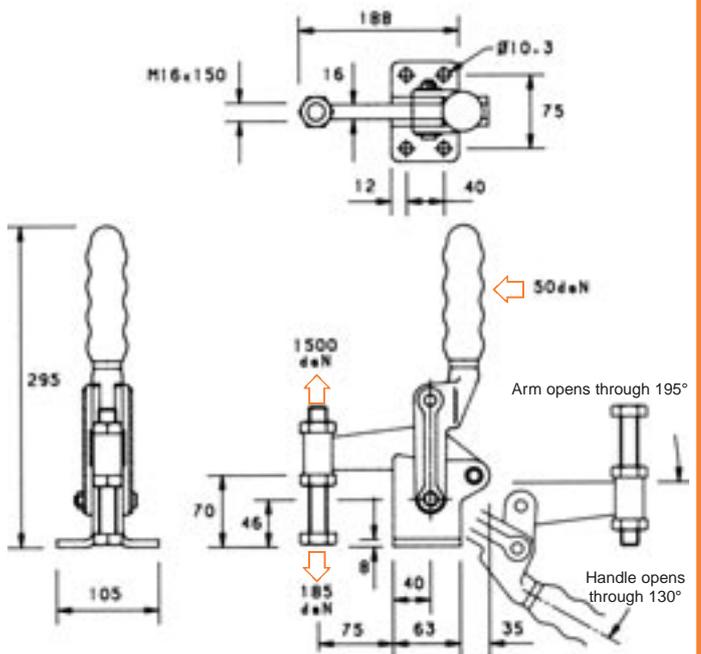
Arm:
Solid arm.
Base:
Straight.
Nominal Holding Force:
2400 daN
Weight:
3.75 Kg
Supplied complete with:
Spindle retainer.
MB16150 Setscrew & nuts.
See "Accessories" for other items.



VA2400 SERIES
MODEL VA2400/2C



Arm:
The spindle is in a fixed position.
Base:
Flanged.
Nominal Holding Force:
2400 daN
Weight:
4.10 Kg
Supplied complete with:
MB16150 Setscrew & nuts.
See "Accessories" for other items.

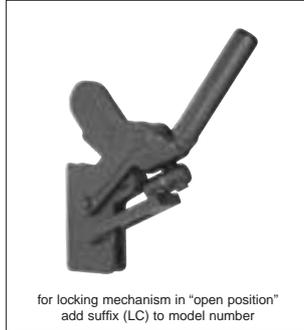


HEAVY-DUTY VERTICAL CLAMPS

VA2400 SERIES MODEL VA2400TD



for pneumatic models
see page 13



for locking mechanism in "open position"
add suffix (LC) to model number



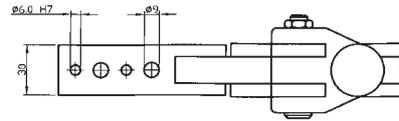
Arm:
Stub nose with mounting holes.

Base:
Straight with mounting holes.

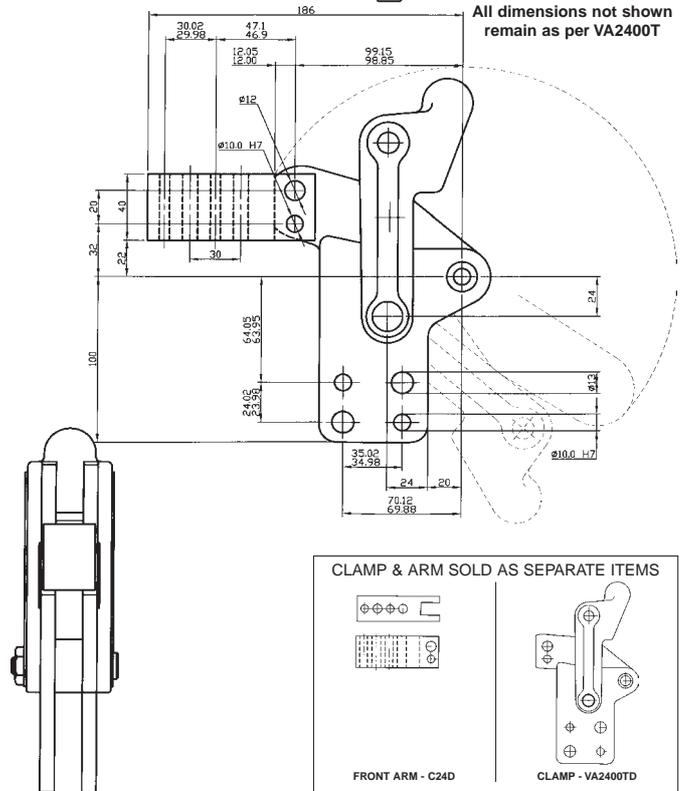
Nominal Holding Force:
2400 daN

Weight:
3.96kg

See "Accessories" for other items.



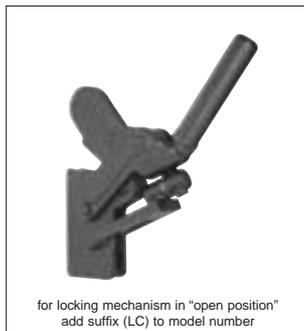
All dimensions not shown
remain as per VA2400T



VA2400 SERIES MODEL VA2400TP



for pneumatic models
see page 13



for locking mechanism in "open position"
add suffix (LC) to model number



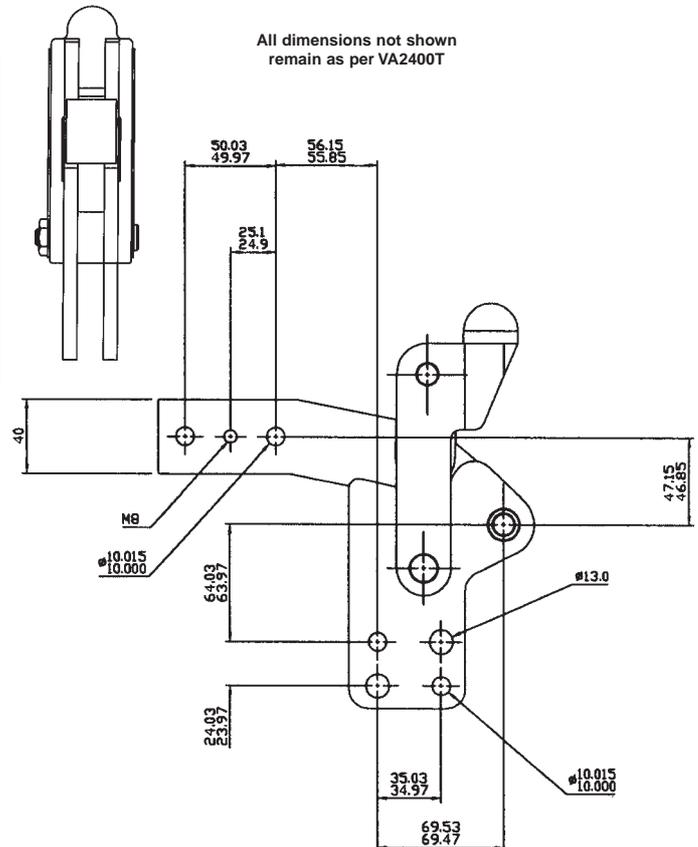
Arm:
Solid arm with mounting holes.

Base:
Straight with mounting holes.

Nominal Holding Force:
2400 daN

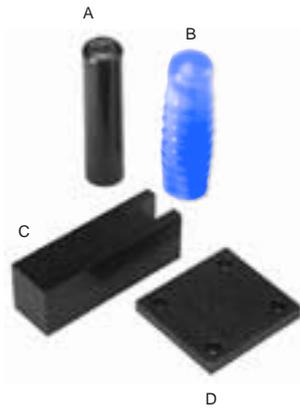
Weight:
3.96kg

See "Accessories" for other items.



HEAVY-DUTY VERTICAL CLAMPS

VA2400 SERIES
ACCESSORIES

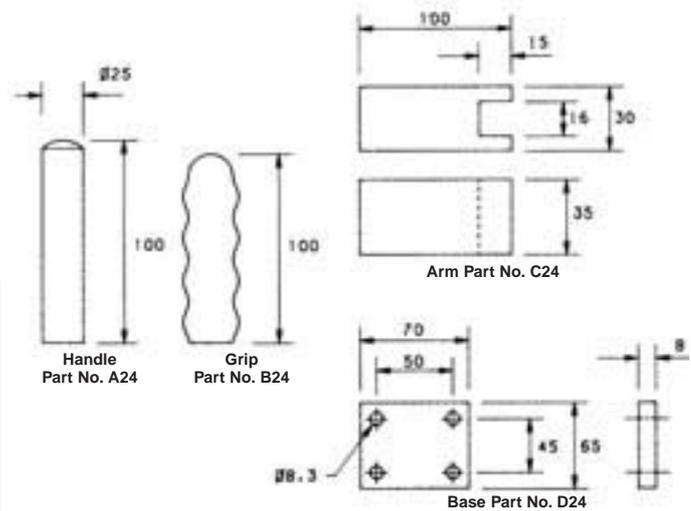


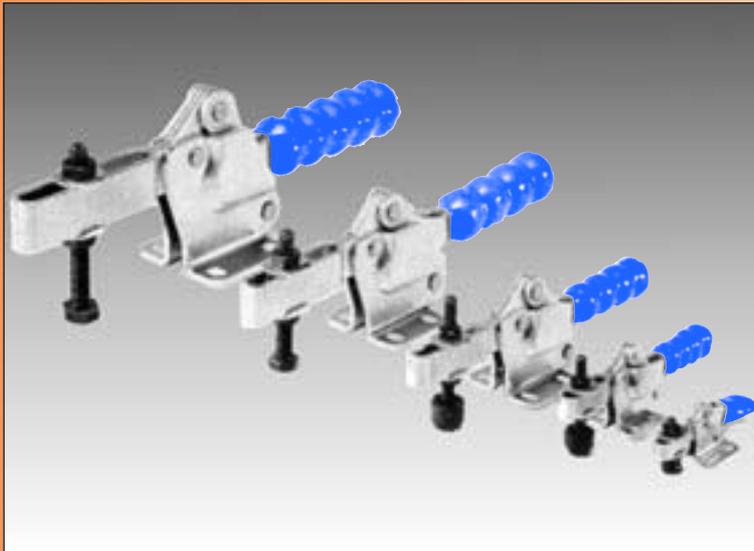
Model A24 Handle: **Weight:**
For welding at the
desired angle to
VA2400S & VA2400T. 0.39Kg

Model B24 Grip: **Weight:**
To fit A24 handle. 0.02 Kg

Model C24 Arm: **Weight:**
For extending the
stub arms of
VA2400S & VA2400T. 0.76 Kg

Model D24 Base: **Weight:**
For bolt mounting
VA2400S & VA2400T. 0.26 Kg





HORIZONTAL CLAMPS

- **Features:**

Horizontal clamps are used where height restrictions prevent the use of a Vertical clamp, or where the action of the clamping arm and handle rotating in opposite directions is more suitable.

The geometry of Brauer Horizontal clamps has been designed to ensure that the clamp opens and closes with a smooth and continuous action.

The side plates have been designed so as to provide a guard against mechanism finger trapping.

A comfortable, cushioned PVC handle grip is fitted to all Horizontal clamps.

Horizontal models except H700 and additional products have a closed end to the clamping arm for rigidity of construction and to retain the spindle or setscrew if it should loosen.

- **Specification:**

The main components are of zinc plated and passivated steel.

Rivets are of stainless steel which burnishes and work-hardens with use, the rivets of the larger clamps rotating in hardened bushes or directly in the close-toleranced holes of hardened parts.

HORIZONTAL CLAMPS

H50 SERIES

MODEL H50/1B



Arm:

The spindle position is adjustable along the arm.

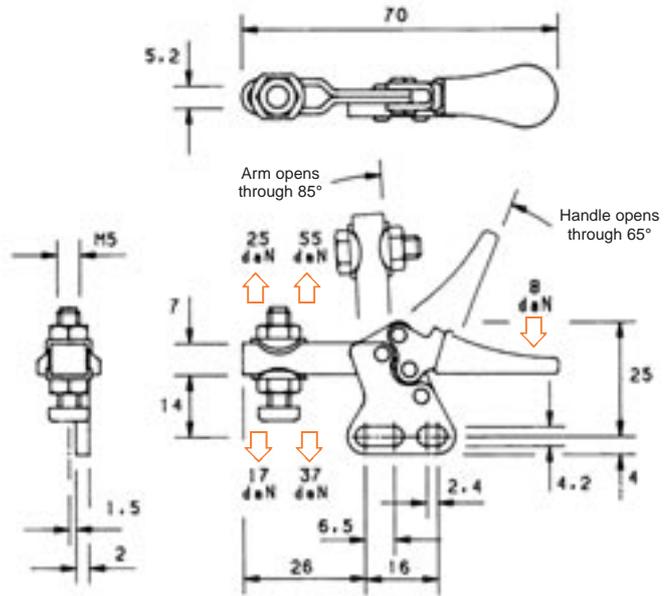
Base:
Straight.

Nominal Holding Force:
50 daN

Weight:
0.033 Kg

Supplied complete with:
MB0520 Setscrew & nuts.
FW05/09 Flanged washers.

See "Accessories" for other items.



H50 SERIES

MODEL H50/2B



Arm:

The spindle position is adjustable along the arm.

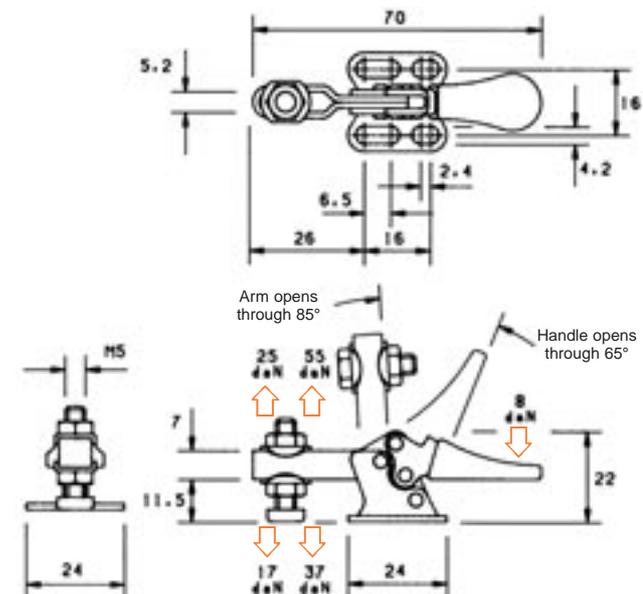
Base:
Flanged.

Nominal Holding Force:
50 daN

Weight:
0.036 Kg

Supplied complete with:
MB0520 Setscrew & nuts.
FW05/09 Flanged washers.

See "Accessories" for other items.



H50 SERIES

MODEL H50/2BSS

**STAINLESS
STEEL**



Arm:

The spindle position is adjustable along the arm.

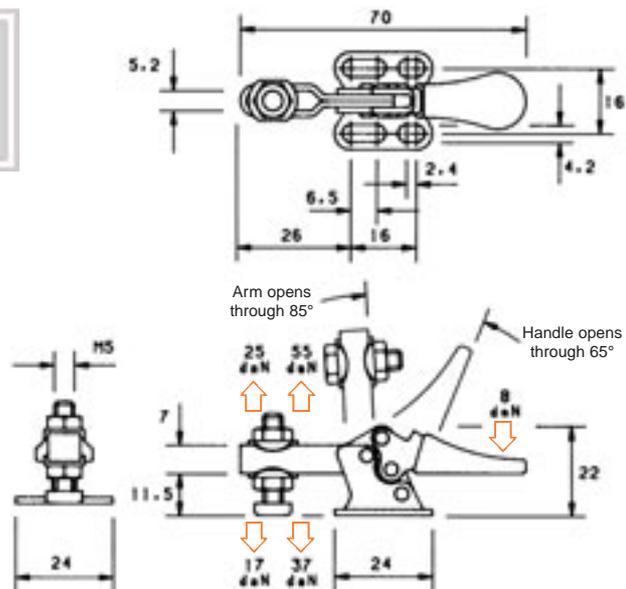
Base:
Flanged.

Nominal Holding Force:
50 daN

Weight:
0.036 Kg

Supplied complete with:
Setscrew & nuts.
Flanged washers.

Material:
BS 304 S15.



HORIZONTAL CLAMPS

H50 SERIES

MODEL H50/2C



Arm:

The spindle is in a fixed position.

Base:

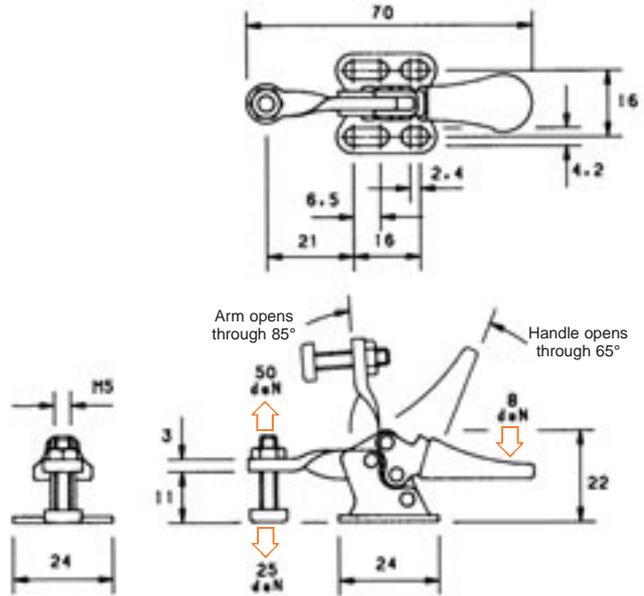
Flanged.

Nominal Holding Force:
50 daN

Weight:
0.025 Kg

Supplied complete with:
MB0520 Setscrew & nuts.

See "Accessories" for other items.



H50 SERIES

MODEL H50/2BL



Arm:

The spindle position is adjustable along the arm.

Base:

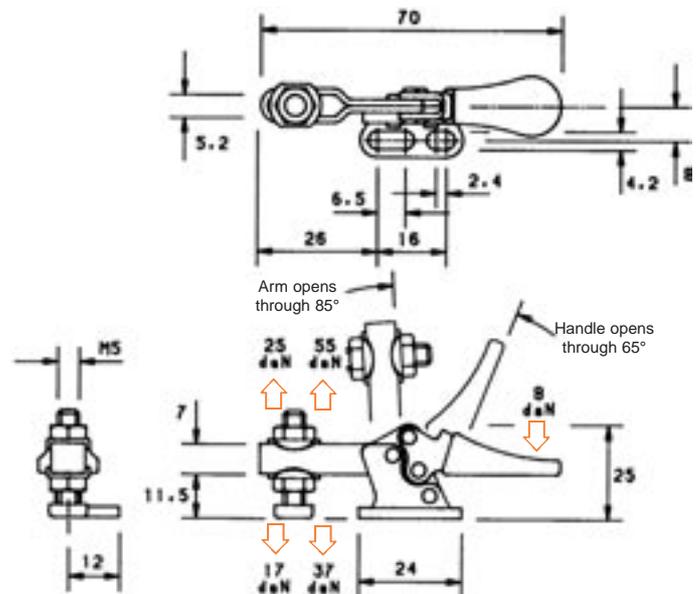
Left hand flanged.

Nominal Holding Force:
50 daN

Weight:
0.02 Kg

Supplied complete with:
MB0520 Setscrew & nuts.
FW05/09 Flanged washers.

See "Accessories" for other items.



H50 SERIES

MODEL H50/2BR



Arm:

The spindle position is adjustable along the arm.

Base:

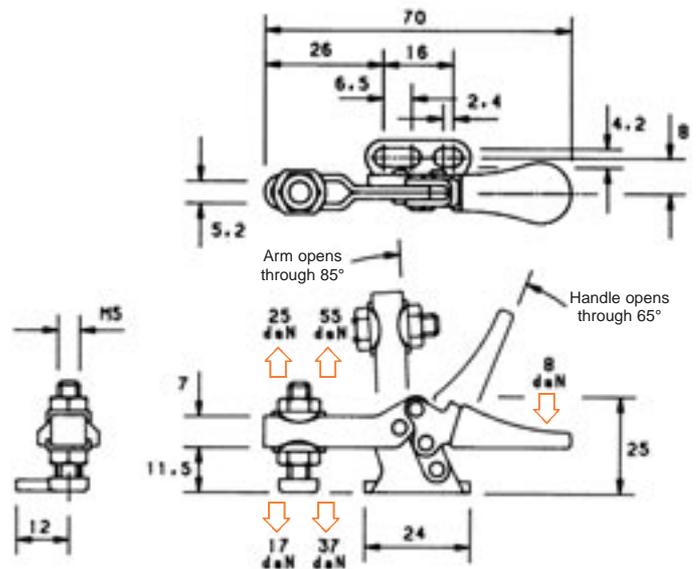
Right hand flanged.

Nominal Holding Force:
50 daN

Weight:
0.02 Kg

Supplied complete with:
MB0520 Setscrew & nuts.
FW05/09 Flanged washers.

See "Accessories" for other items.



HORIZONTAL CLAMPS

H75 SERIES

MODEL H75/1B



Arm:
The spindle position is adjustable along the arm.

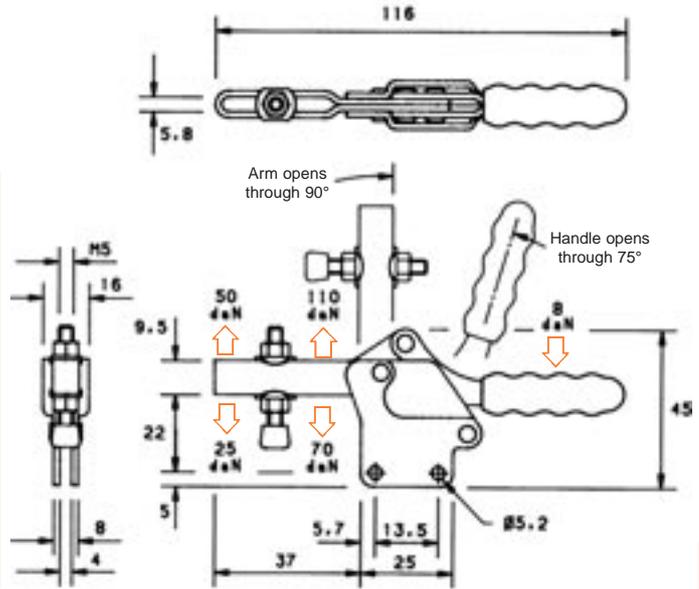
Base:
Straight.

Nominal Holding Force:
75 daN

Weight:
0.10 Kg

Supplied complete with:
MB0535 Setscrew & nuts.
FW05/10 Flanged washers.
NC/05 Neoprene cover.

See "Accessories" for other items.



H75 SERIES

MODEL H75/1BSS

NEW

STAINLESS
STEEL



Arm:
The spindle position is adjustable along the arm.

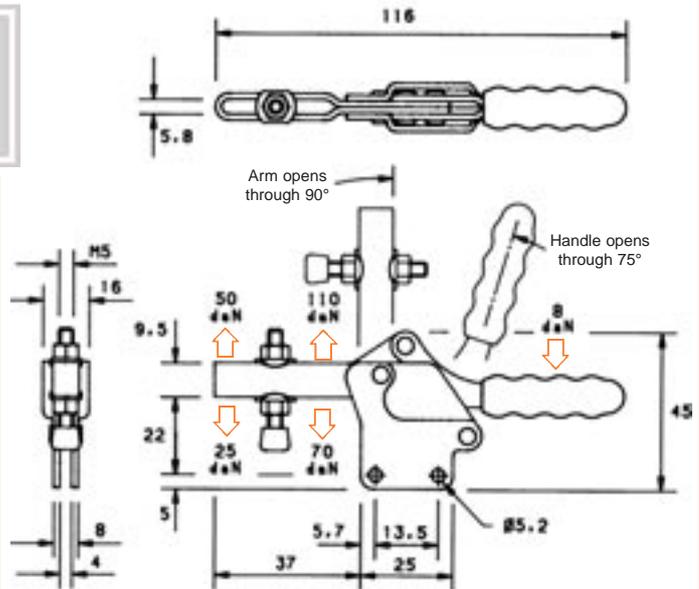
Base:
Straight.

Nominal Holding Force:
75 daN

Weight:
0.10 Kg

Supplied complete with:
MB0535 Setscrew & nuts.
FW05/10 Flanged washers.
NC/05 Neoprene cover.

Material:
BS 304 S15.



H75 SERIES

MODEL H75/1C



Arm:
The spindle is in a fixed position.

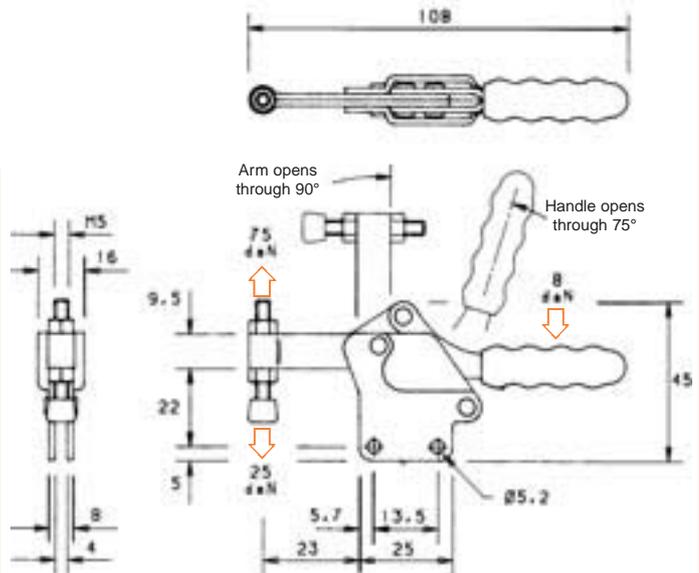
Base:
Straight.

Nominal Holding Force:
75 daN

Weight:
0.10 Kg

Supplied complete with:
MB0535 Setscrew & nuts.
NC/05 Neoprene cover.

See "Accessories" for other items.



HORIZONTAL CLAMPS

H75 SERIES

MODEL H75/2B



for front mounting use bracket Model FM1



Arm:
The spindle position is adjustable along the arm.

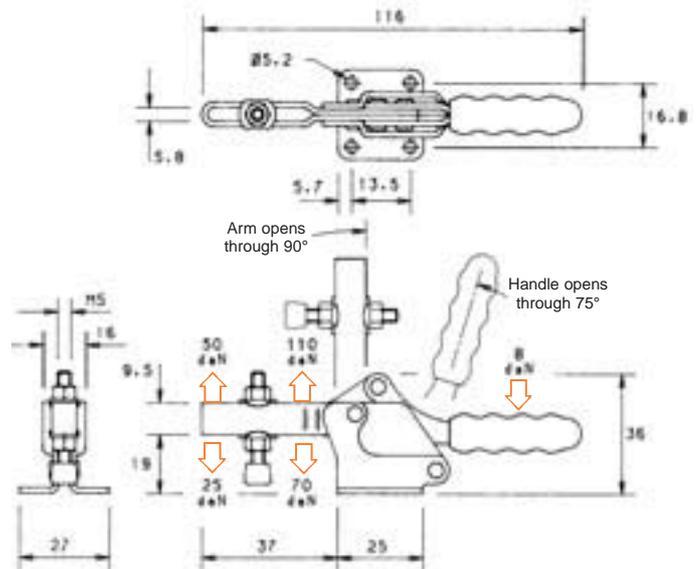
Base:
Flanged.

Nominal Holding Force:
75 daN

Weight:
0.10 Kg

Supplied complete with:
MB0535 Setscrew & nuts.
FW05/10 Flanged washers.
NC/05 Neoprene cover.

See "Accessories" for other items.



H75 SERIES

MODEL H75/2BSS

**STAINLESS
STEEL**



Arm:
The spindle position is adjustable along the arm.

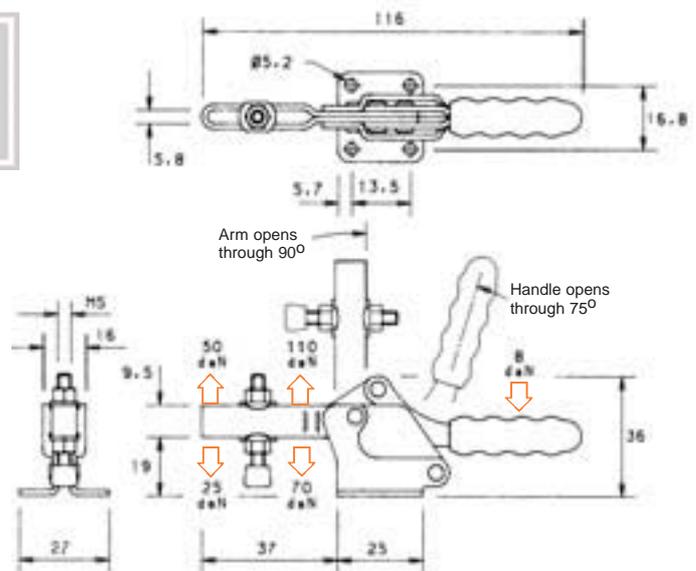
Base:
Flanged.

Nominal Holding Force:
75 daN

Weight:
0.10 Kg

Supplied complete with:
Setscrew & nuts.
Flanged washers.
Neoprene cover.

Material:
BS 304 S15.



H75 SERIES

MODEL H75/2C



for front mounting use bracket Model FM1



Arm:
The spindle is in a fixed position.

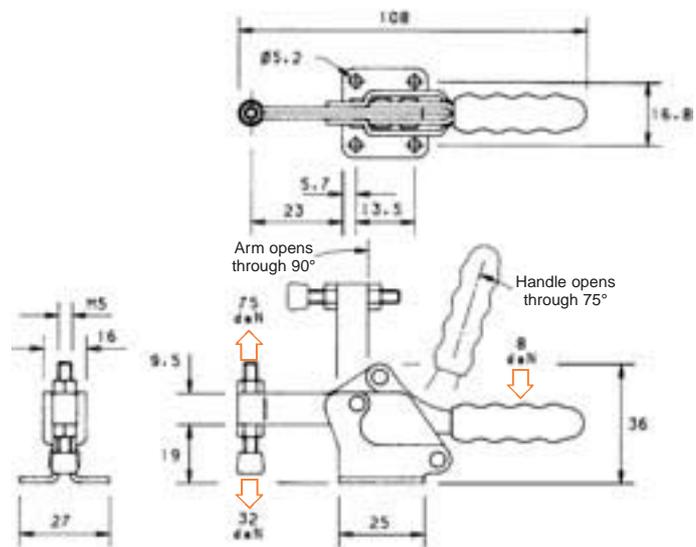
Base:
Flanged.

Nominal Holding Force:
75 daN

Weight:
0.10 Kg

Supplied complete with:
MB0535 Setscrew & nuts.
NC/Neoprene cover.

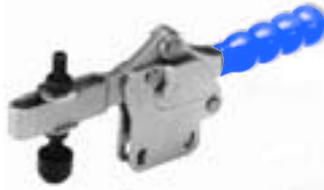
See "Accessories" for other items.



HORIZONTAL CLAMPS

H150 SERIES

MODEL H150/1B



Arm:
The spindle position is adjustable along the arm.

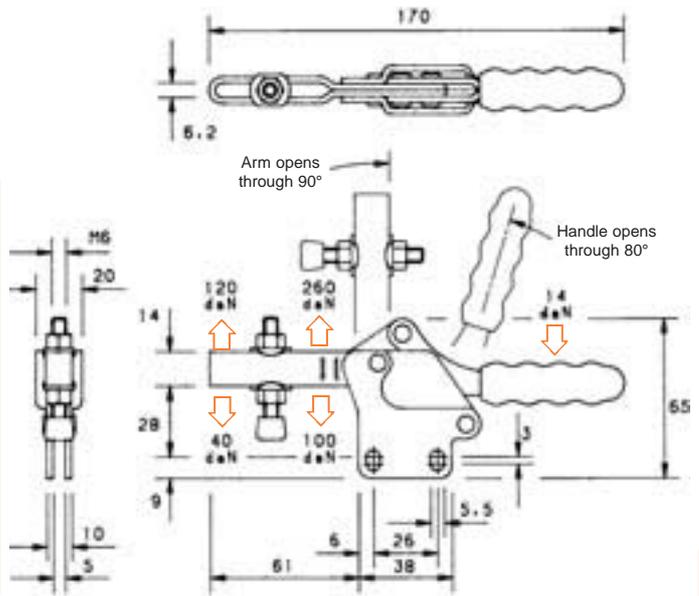
Base:
Straight.

Nominal Holding Force:
150 daN

Weight:
0.25 Kg

Supplied complete with:
MB0650 Setscrew & nuts.
NC/06 Neoprene cover.
FW06/12 Flanged washers.

See "Accessories" for other items.



H150 SERIES

MODEL H150/1BSS

NEW

**STAINLESS
STEEL**



Arm:
The spindle position is adjustable along the arm.

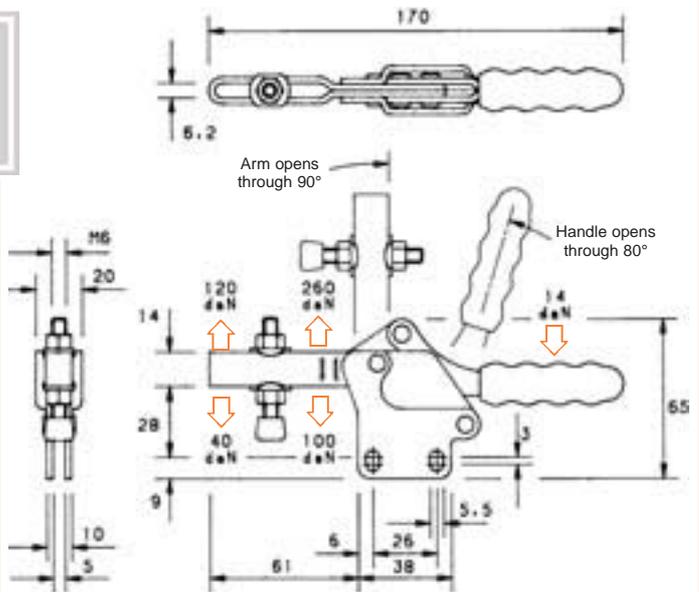
Base:
Straight.

Nominal Holding Force:
150 daN

Weight:
0.25 Kg

Supplied complete with:
MB0650 Setscrew & nuts.
NC/06 Neoprene cover.
FW06/12 Flanged washers.

Material:
BS 304 S15.



H150 SERIES

MODEL H150/1C



Arm:
The spindle is in a fixed position.

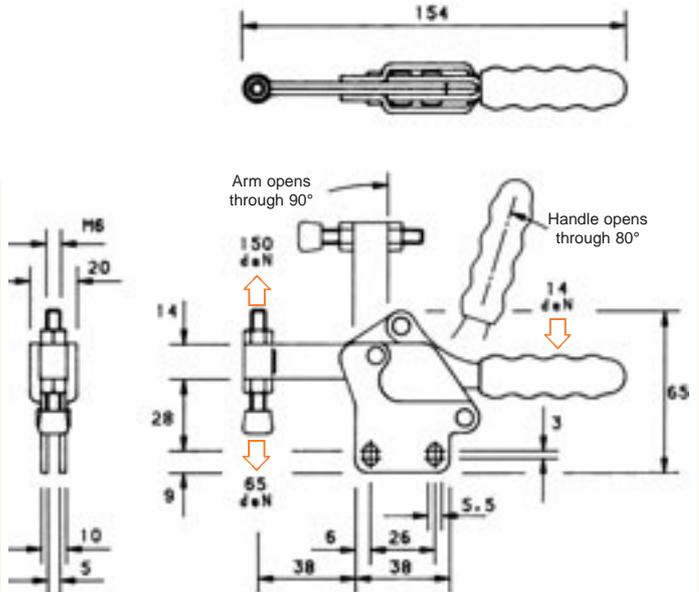
Base:
Straight.

Nominal Holding Force:
150 daN

Weight:
0.25 Kg

Supplied complete with:
MB0650 Setscrew & nuts.
NC/06 Neoprene cover.

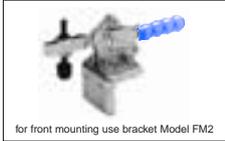
See "Accessories" for other items.



HORIZONTAL CLAMPS

H150 SERIES

MODEL H150/2B



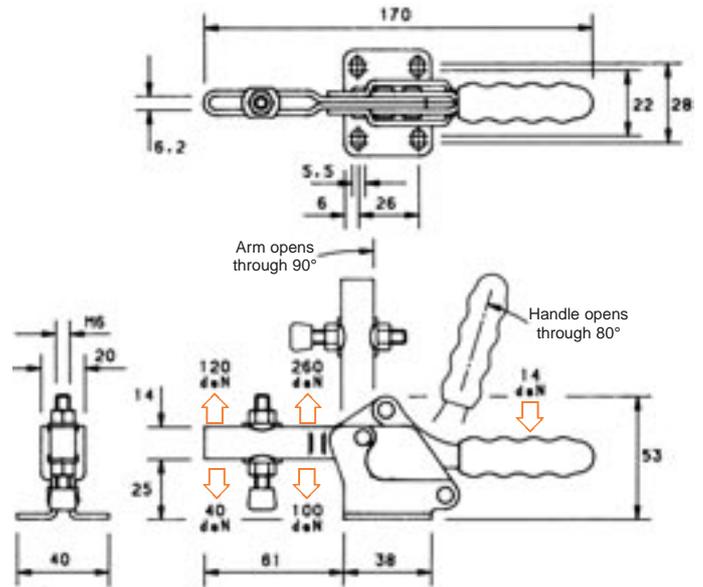
Arm:
The spindle position is adjustable along the arm.

Base:
Flanged.

Nominal Holding Force:
150 daN

Weight:
0.25 Kg

Supplied complete with:
MB0650 Setscrew & nuts.
NC/06 Neoprene cover.
FW06/12 Flanged washers.
See "Accessories" for other items.



H150 SERIES

MODEL H150/2BSS

**STAINLESS
STEEL**



Arm:
The spindle position is adjustable along the arm.

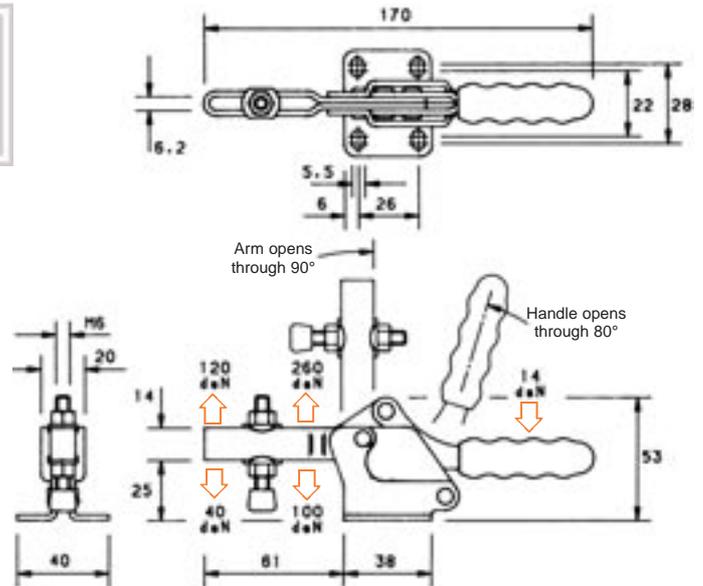
Base:
Flanged.

Nominal Holding Force:
150 daN

Weight:
0.10 Kg

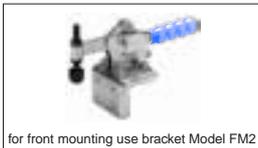
Supplied complete with:
Setscrew & nuts.
Flanged washers.

Material:
BS 304 S15.



H150 SERIES

MODEL H150/2C



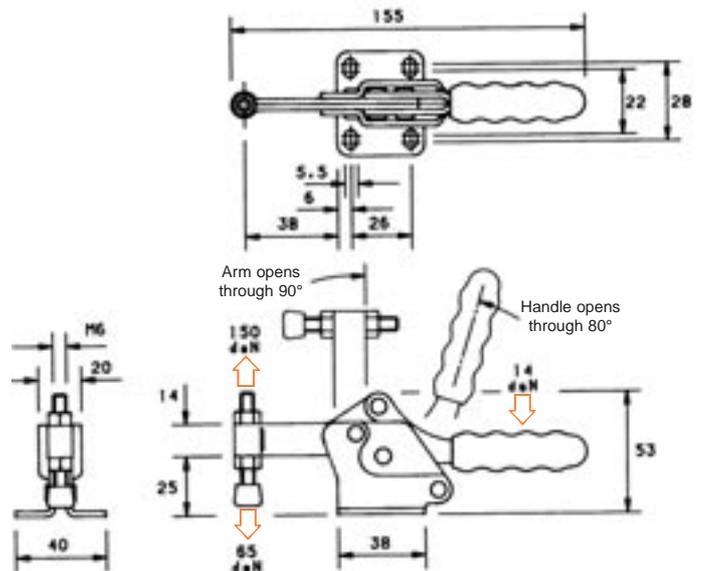
Arm:
The spindle is in a fixed position.

Base:
Flanged.

Nominal Holding Force:
150 daN

Weight:
0.25 Kg

Supplied complete with:
MB0650 Setscrew & nuts.
NC/06 Neoprene cover.
See "Accessories" for other items.



HORIZONTAL CLAMPS

H250 SERIES

MODEL H250/1A



Arm:
2-piece "solid" arm with spindle retainer supplied loose for welding in the desired position.

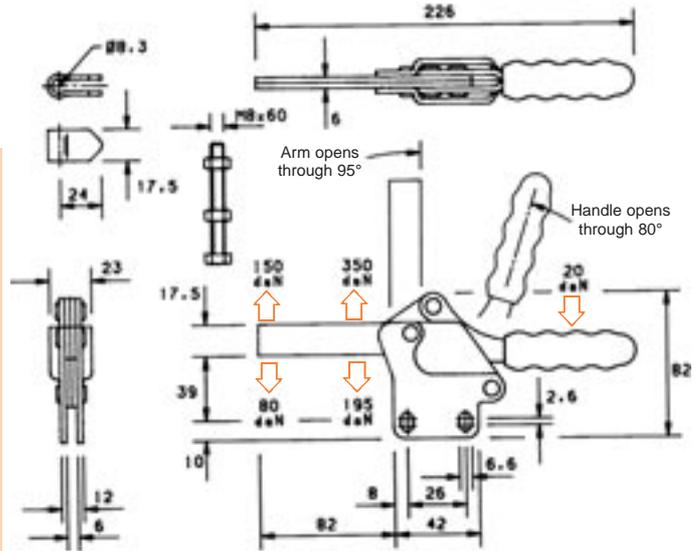
Base:
Straight.

Nominal Holding Force:
250 daN

Weight:
0.50 Kg

Supplied complete with:
MB0860 Setscrew & nuts.
R/08 Spindle retainer.

See "Accessories" for other items.



H250 SERIES

MODEL H250/1AL

NEW



Arm:
Solid arm with spindle retainer supplied loose for welding in the desired position. 10mm added to arm length over V250/1A model.

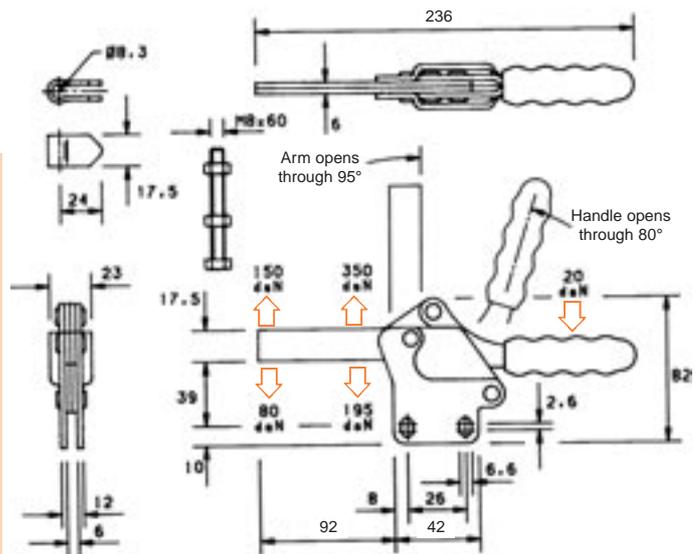
Base:
Straight.

Nominal Holding Force:
250 daN

Weight:
0.50 Kg

Supplied complete with:
MB0860 Setscrew & nuts.
R/08 Spindle retainer.

See "Accessories" for other items.



H250 SERIES

MODEL H250/1B



for "T" Bar Accessory order Model T250



Arm:
The spindle position is adjustable along the arm.

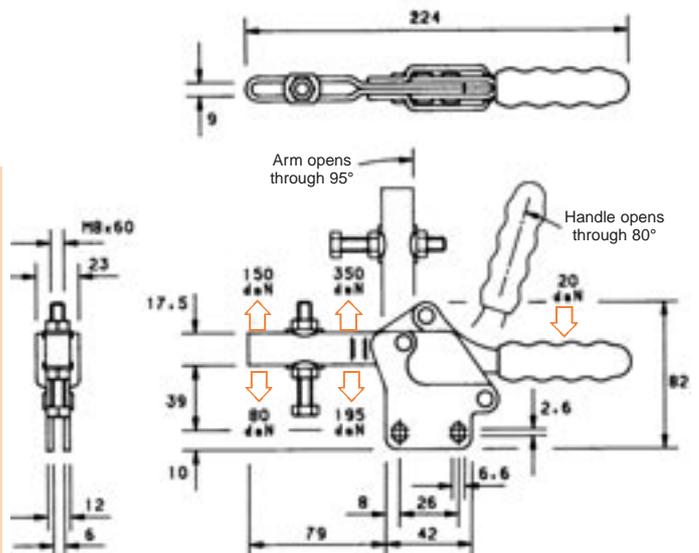
Base:
Straight.

Nominal Holding Force:
250 daN

Weight:
0.50 Kg

Supplied complete with:
MB0860 Setscrew & nuts.
FW08/15 Flanged washers.

See "Accessories" for other items.



HORIZONTAL CLAMPS

H350 SERIES
MODEL H350/1A



Arm:
2-piece "solid" arm with spindle retainer supplied loose for welding in the desired position.

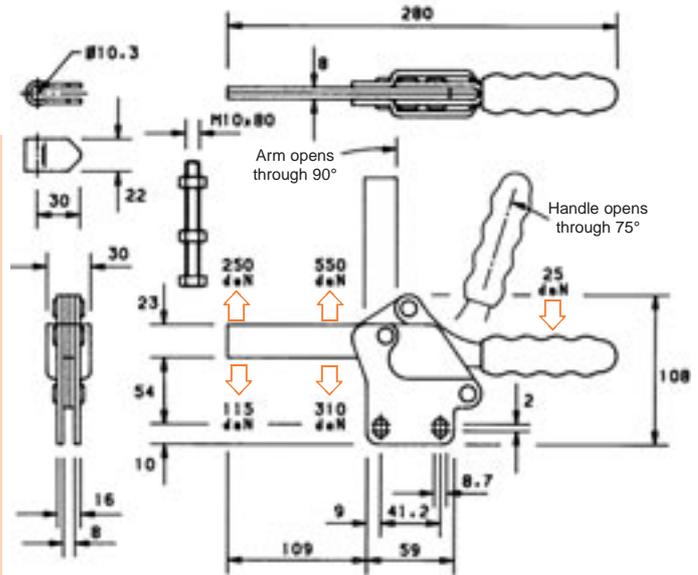
Base:
Straight.

Nominal Holding Force:
350 daN

Weight:
0.90 Kg

Supplied complete with:
MB1080 Setscrew & nuts.
R/10 Spindle retainer.

See "Accessories" for other items.



H350 SERIES
MODEL H350/1B



for "T" Bar Accessory order Model T350



Arm:
The spindle position is adjustable along the arm.

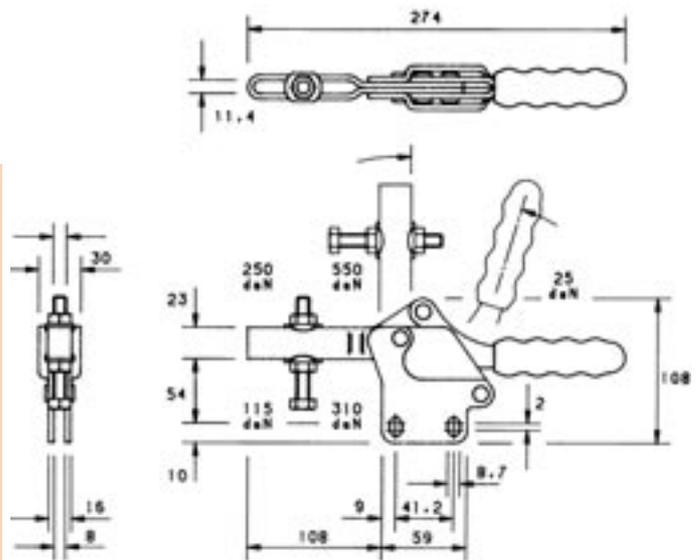
Base:
Straight.

Nominal Holding Force:
350 daN

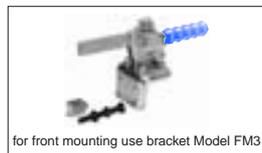
Weight:
0.90 Kg

Supplied complete with:
MB1080 Setscrew & nuts.
FW10/20 Flanged washers.

See "Accessories" for other items.



H350 SERIES
MODEL H350/2A



for front mounting use bracket Model FM3



Arm:
2-piece "solid" arm with spindle retainer supplied loose for welding in the desired position.

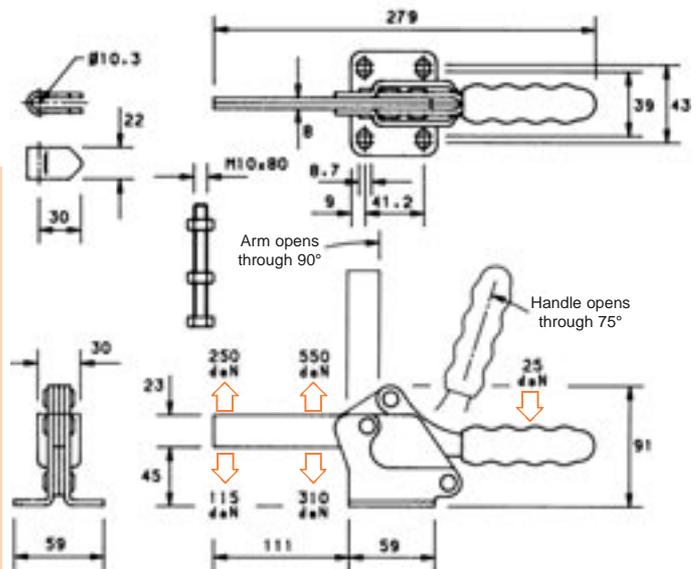
Base:
Flanged.

Nominal Holding Force:
350 daN

Weight:
0.90 Kg

Supplied complete with:
MB1080 Setscrew & nuts.
R/10 Spindle retainer.

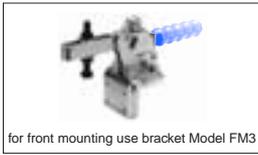
See "Accessories" for other items.



HORIZONTAL CLAMPS

H350 SERIES

MODEL H350/2B



for front mounting use bracket Model FM3



Arm:
The spindle position is adjustable along the arm.

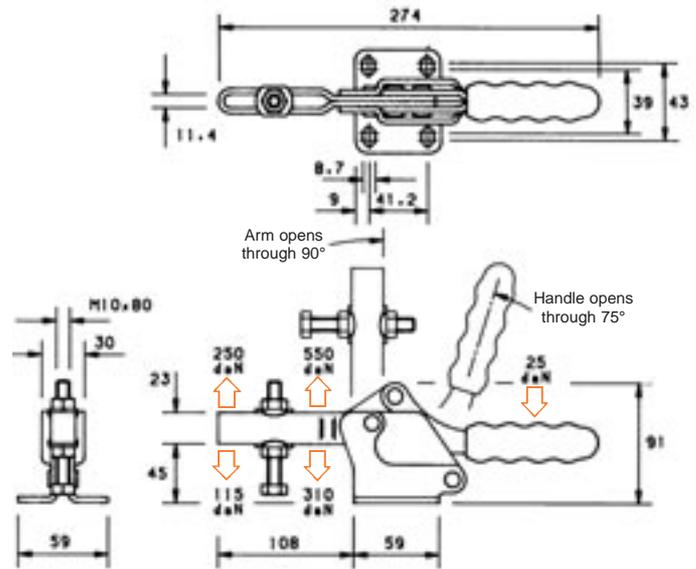
Base:
Flanged.

Nominal Holding Force:
350 daN

Weight:
0.90 Kg

Supplied complete with:
MB1080 Setscrew & nuts.
FW10/20 Flanged washers.

See "Accessories" for other items.



H450 SERIES

MODEL H450/1A



Arm:
Solid with spindle retainer supplied loose for welding in the desired position.

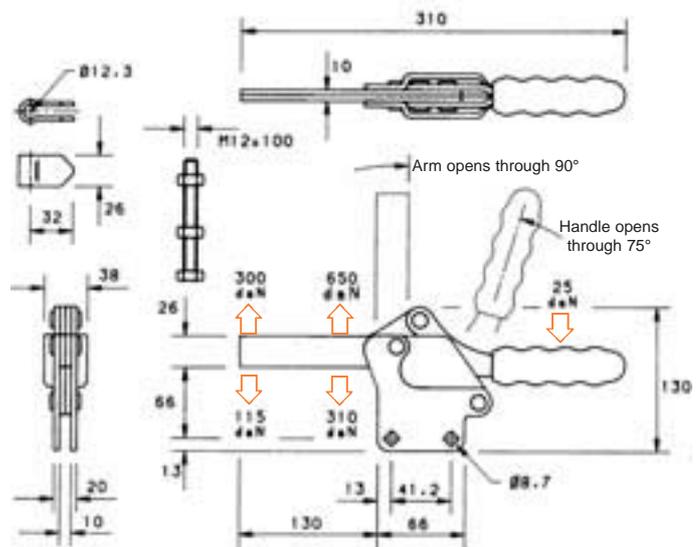
Base:
Straight.

Nominal Holding Force:
450 daN

Weight:
1.60 Kg

Supplied complete with:
MB12100 Setscrew & nuts.
R/12 Spindle retainer.

See "Accessories" for other items.



H450 SERIES

MODEL H450/1B



for "T" Bar Accessory order Model T450



Arm:
The spindle position is adjustable along the arm.

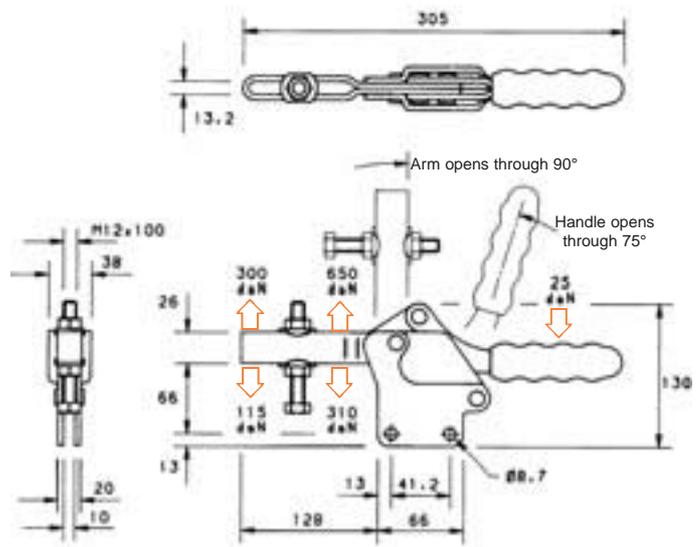
Base:
Straight.

Nominal Holding Force:
450 daN

Weight:
1.60 Kg

Supplied complete with:
MB12100 Setscrew & nuts.
FW12/23 Flanged washers.

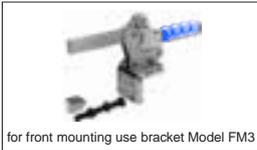
See "Accessories" for other items.



HORIZONTAL CLAMPS

H450 SERIES

MODEL H450/2A



for front mounting use bracket Model FM3



Arm:
Solid with spindle retainer supplied loose for welding in the desired position.

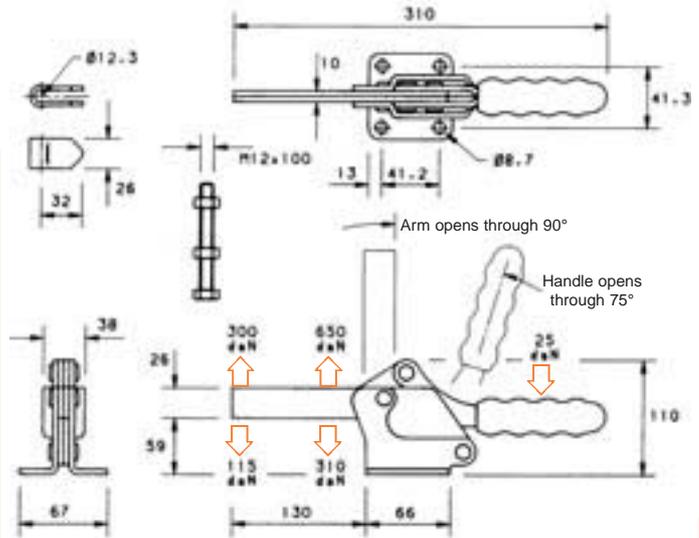
Base:
Flanged.

Nominal Holding Force:
450 daN

Weight:
1.60 Kg

Supplied complete with:
MB12100 Setscrew & nuts.
R/12 Spindle retainer.

See "Accessories" for other items.



H450 SERIES

MODEL H450/2B



for front mounting use bracket Model FM3



Arm:
The spindle position is adjustable along the arm.

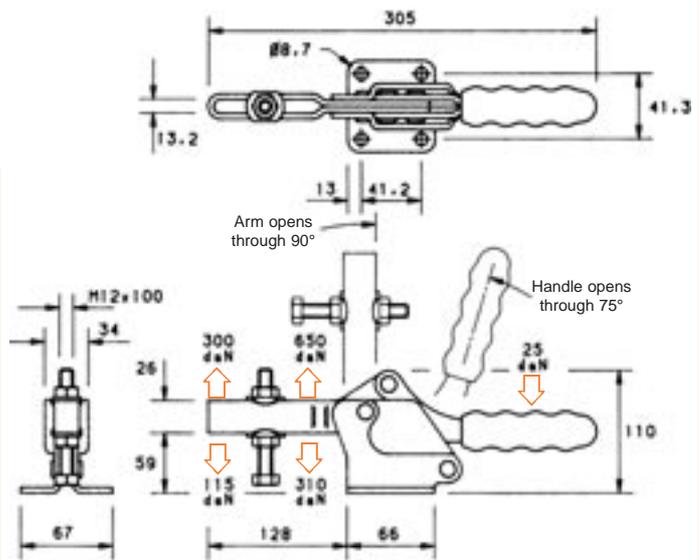
Base:
Flanged.

Nominal Holding Force:
450 daN

Weight:
1.60 Kg

Supplied complete with:
MB12100 Setscrew & nuts.
FW12/23 Flanged washers.

See "Accessories" for other items.



H700 SERIES

MODEL H700



for "T" Bar Accessory order Model T450



Arm:
The spindle position is adjustable along the arm.

Base:
Flanged.

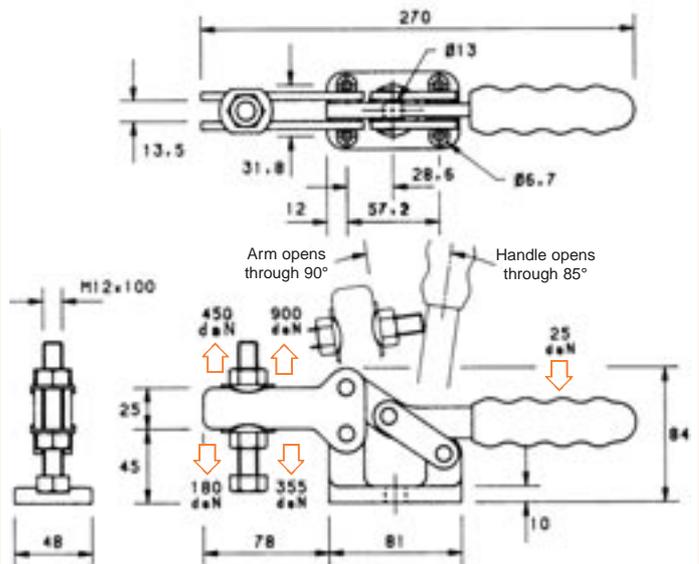
Nominal Holding Force:
700 daN

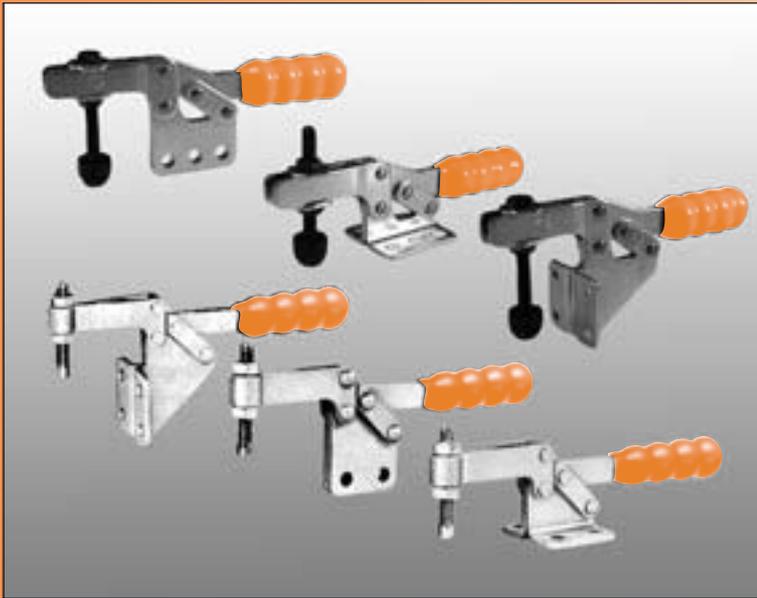
Weight:
1.15 Kg

Supplied complete with:
MB12100 Setscrew & nuts.
FW12/23 Flanged washers.

This heavy duty clamp features a cast steel base with central hole for optional "tee" bolt mounting.

See "Accessories" for other items.





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**ADDITIONAL HORIZONTAL
CLAMPING PRODUCTS**

ADDITIONAL HORIZONTAL CLAMPING PRODUCTS

MODEL H100/1B



Arm:
The spindle position is adjustable along the arm.

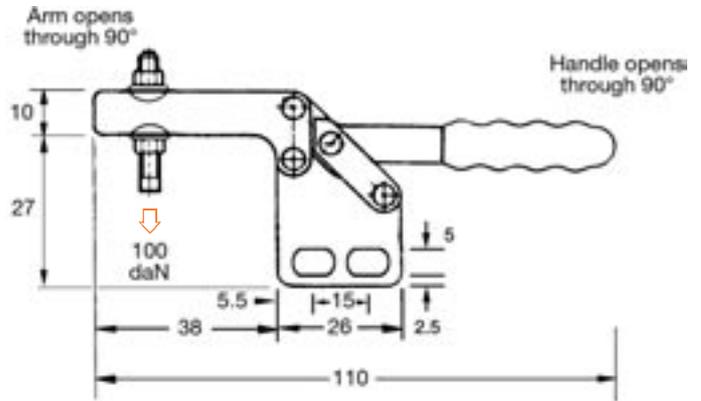
Base:
Straight.

Nominal Holding Force:
100 daN

Weight:
0.085 Kg

Supplied complete with:
standard spindle, nuts and flanged washers

See "Accessories" for other items.



MODEL H100/1C



Arm:
The spindle is in a fixed position.

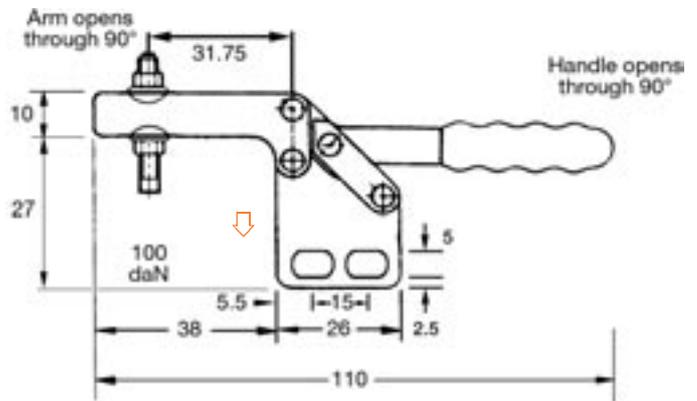
Base:
Straight.

Nominal Holding Force:
100 daN

Weight:
0.085 Kg

Supplied complete with:
standard spindle, nuts and flanged washers

See "Accessories" for other items.



MODEL H100/2B



Arm:
The spindle position is adjustable along the arm.

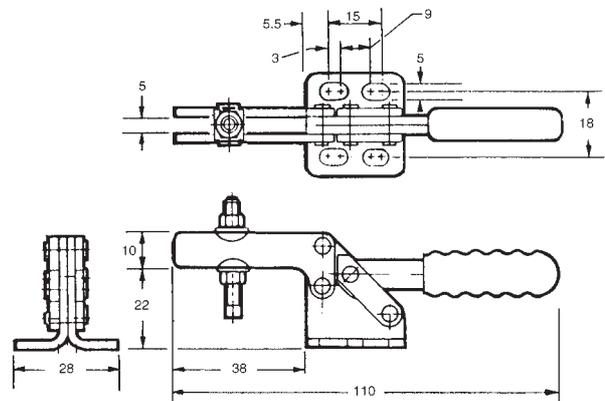
Base:
Flanged.

Nominal Holding Force:
100 daN

Weight:
0.085 kg

Supplied complete with:
standard spindle, nuts and flanged washers

See "Accessories" for other items.



ADDITIONAL HORIZONTAL CLAMPING PRODUCTS

MODEL H100/2C



Arm:
The spindle is in a fixed position.

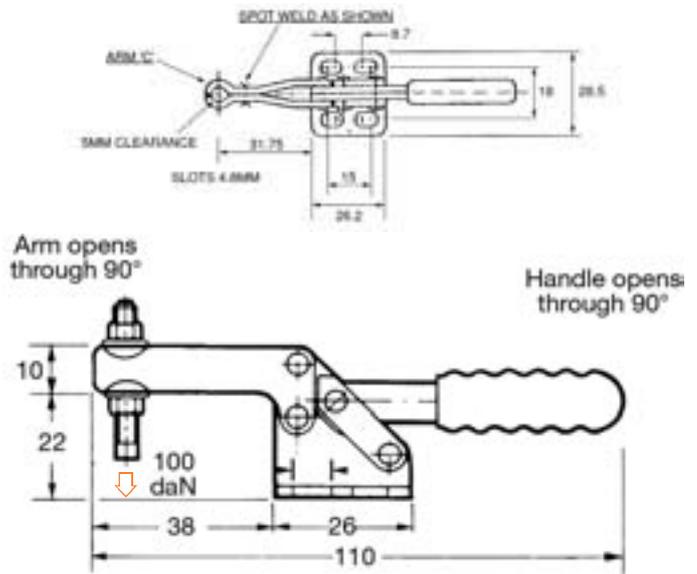
Base:
Flanged.

Nominal Holding Force:
100 daN

Weight:
0.085 Kg

Supplied complete with:
standard spindle, nuts and flanged washers

See "Accessories" for other items.



MODEL H100/3B



Arm:
The spindle position is adjustable along the arm.

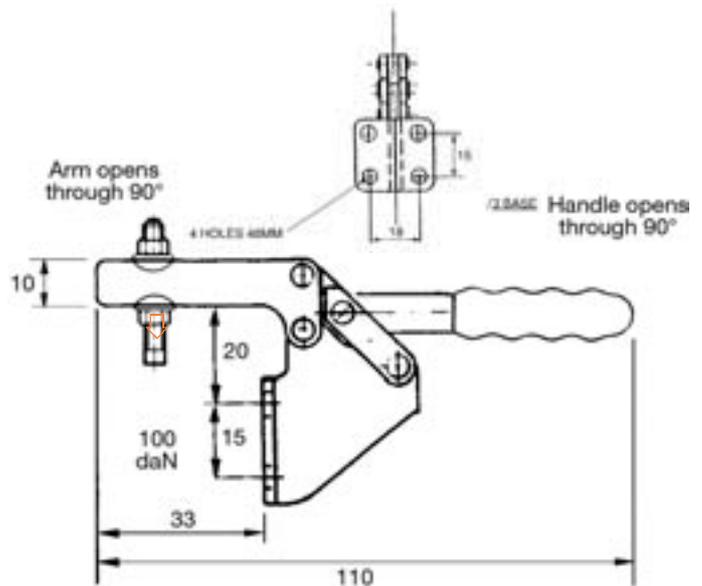
Base:
Front mounting.

Nominal Holding Force:
100 daN

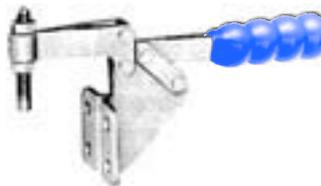
Weight:
0.085 Kg

Supplied complete with:
standard spindle, nuts and flanged washers

See "Accessories" for other items.



MODEL H100/3C



Arm:
The spindle is in a fixed position.

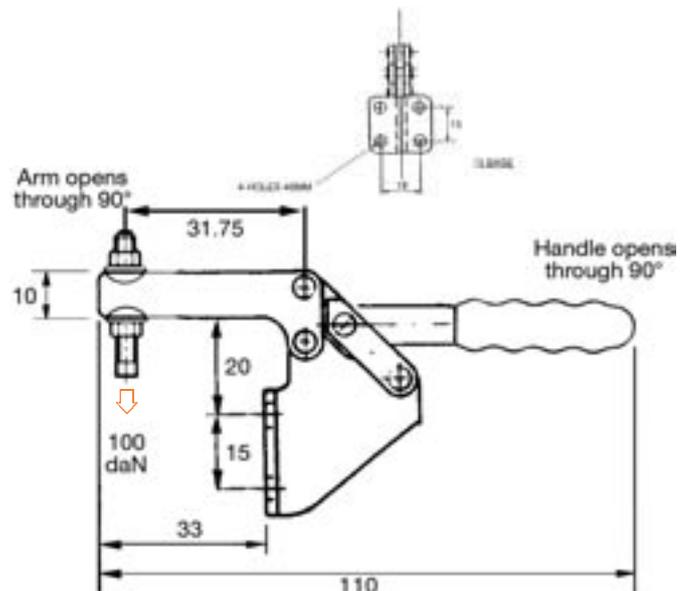
Base:
Front mounting.

Nominal Holding Force:
100 daN

Weight:
0.085 Kg

Supplied complete with:
standard spindle, nuts and flanged washers

See "Accessories" for other items.



ADDITIONAL HORIZONTAL CLAMPING PRODUCTS

MODEL H200/1B



Arm:
The spindle position is adjustable along the arm.

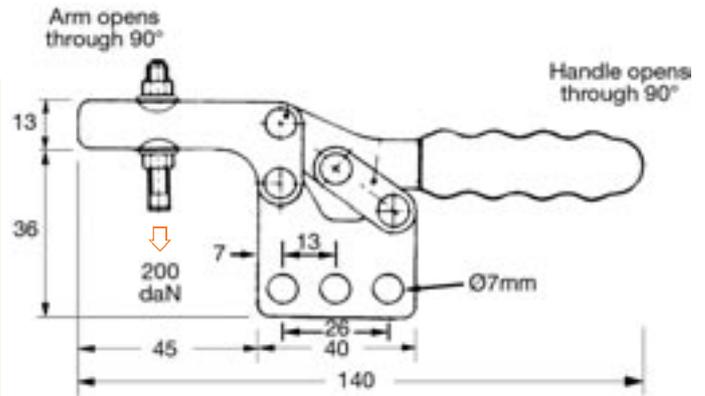
Base:
Straight.

Nominal Holding Force:
200 daN

Weight:
0.17 Kg

Supplied complete with:
standard spindle, nuts and flanged washers

See "Accessories" for other items.



MODEL H200/2B



Arm:
The spindle position is adjustable along the arm.

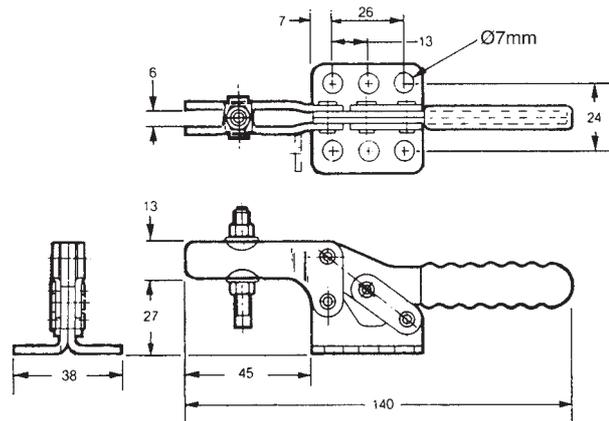
Base:
Flanged.

Nominal Holding Force:
200 daN

Weight:
0.17 Kg

Supplied complete with:
standard spindle, nuts and flanged washers

See "Accessories" for other items.



MODEL H200/3B



Arm:
The spindle position is adjustable along the arm.

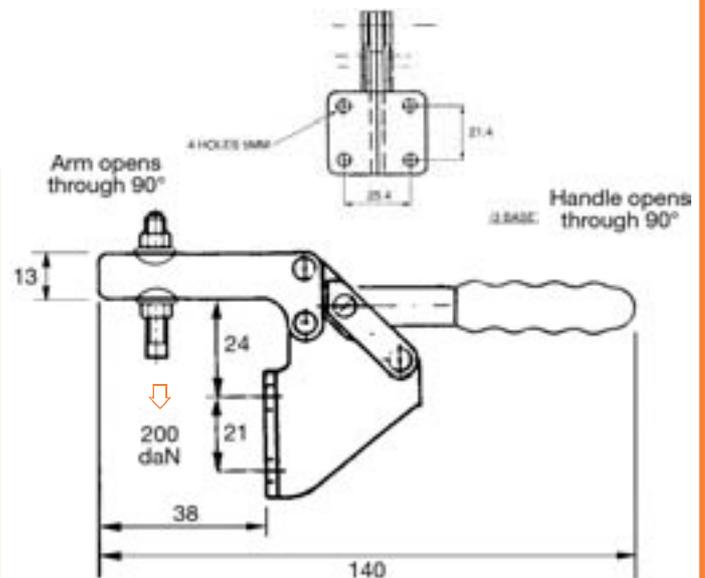
Base:
Front mounting.

Nominal Holding Force:
200 daN

Weight:
0.17 Kg

Supplied complete with:
standard spindle, nuts and flanged washers

See "Accessories" for other items.



ADDITIONAL HORIZONTAL CLAMPING PRODUCTS

MODEL H300/1B



Arm:
The spindle position is adjustable along the arm.

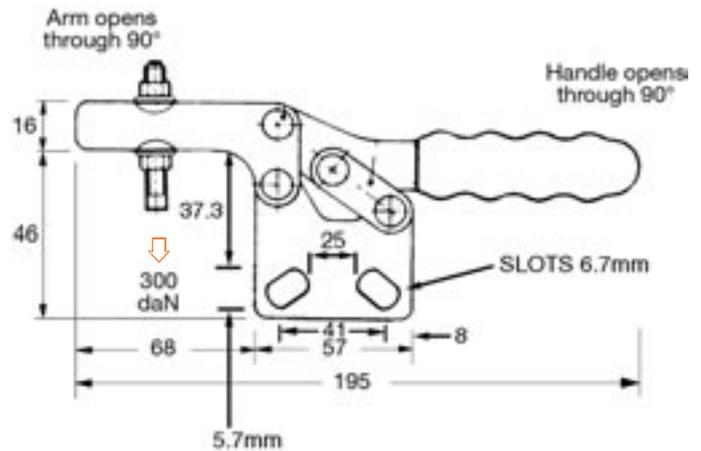
Base:
Straight.

Nominal Holding Force:
300 daN

Weight:
0.34 Kg

Supplied complete with:
standard spindle, nuts and flanged washers

See "Accessories" for other items.



MODEL H300/2B



Arm:
The spindle position is adjustable along the arm.

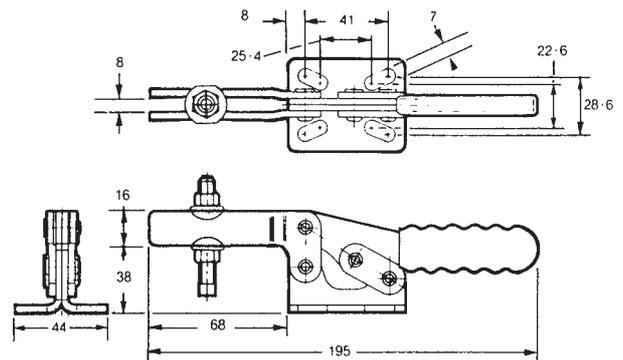
Base:
Flanged.

Nominal Holding Force:
300 daN

Weight:
0.34 Kg

Supplied complete with:
standard spindle, nuts and flanged washers

See "Accessories" for other items.



MODEL H300/3B



Arm:
The spindle position is adjustable along the arm.

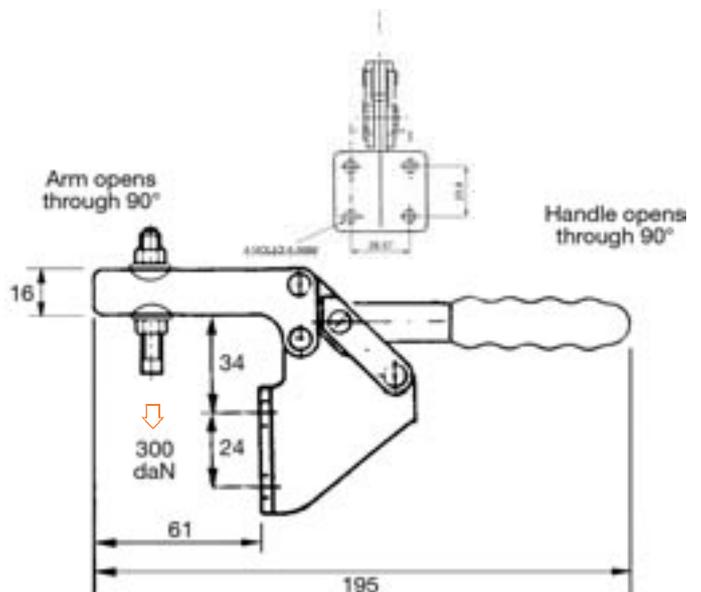
Base:
Front mounting.

Nominal Holding Force:
300 daN

Weight:
0.34 Kg

Supplied complete with:
standard spindle, nuts and flanged washers

See "Accessories" for other items.





PULL BACK CLAMP MODEL TC79

- **Features:**

This clamp is unique in having an action similar to a wide-opening locking plier, but having a flanged body which can be fastened to the fixture or mould against which the work-piece or mould half is to be clamped.

A comfortable, cushioned PVC grip is fitted.

- **Specification:**

The pressed components are of zinc plated and passivated steel. The jaw is a machined casting which is also zinc plated and passivated. Rivets are of stainless steel.

PULL BACK CLAMPS

PULL BACK CLAMP
MODEL TC79



Arm:
The spindle is in a fixed position.

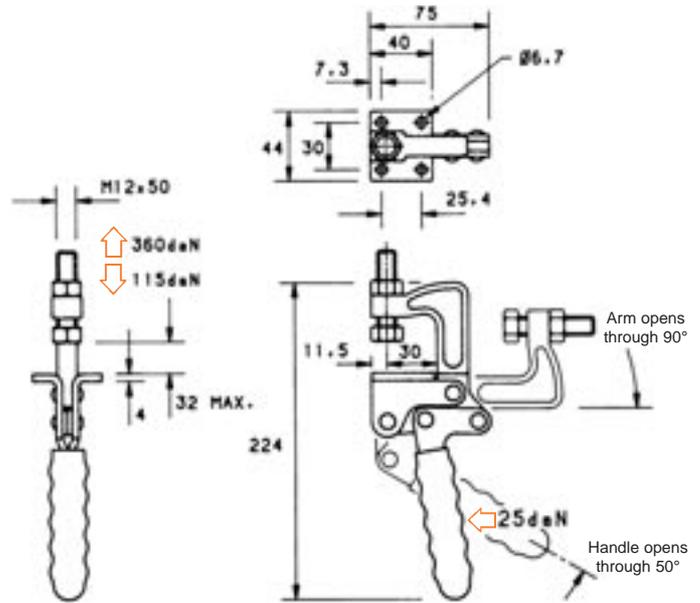
Base:
Flanged.

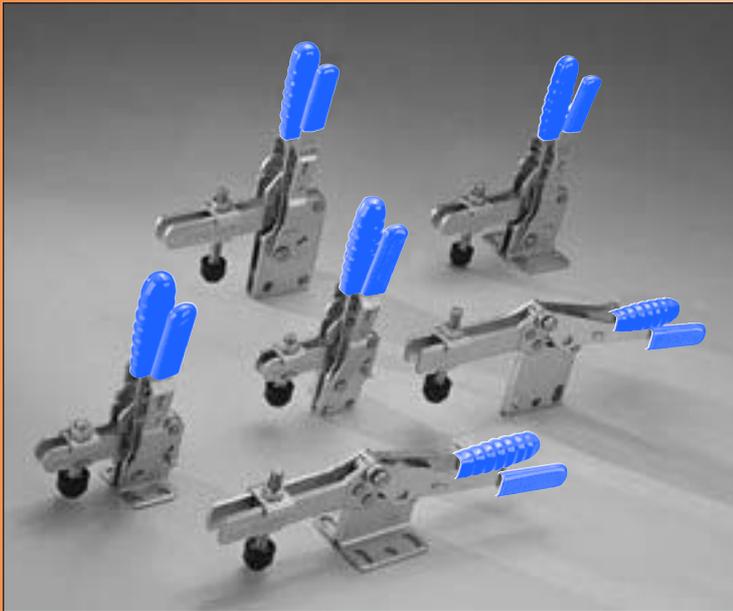
Nominal Holding Force:
360 daN

Weight:
0.50 Kg

Supplied complete with:
Setscrew & nuts.

See "Accessories" for other items.





POSITIVE LOCKING CLAMPS

- Positive safety lock, in clamped and open position
- Unique mechanical locking mechanism
- Ideal for applications where the toggle clamp is used upside down or inverted
- Stainless steel rivets and hardened bushes for longer life

POSITIVE LOCKING CLAMPS

V250 SERIES

MODEL V250/1BLC



Arm:

The spindle position is adjustable along the length of the arm.

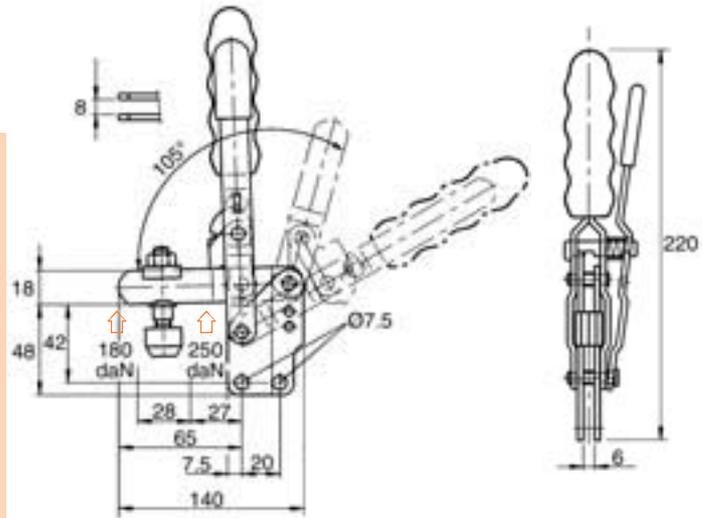
Base:
Straight.

Nominal Holding Force:
250 daN

Weight:
0.47 Kg

Supplied complete with:
Zinc plated screw, nut, washers and neoprene cover.

See "Accessories" for other items.



V250 SERIES

MODEL V250/2BLC



Arm:

The spindle position is adjustable along the length of the arm.

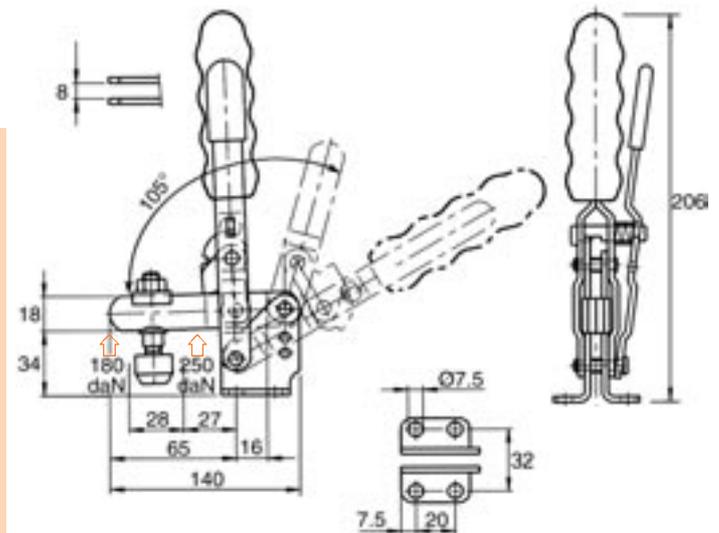
Base:
Flanged.

Nominal Holding Force:
250 daN

Weight:
0.47 Kg

Supplied complete with:
Zinc plated screw, nut, washers and neoprene cover.

See "Accessories" for other items.



V250 SERIES

MODEL V250/3BLC



Arm:

The spindle position is adjustable along the length of the arm.

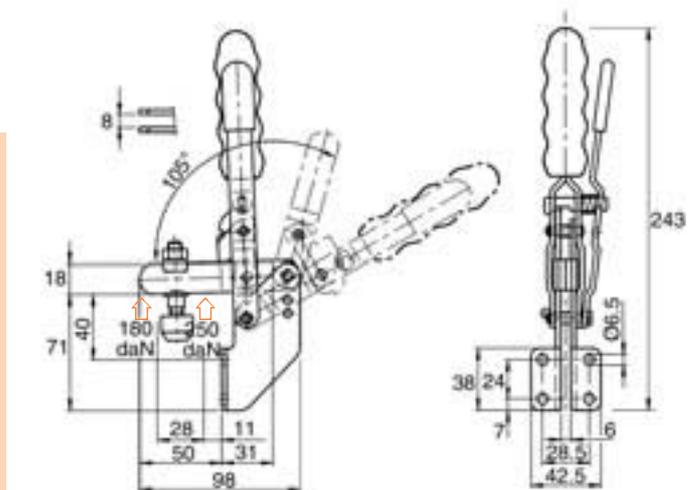
Base:
Flanged.

Nominal Holding Force:
250 daN

Weight:
0.535 Kg

Supplied complete with:
Zinc plated screw, nut, washers and neoprene cover.

See "Accessories" for other items.



POSITIVE LOCKING CLAMPS

V350 SERIES

MODEL V350/1BLC



Arm:

The spindle position is adjustable along the length of the arm.

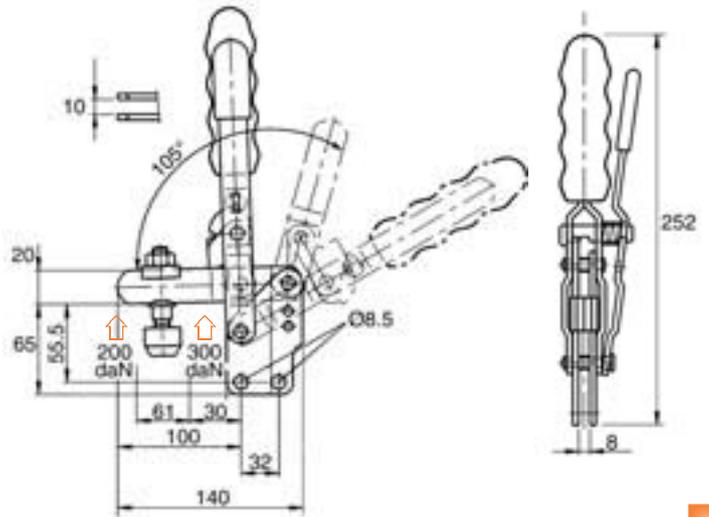
Base:
Straight.

Nominal Holding Force:
350 daN

Weight:
0.69 Kg

Supplied complete with:
Zinc plated screw, nut, washers and neoprene cover.

See "Accessories" for other items.



V350 SERIES

MODEL V350/2BLC



Arm:

The spindle position is adjustable along the length of the arm.

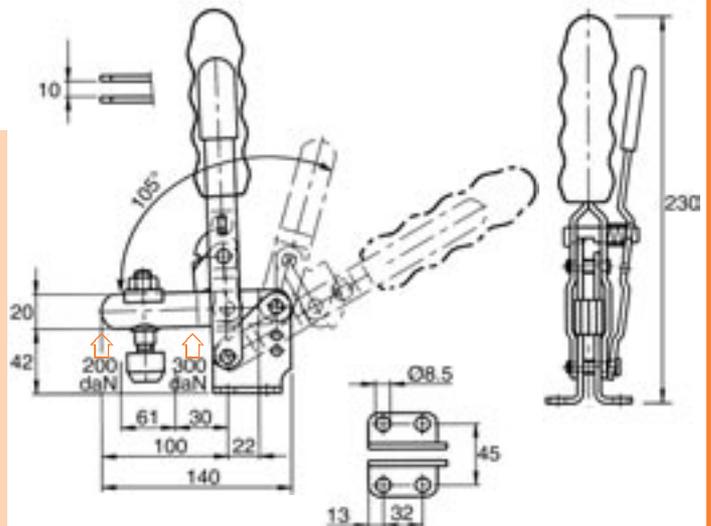
Base:
Flanged.

Nominal Holding Force:
350 daN

Weight:
0.69 Kg

Supplied complete with:
Zinc plated screw, nut, washers and neoprene cover.

See "Accessories" for other items.



H350 SERIES

MODEL H350/1BLC



Arm:

The spindle position is adjustable along the length of the arm.

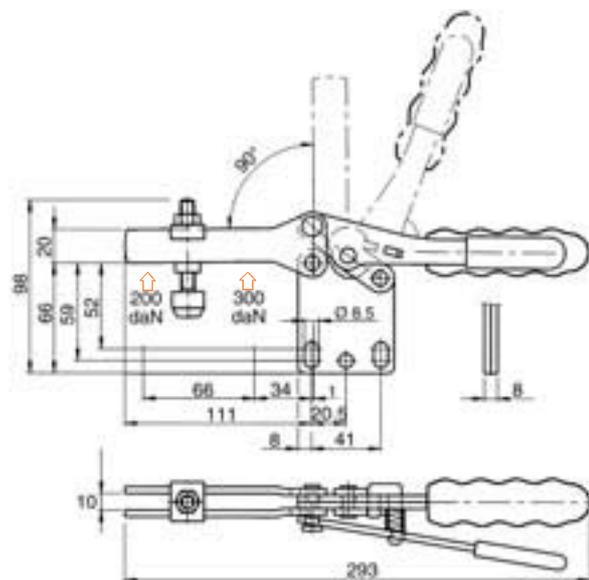
Base:
Straight.

Nominal Holding Force:
350 daN

Weight:
0.8 Kg

Supplied complete with:
Zinc plated screw, nut, washers and neoprene cover.

See "Accessories" for other items.



BRAUER[®]

POSITIVE LOCKING CLAMPS

H350 SERIES

MODEL H350/2BLC



Arm:

The spindle position is adjustable along the length of the arm.

Base:

Flanged.

Nominal Holding Force:

350 daN

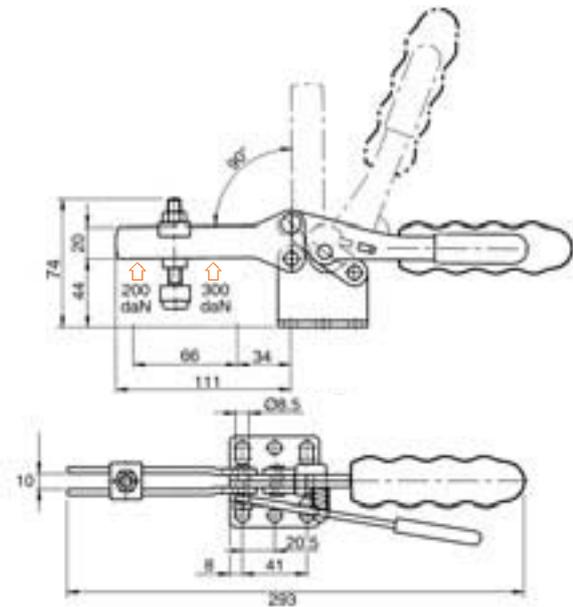
Weight:

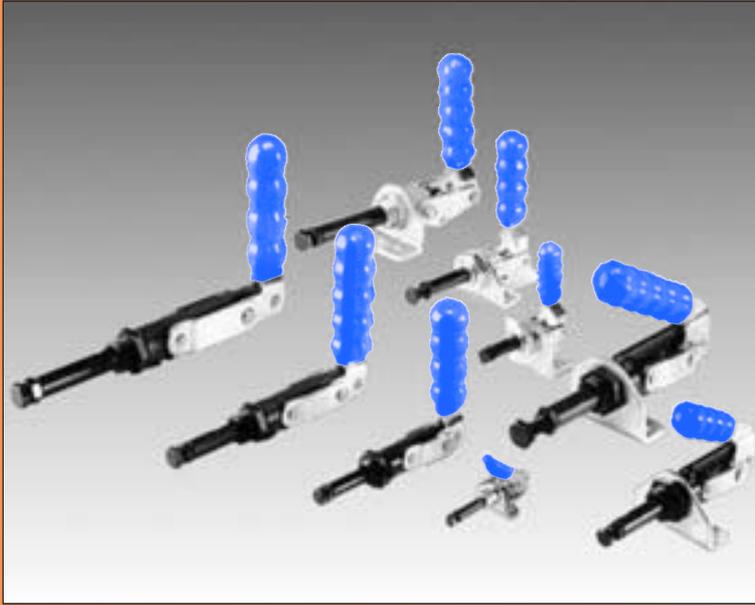
0.8 Kg

Supplied complete with:

Zinc plated screw, nut, washers and neoprene cover.

See "Accessories" for other items.





PUSH-PULL SLIMLINE CLAMPS

- **Features:**

With the exception of model P50, which is a light duty base mounted clamp, these push-pull clamps are mounted either directly into a threaded or plain hole in a fixture, or can be mounted in a bracket which is either supplied with the clamp or offered as an accessory.

Nose mounting allows the clamp to be rotated to the required angle and locked by means of the locknut provided.

Models P100, P200 and P400 offer long strokes in light-duty clamps, while models P350, P550 and P750 are compact and robust, with their plunger movement tightly controlled.

A comfortable, cushioned PVC handle grip is fitted to all push-pull clamps.

- **Specification:**

The main components are of steel with either a zinc plated and passivated or manganese phosphated finish. All models are supplied with a steel setscrew and locknut finished chemi-black.

- **Installation:**

When mounting clamps ensure that the mechanism clears the mounting bracket or fixture.

PUSH-PULL CLAMPS

P50 SERIES

MODEL P50



Plunger:
Locks at both extended & retracted ends of the stroke.

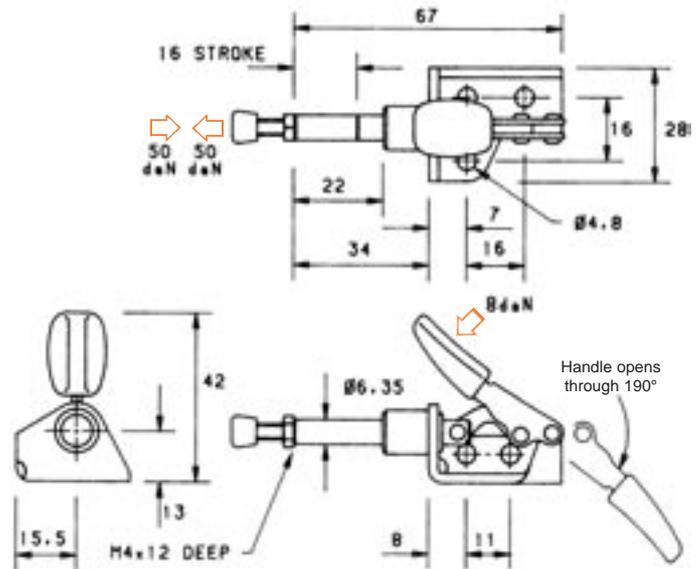
Base:
Fixed Flange with bottom or side mounting.

Nominal Holding Force:
50 daN

Weight:
0.05 Kg

Supplied complete with:
MB0420 Setscrew & nut.
NC/04 Neoprene cover.

See "Accessories" for other items.



P50 SERIES

MODEL P50SS



Plunger:
Locks at both extended & retracted ends of the stroke.

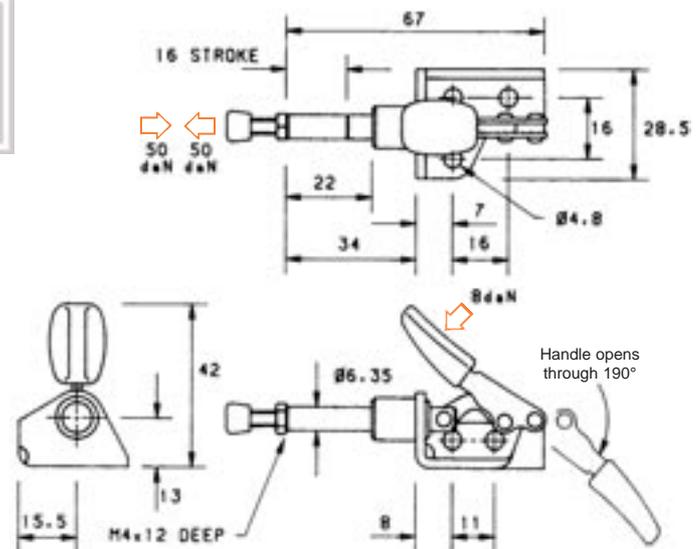
Base:
Fixed Flange with bottom or side mounting.

Nominal Holding Force:
50 daN

Weight:
0.05 Kg

Supplied complete with:
Setscrew & nut.
Neoprene cover.

Material:
BS 304 S15



P250 SERIES

MODEL P250



Plunger:
Locks at both extended & retracted ends of the stroke.

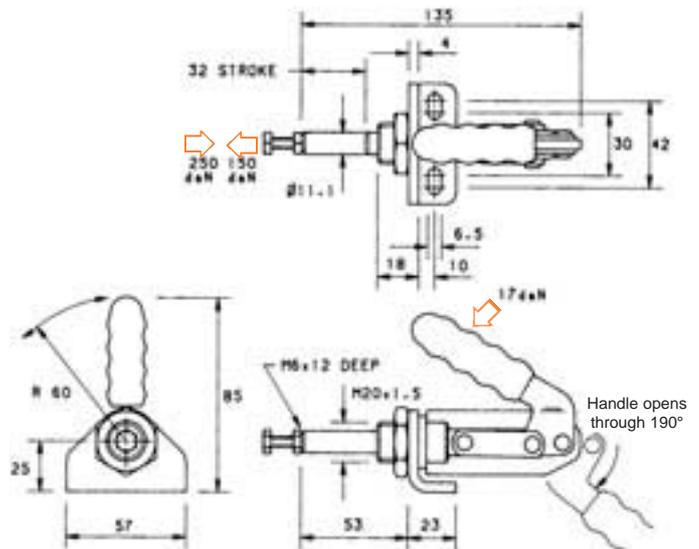
Base:
Nose or flange mounting.

Nominal Holding Force:
250 daN

Weight:
0.30 Kg

Supplied complete with:
MB0625 Setscrew & nut.
Mounting bracket & locknut.

See "Accessories" for alternative FM20 Mounting Bracket & other items.



PUSH-PULL CLAMPS

P450 SERIES

MODEL P450



Plunger:
Locks at both extended & retracted ends of the stroke.

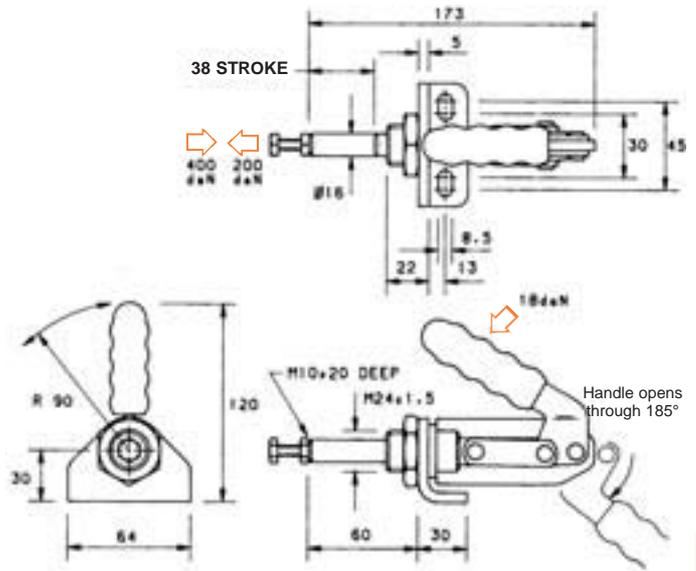
Base:
Nose or flange mounting.

Nominal Holding Force:
450 daN

Weight:
0.75 Kg

Supplied complete with:
MB1050 Setscrew & nut.
Mounting bracket & locknut.

See "Accessories" for for alternative FM24 Mounting Bracket & other items.



P100 SERIES

MODEL P100



Plunger:
Locks at both extended & retracted ends of the stroke.

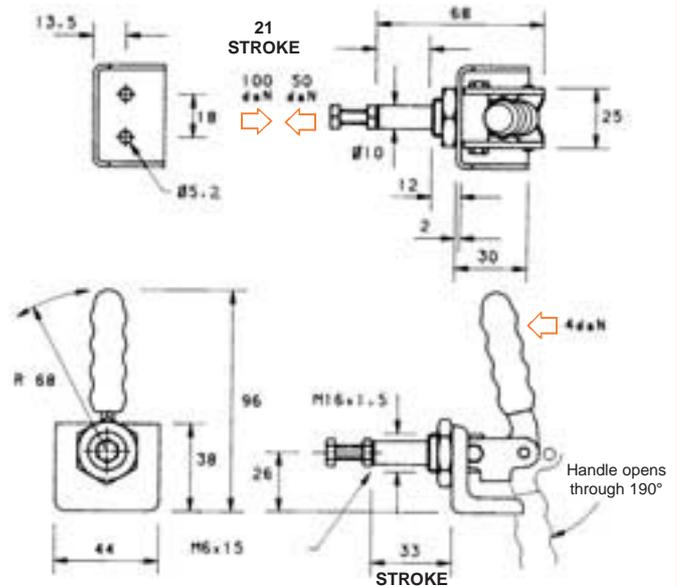
Base:
Nose or flange mounting.

Nominal Holding Force:
100 daN

Weight:
0.15 Kg

Supplied complete with:
MB0625 Setscrew & nut.
Mounting bracket & locknut.

See "Accessories" for alternative FM16 Mounting Bracket & other items.



P100 SERIES

MODEL P100SS



Plunger:
Locks at both extended & retracted ends of the stroke.

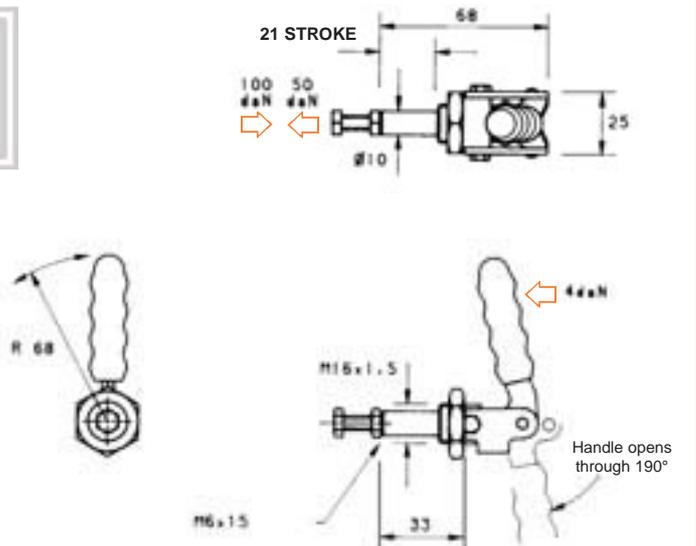
Base:
Nose or flange mounting.

Nominal Holding Force:
100 daN

Weight:
0.15 Kg

Supplied complete with:
Setscrew & nut.

Material:
BS 304 S15



PUSH-PULL CLAMPS

P200 SERIES MODEL P200



Plunger:
Locks at both extended & retracted ends of the stroke.

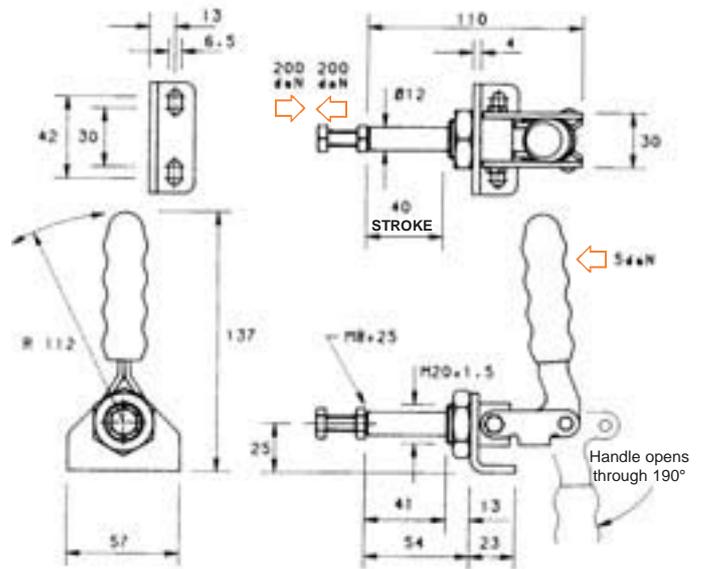
Base:
Nose or flange mounting.

Nominal Holding Force:
200 daN

Weight:
0.35 Kg

Supplied complete with:
MB0840 Setscrew & nut.
Mounting bracket & locknut.

See "Accessories" for alternative FM20 Mounting Bracket & other items.



P200 SERIES MODEL P200SS



Plunger:
Locks at both extended & retracted ends of the stroke.

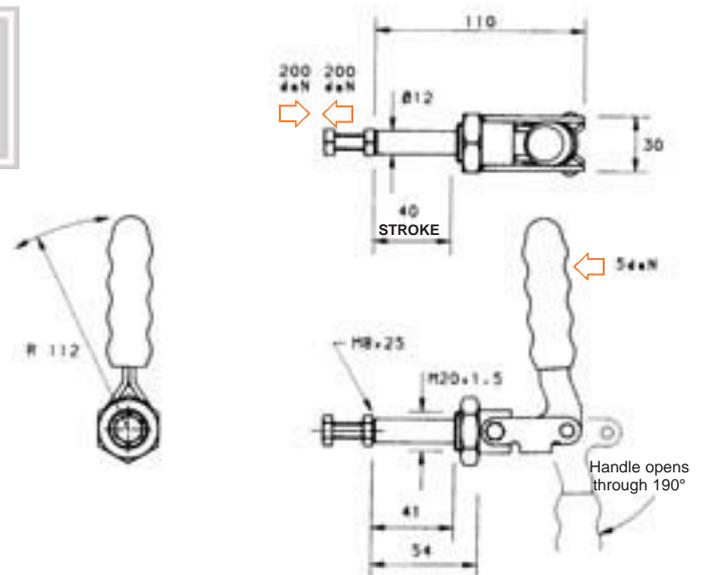
Base:
Nose or flange mounting.

Nominal Holding Force:
200 daN

Weight:
0.35 Kg

Supplied complete with:
Setscrew & nut.

Material:
BS 304 S15



P400 SERIES MODEL P400



Plunger:
Locks at both extended & retracted ends of the stroke.

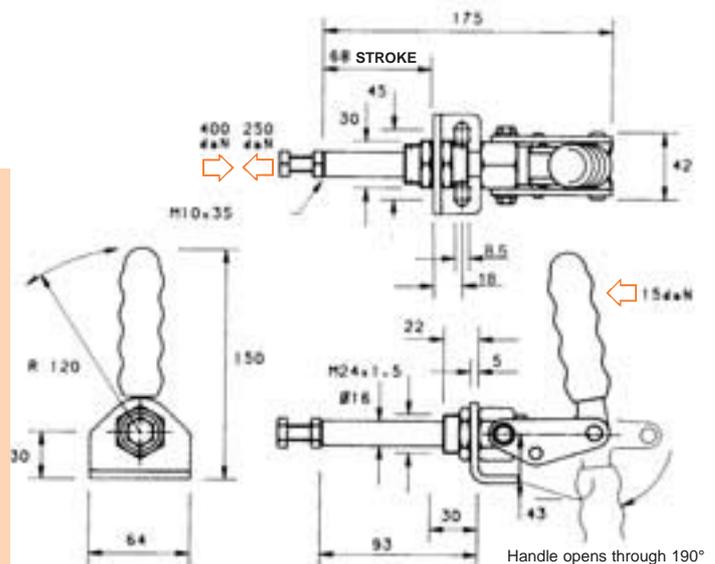
Base:
Nose or flange mounting.

Nominal Holding Force:
400 daN

Weight:
0.80 Kg

Supplied complete with:
MB1050 Setscrew & nut.
Mounting bracket & locknut.

See "Accessories" for alternative FM24 Mounting Bracket & other items.



PUSH-PULL CLAMPS

P400 SERIES
MODEL P400SS

STAINLESS
STEEL



Plunger:
Locks at both extended & retracted ends of the stroke.

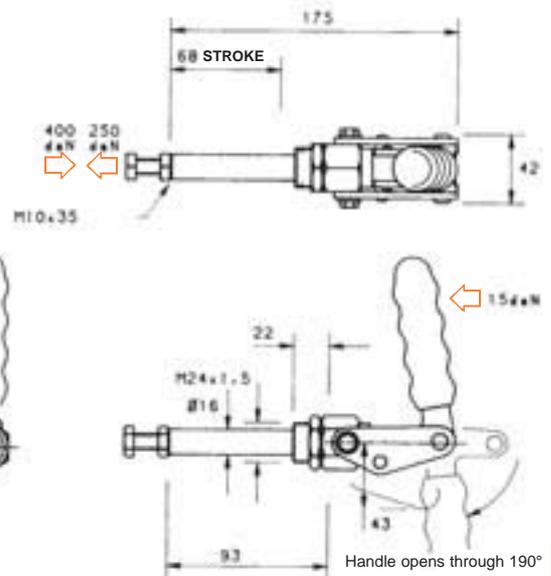
Base:
Nose or flange mounting.

Nominal Holding Force:
400 daN

Weight:
0.80 Kg

Supplied complete with:
Setscrew & nut.

Material:
BS 304 S15



'SLIMLINE' PUSH-PULL CLAMPS

MODEL P350



Plunger:
Locks at both extended & retracted ends of the stroke.

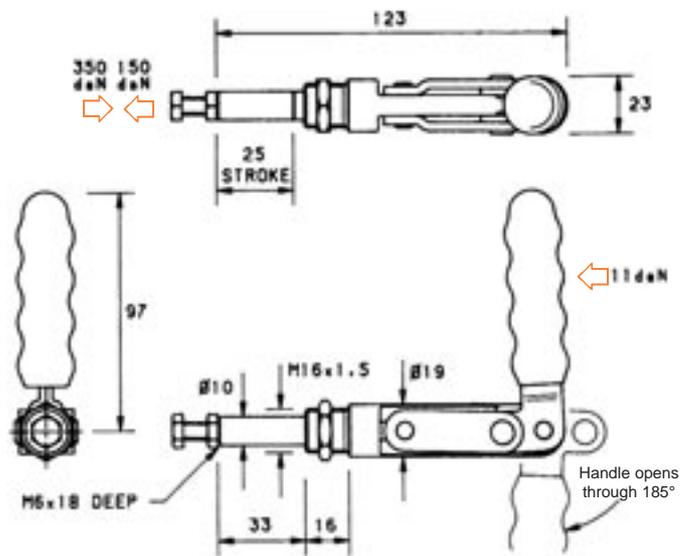
Base:
Nose mounting.

Nominal Holding Force:
350 daN

Weight:
0.20 Kg

Supplied complete with:
MB0625 Setscrew & nut.

See "Accessories" for FM16
Mounting Bracket & other items.



'SLIMLINE' PUSH-PULL CLAMPS

MODEL P550



Plunger:
Locks at both extended & retracted ends of the stroke.

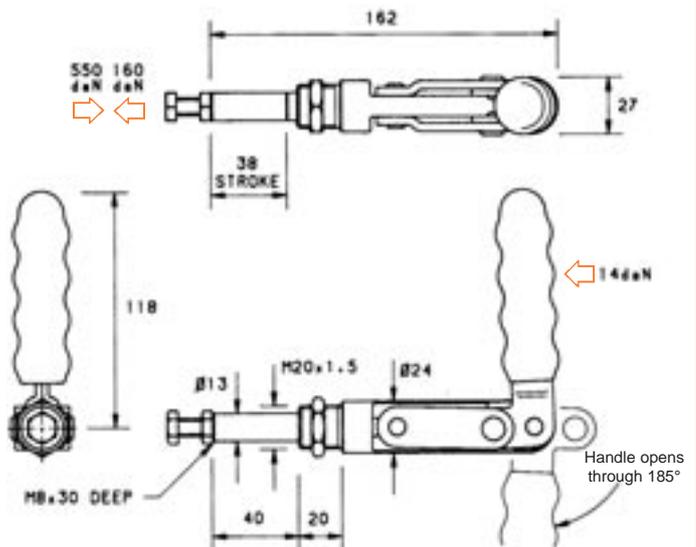
Base:
Nose mounting.

Nominal Holding Force:
550 daN

Weight:
0.45 Kg

Supplied complete with:
MB0840 Setscrew & nut.

See "Accessories" for FM20
Mounting Bracket & other items.



PUSH-PULL CLAMPS

'SLIMLINE' PUSH-PULL CLAMPS

MODEL P750



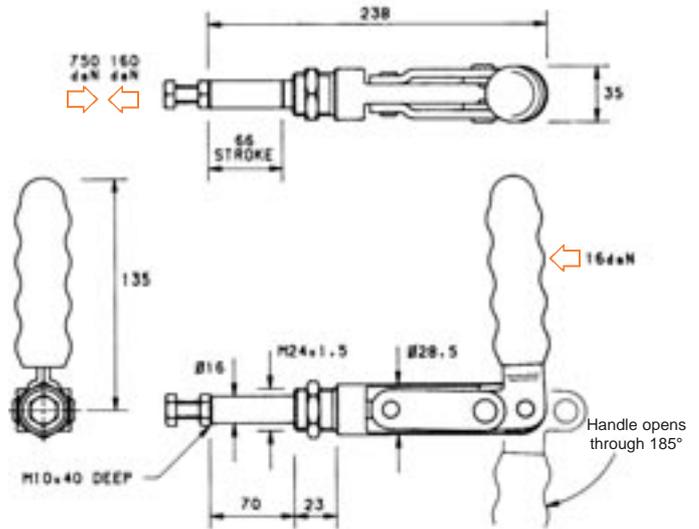
Plunger:
Locks at both extended & retracted ends of the stroke.

Base:
Nose mounting.

Nominal Holding Force:
750 daN

Weight:
1.00 Kg

Supplied complete with:
MB1050 Setscrew & nut.
See "Accessories" for FM24 Mounting Bracket & other items.



'PRECISION' PUSH-PULL CLAMP

MODEL SP700

NEW



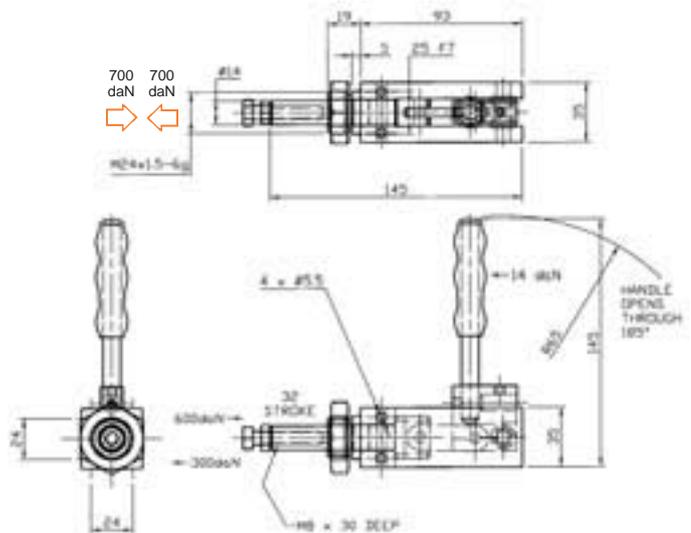
Plunger:
Ground steel precision self-locking at forward stroke position.

Base:
Carbon steel precision machined, nose mounting or body mounting.

Nominal Holding Force:
700 daN

Weight:
0.83 Kg

Supplied complete with:
MB0840 setscrew & nuts.



'PRECISION' PUSH-PULL CLAMP

MODEL P1150

P2250

NEW

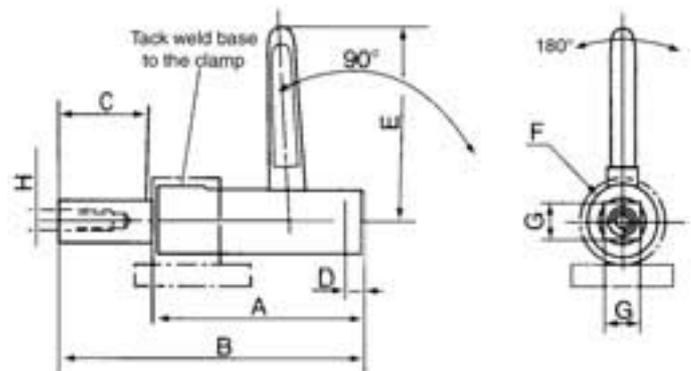


Piston:
Locks at the extended end of the stroke.

Base:
Fixed by using accessories overleaf.

Holding Force:
P1150 - 1 150 daN
P2250 - 2 250 daN

Weight:
P1150 - 1,150Kg
P2250 - 1,850Kg



MODEL	A	B	C	D	E	F	G	H
P1150	108	159	46	10	112	35	19	M12
P2250	141	212.5	55	14	127	45	24.8	M16

PUSH-PULL CLAMPS

'PRECISION' PUSH-PULL CLAMP

MODEL P1150L
P2250L

NEW

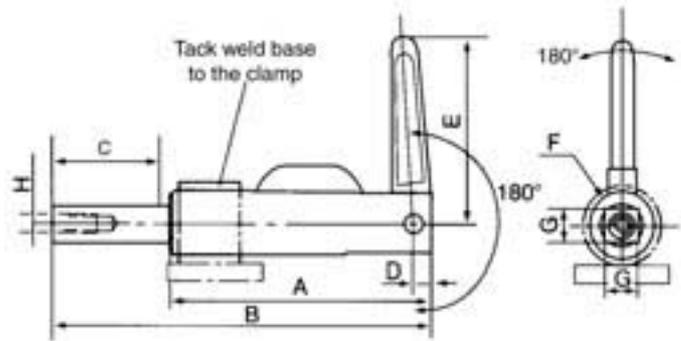


Piston:
Locks at the extended end of the stroke.

Base:
Fixed by using accessories overleaf.

Holding Force:
P1150L - 1 150 daN
P2250L - 2 250 daN

Weight:
P1150L - 1,150Kg
P2250L - 1,850Kg

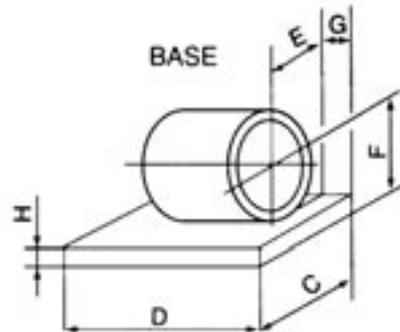


MODEL	A	B	C	D	E	F	G	H
P1150L	149.9	215.9	60	10	112	35	19	M12
P2250L	194	291	78	14	127	45	24.8	M16

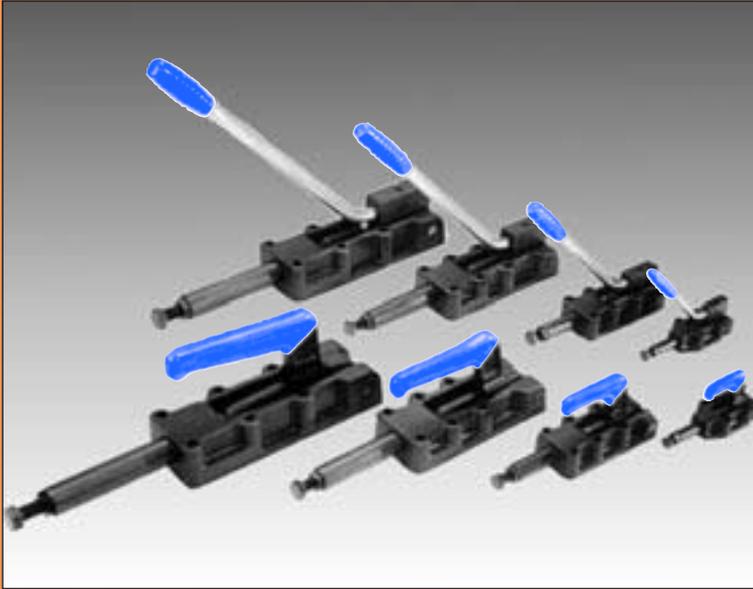
BASE ACCESSORIES

MODEL P1150, P1150L, P2250 & P2250L

Weight of base:
1150B - 0.38Kg
2250B - 0.90Kg



BASE	C	D	E	F	G	H
1150B	70	50	35	30.1	6.5	7.6
2250B	90	70	45	40	7	12



HEAVY-DUTY & LONG-HANDLED PUSH-PULL CLAMPS

- **Features:**

These clamps are of exceptionally robust construction featuring cast and machined handles and bases. The clamps are designed with a low plunger height and with the mechanism guarded within the base to avoid finger traps.

- Models P600, P1200, P2500 and P5000 have handles of normal length for clamping. The long handled 'L' versions (P600L, P1200L, P2500L, and P5000L) have their handles either to the front or rear of the clamp according to the application and produce high forces which make them suitable for clamping or for light work such as swaging, rivetting, press fitting components, etc. All models are fitted with a comfortable, cushioned PVC handle grip.

- **Specification:**

The bases of all models, and the handles of models P600, P1200, P2500 and P5000 are machined S.G. iron castings.

The handles of the 'L' versions are of steel bar and mount in housings which are either machined steel castings or machined from steel bar.

- The plungers are of steel, and their precision ground diameter runs in a close-toleranced hole in the base casting.

All axles are of hardened steel and run in either the S.G. iron of the handle, or in the close-toleranced holes of hardened parts.

All models are supplied with a steel setscrew finished chemi-black.

HEAVY-DUTY PUSH-PULL CLAMPS

MODEL P600



Plunger: Ground Steel.
Locks at both extended & retracted ends of the stroke.

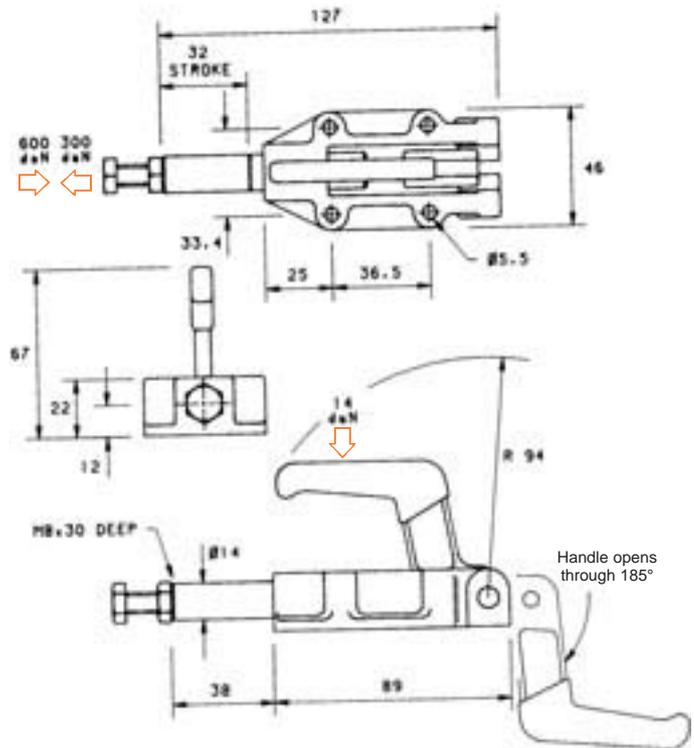
Base: SG Iron Casting.
Body mounting.

Nominal Holding Force:
600 daN

Weight:
0.45 Kg

Supplied complete with:
MB0840 Setscrew & nut.

See "Accessories" for other items.



MODEL P1200



Plunger: Ground Steel.
Locks at both extended & retracted ends of the stroke.

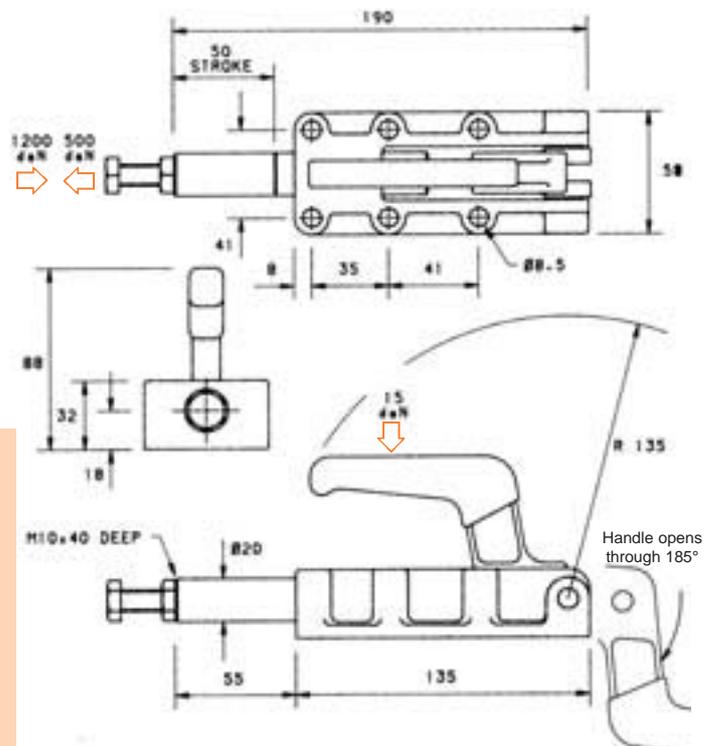
Base: SG Iron Casting.
Body mounting.

Nominal Holding Force:
1200 daN

Weight:
1.35 Kg

Supplied complete with:
MB1050 Setscrew & nut.

See "Accessories" for other items.

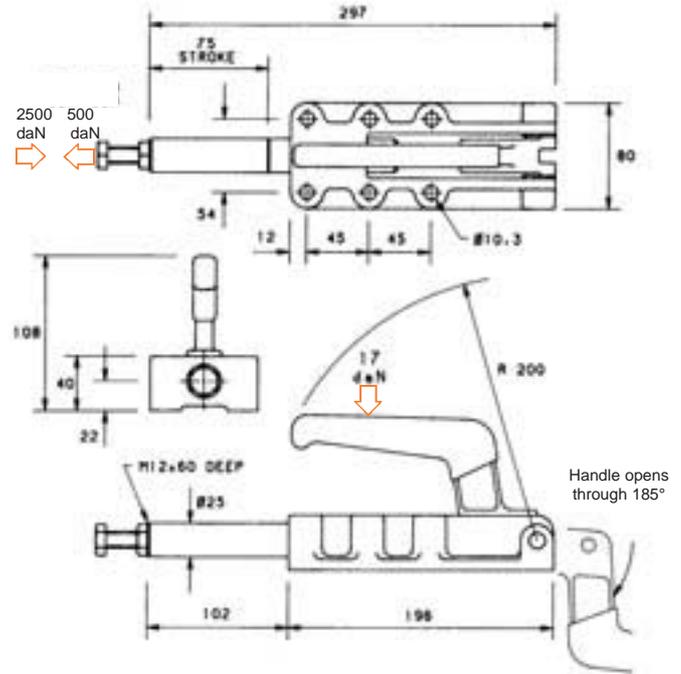


HEAVY-DUTY PUSH-PULL CLAMPS

MODEL P2500



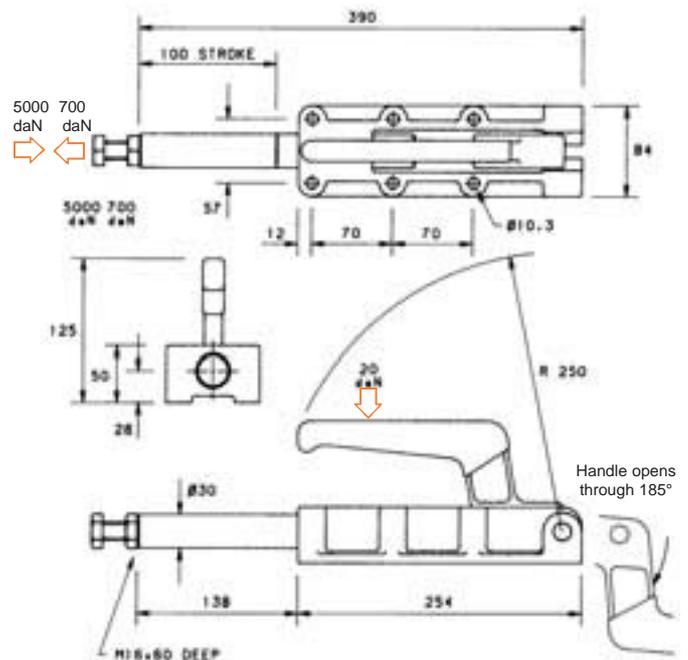
Plunger: Ground Steel. Locks at both extended & retracted ends of the stroke.
Base: SG Iron Casting. Body mounting.
Nominal Holding Force: 2500 daN
Weight: 3.60 Kg
Supplied complete with: MB1250 Setscrew & nut.
See "Accessories" for other items.



MODEL P5000

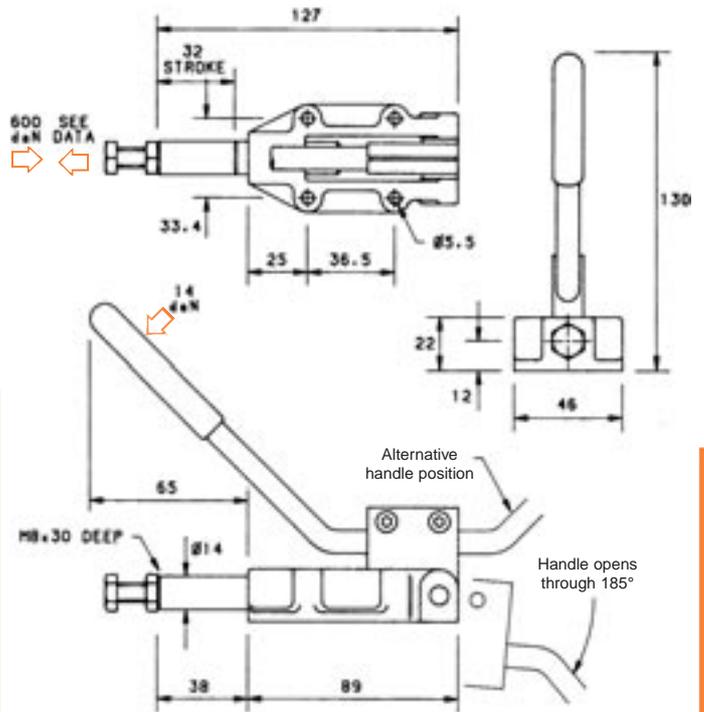
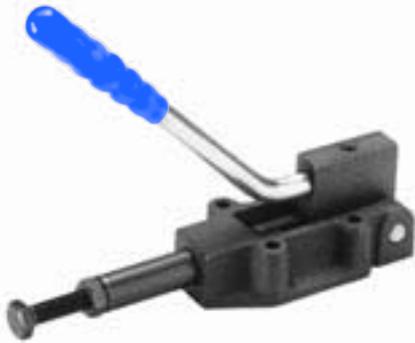


Plunger: Ground Steel. Locks at both extended & retracted ends of the stroke.
Base: SG Iron Casting. Body mounting.
Nominal Holding Force: 5000 daN
Weight: 6.20 Kg
Supplied complete with: MB1680 Setscrew & nut.
See "Accessories" for other items.



HEAVY-DUTY PUSH-PULL CLAMPS

MODEL P600L



Plunger: Ground Steel.
Locks at both extended & retracted ends of the stroke.

Base: SG Iron Casting.
Body mounting.

Nominal Holding Force:
600 daN

Weight:
0.55 Kg

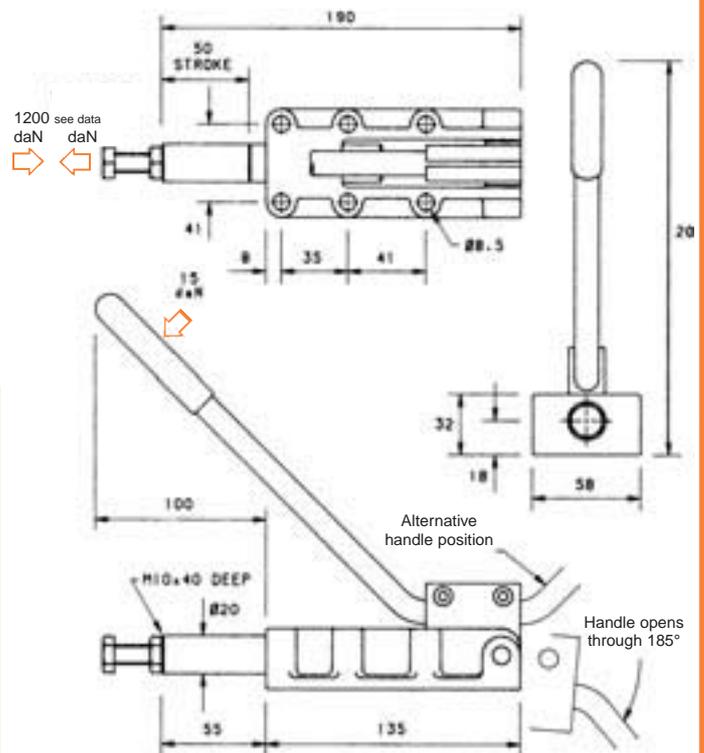
Supplied complete with:
MB0840 Setscrew & nut.

See "Accessories" for other items.

With 14 daN handle force the output force is:

Stroke	daN
Fully retracted	470
5 mm extended	110
10 mm "	70
15 mm "	75
20 mm "	80
25 mm "	85
30 mm "	146
31 mm "	190
Fully extended	580

MODEL P1200L



Plunger: Ground Steel.
Locks at both extended & retracted ends of the stroke.

Base: SG Iron Casting.
Body mounting.

Nominal Holding Force:
1200 daN

Weight:
1.60 Kg

Supplied complete with:
MB1050 Setscrew & nut.

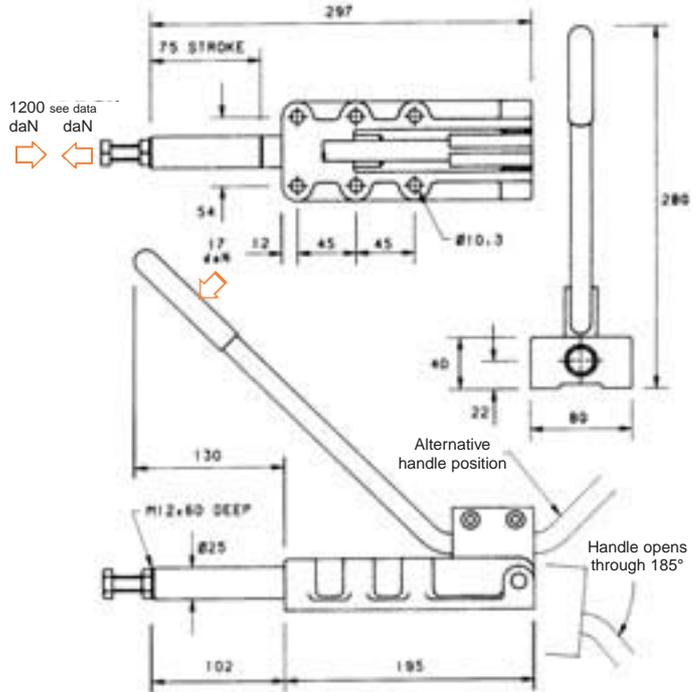
See "Accessories" for other items.

With 15 daN handle force the output force is:

Stroke	daN
Fully retracted	705
5 mm extended	167
10 mm "	90
15 mm "	73
20 mm "	70
25 mm "	72
30 mm "	85
35 mm "	100
40 mm "	110
45 mm "	150
48 mm "	220
49 mm "	290
Fully extended	930

HEAVY-DUTY PUSH-PULL CLAMPS

MODEL P2500L



Plunger: Ground Steel.
Locks at both extended & retracted ends of the stroke.

Base: SG Iron Casting.
Body mounting.

Nominal Holding Force:
2500 daN

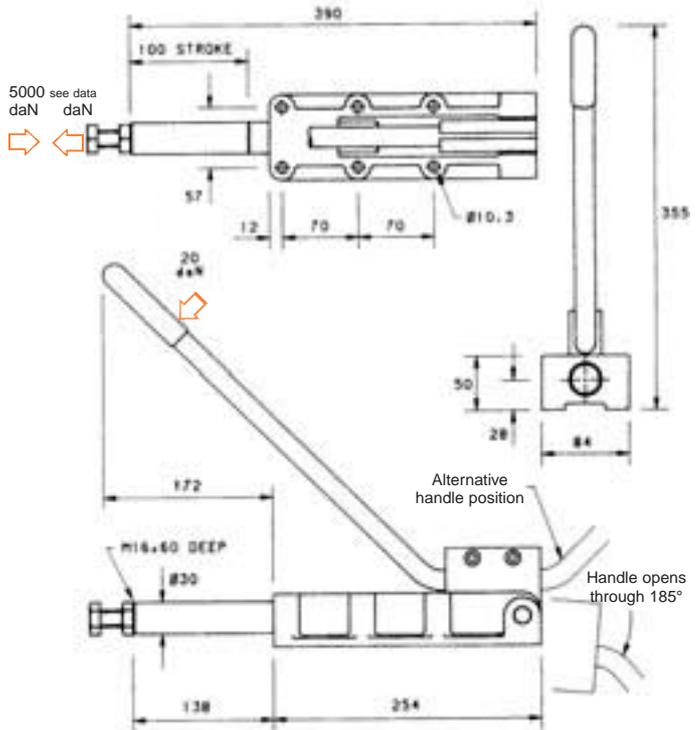
Weight:
4.15 Kg

Supplied complete with:
MB1250 Setscrew & nut.

See "Accessories" for other items.

With 17 daN handle force the output force is:	daN
Fully retracted	1000
10 mm extended	100
20 mm "	72
30 mm "	60
40 mm "	70
50 mm "	88
60 mm "	118
70 mm "	190
72 mm "	230
74 mm "	353
Fully extended	1100

MODEL P5000L



Plunger: Ground Steel.
Locks at both extended & retracted ends of the stroke.

Base: SG Iron Casting.
Body mounting.

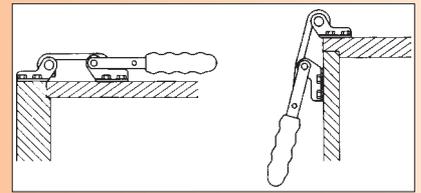
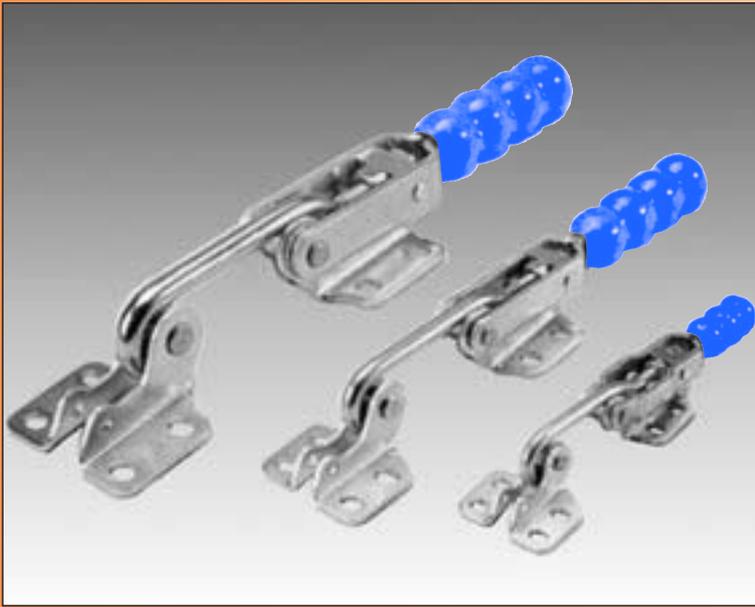
Nominal Holding Force:
5000 daN

Weight:
7.10 Kg

Supplied complete with:
MB1680 Setscrew & nut.

See "Accessories" for other items.

With 20 daN handle force the output force is:	daN
Fully retracted	1100
10 mm extended	180
20 mm "	110
30 mm "	75
40 mm "	80
50 mm "	82
60 mm "	100
70 mm "	100
80 mm "	130
90 mm "	190
95 mm "	250
97 mm "	310
99 mm "	450
Fully extended	1210



HOOK CLAMPS

- **Features:**

The action of Hook clamps in pulling two parts together makes them suitable for applications such as closing and holding doors, lids, moulds, etc.

A benefit of Hook clamps is that while the clamp and the interface bracket it engages must be in alignment when viewed from the top, there is no such requirement when viewed from the side — the clamp will lock securely over centre regardless of the angle of the hook shown in the diagram above.

The hook may be engaged either directly to a bolt or pin on one of the parts to be pulled together, or to the latch bracket provided.

All Hook clamps are fitted with a comfortable, cushioned handle grip.

- **Specification:**

All components are of zinc plated and passivated steel, the hooks being of high tensile alloy steel.

- **Installation:**

These clamps generate high forces and should not be over adjusted as damage could result. The clamp and its latch bracket must be in alignment when viewed from the top.

HOOK CLAMPS

MODEL LH200

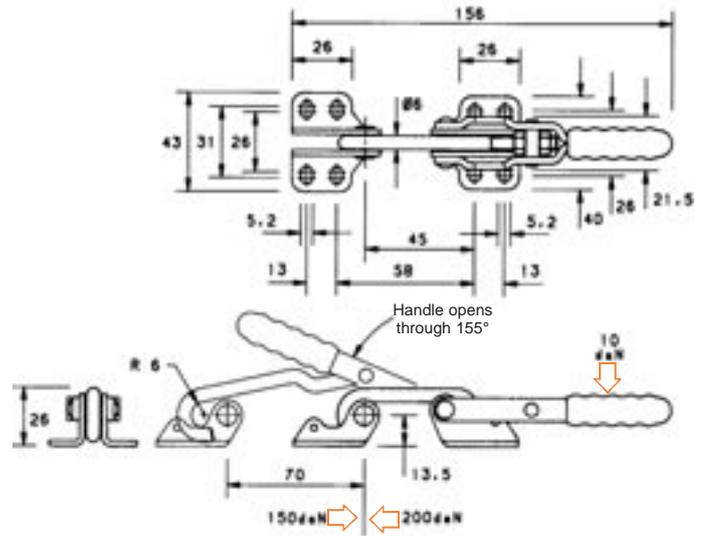


Nominal Holding Force:
200 daN

Weight:
0.10 Kg

Supplied complete with:
Latch Bracket as shown.

See "Features and installation information" page for installation instructions.



MODEL LH200SS

STAINLESS
STEEL



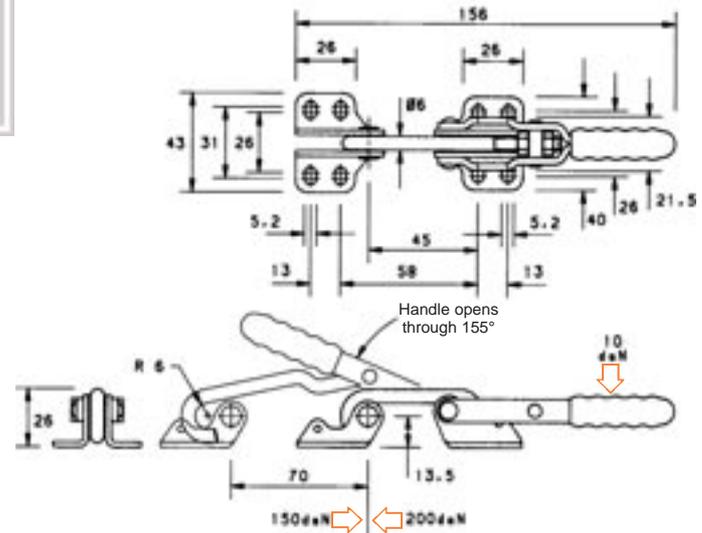
Nominal Holding Force:
200 daN

Weight:
0.10 Kg

Supplied complete with:
Latch Bracket as shown.

Material:
BS 304 S15

See "Features and installation information" page for installation instructions.



MODEL LH400

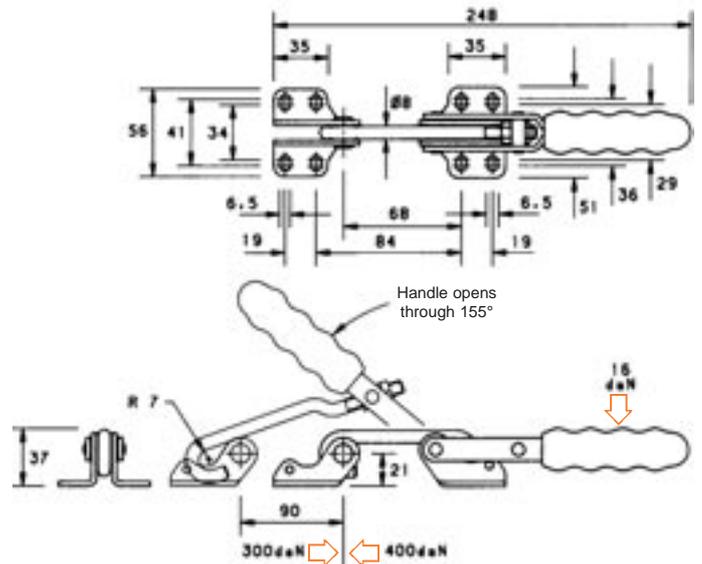


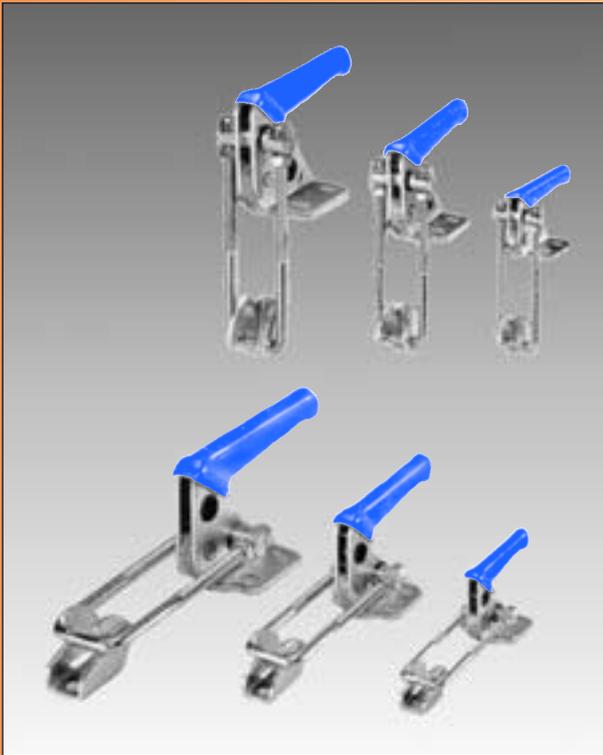
Nominal Holding Force:
400 daN

Weight:
0.35 Kg

Supplied complete with:
Latch Bracket as shown.

See "Features and installation information" page for installation instructions.





LATCH CLAMPS HORIZONTAL & VERTICAL

- **Features:**

Latch clamps are available in two configurations; horizontal as per bottom of the above photograph, with the clamp and latch bracket in the same plane (LU200H, LU400H, LU700H, LU2000H and LU4000H) or a vertical (corner) configuration as per top of the above photograph, the clamp and bracket being at right angles to each other (LU200V, LU400V, and LU700V).

All latch clamps are fitted with PVC handle grips.

- **Specification:**

The components of both variants of LU200, LU400 and LU700 clamps are of zinc plated and passivated steel, the rivet being of stainless steel and rotating in the close-toleranced hole of hardened parts or in hardened bushes. The handle and the trunnion which holds the 'U'-bolt are also hardened to resist wear.

Clamps LU2000H and LU4000H have precision cast steel bases and latch brackets and handles of S.G. iron.

- **Installation:**

It is important that the clamp and latch bracket of horizontal (H) variants are in alignment when viewed from both the top and the side to ensure that the clamp locks over centre correctly.

Vertical (V) variants should be in alignment when viewed from the top, and, when viewed from the side, the base of the latch bracket should be aligned with the flat front edge of the clamp base and at right angles to it. As illustrated in the top of the above photograph

The 'U' bolt should be adjusted to ensure an equal pull on either side.

LATCH CLAMPS

HORIZONTAL MODEL LU200H



Nominal Holding Force:

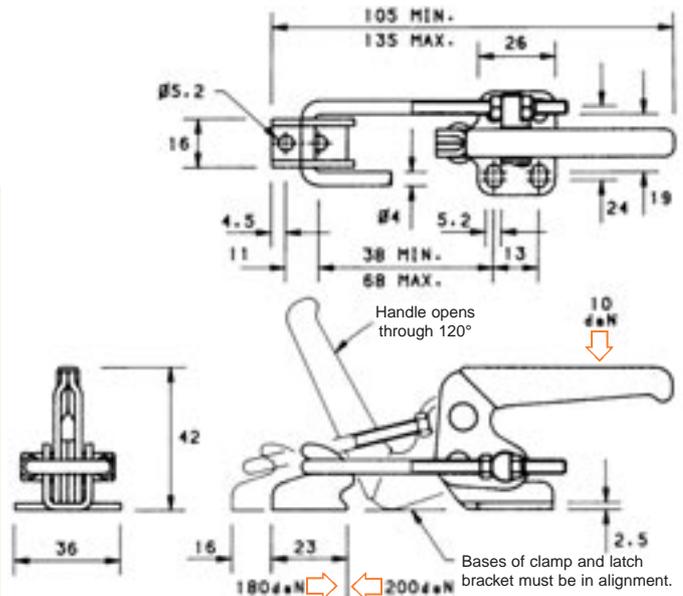
200 daN

Weight:

0.05 Kg

Supplied complete with:
Latch Bracket as shown.

See "Features and installation information" page for installation instructions.



HORIZONTAL MODEL LU200HSS

**STAINLESS
STEEL**



Nominal Holding Force:

200 daN

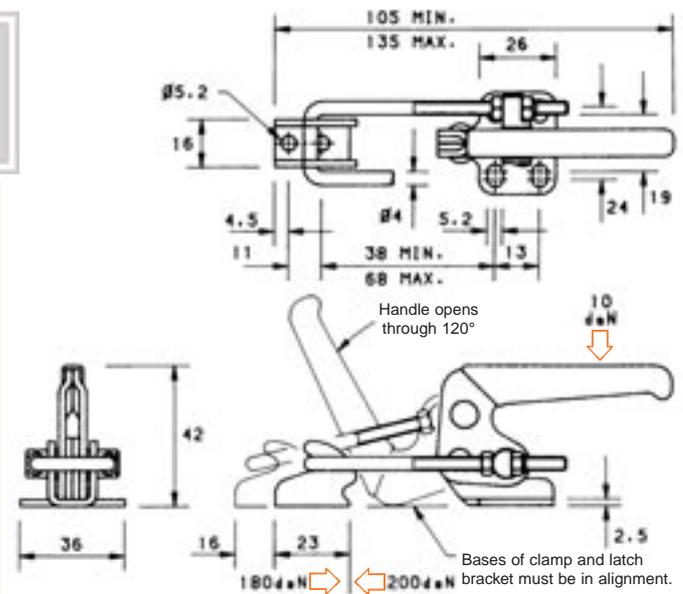
Weight:

0.05 Kg

Supplied complete with:
Latch Bracket as shown.

Material:
BS 304 S15.

See "Features and installation information" page for installation instructions.



HORIZONTAL MODEL LU400H



Nominal Holding Force:

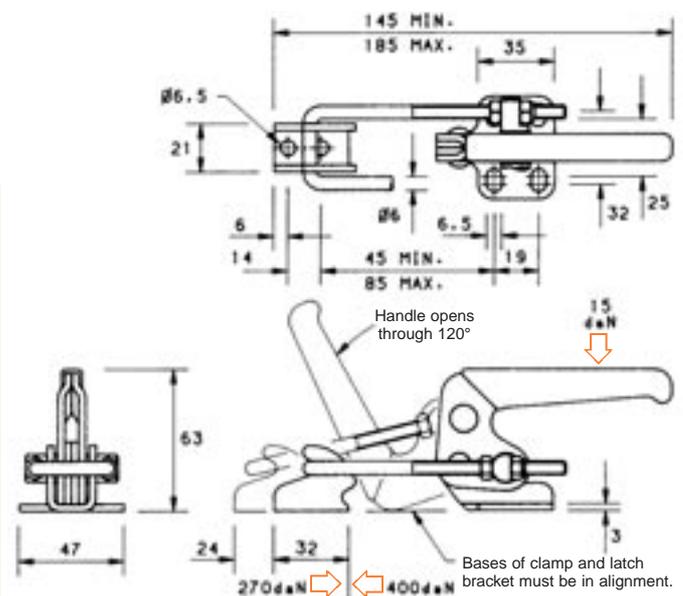
400 daN

Weight:

0.25 Kg

Supplied complete with:
Latch Bracket as shown.

See "Features and installation information" page for installation instructions.



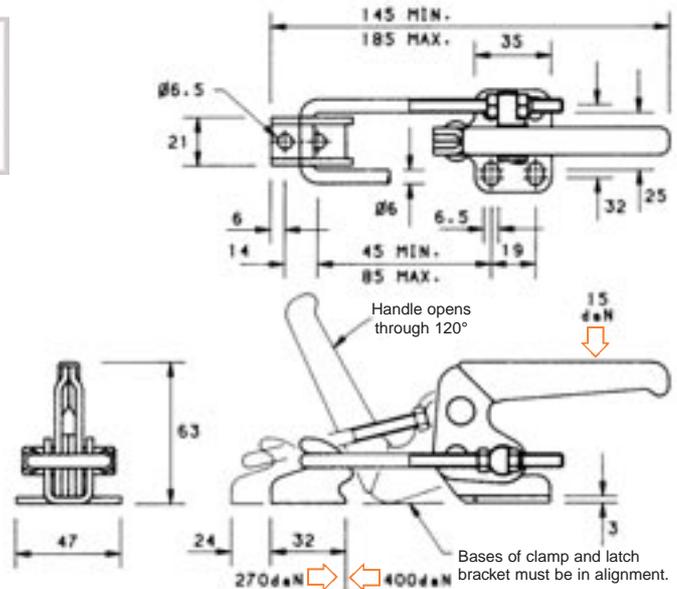
LATCH CLAMPS

HORIZONTAL
MODEL LU400HSS

**STAINLESS
STEEL**



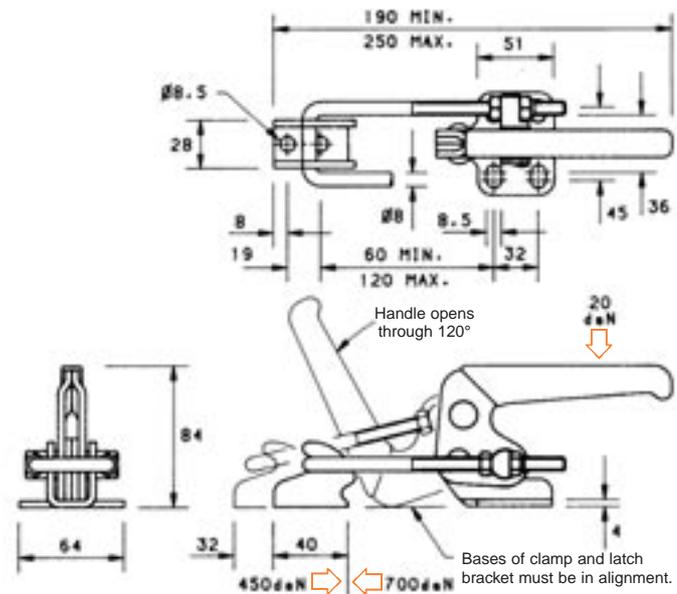
Nominal Holding Force:
400 daN
Weight:
0.25 Kg
Supplied complete with:
Latch Bracket as shown.
Material:
BS 304 S15.
See "Features and installation information" page for installation instructions.



HORIZONTAL
MODEL LU700H



Nominal Holding Force:
700 daN
Weight:
0.70 Kg
Supplied complete with:
Latch Bracket as shown.
See "Features and installation information" page for installation instructions.

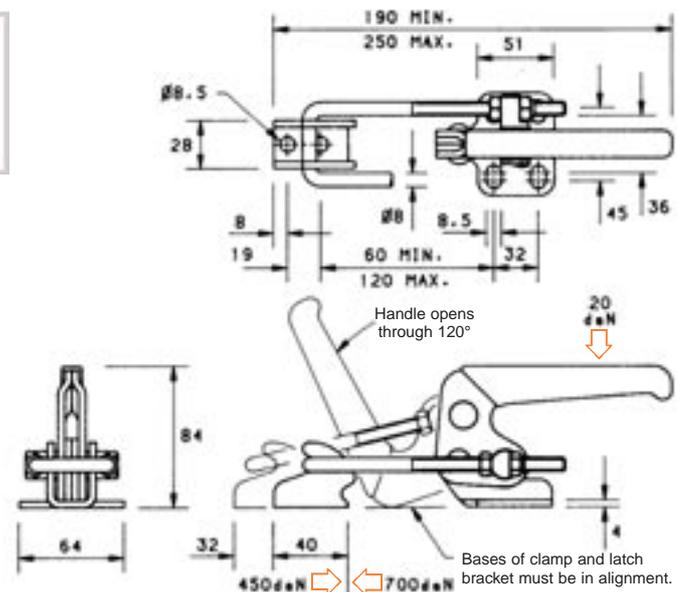


HORIZONTAL
MODEL LU700HSS

**STAINLESS
STEEL**



Nominal Holding Force:
700 daN
Weight:
0.70 Kg
Supplied complete with:
Latch Bracket as shown.
Material:
BS 304 S15.
See "Features and installation information" page for installation instructions.

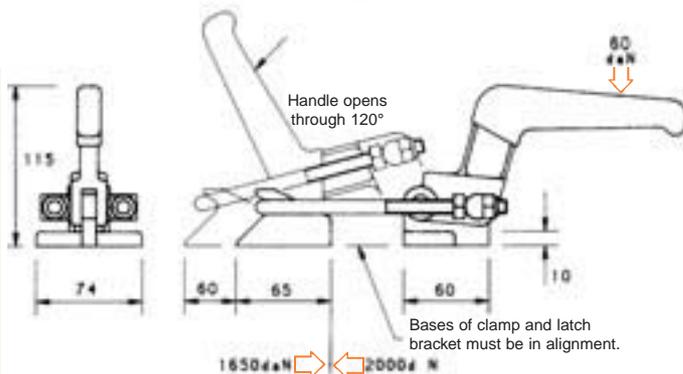
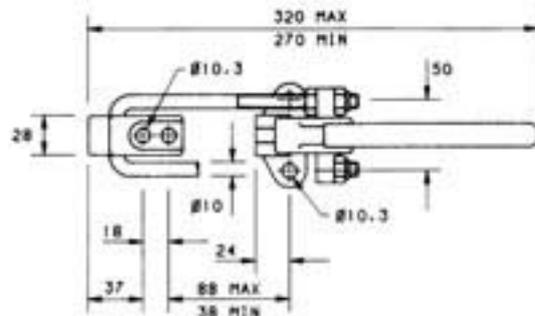


LATCH CLAMPS

HORIZONTAL
MODEL LU2000H



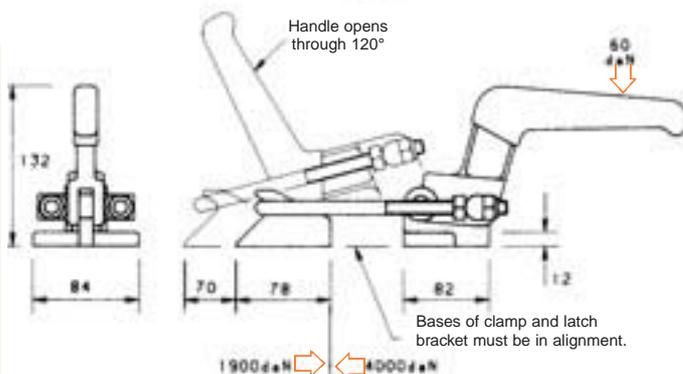
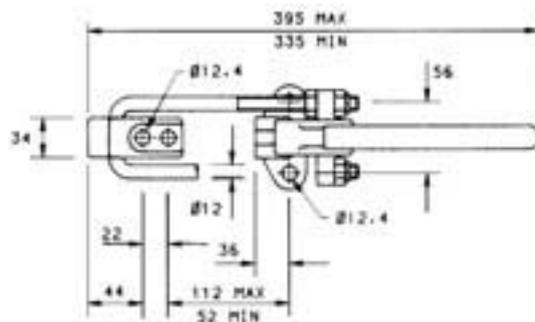
Nominal Holding Force:
2000 daN
Weight:
1.40 Kg
Supplied complete with:
Latch Bracket as shown.
See "Features and installation information" page for installation instructions.



HORIZONTAL
MODEL LU4000H



Nominal Holding Force:
4000 daN
Weight:
2.60 Kg
Supplied complete with:
Latch Bracket as shown.
See "Features and installation information" page for installation instructions.



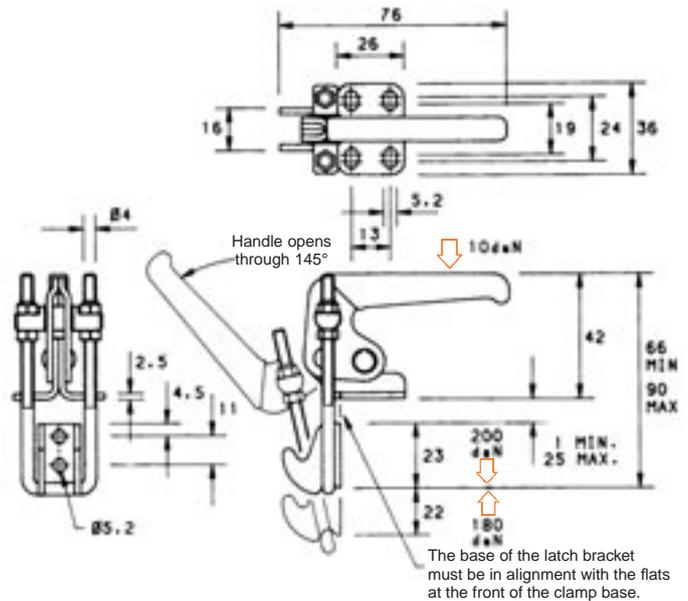
LATCH CLAMPS

VERTICAL

MODEL LU200V



Nominal Holding Force:
200 daN
Weight:
0.05 Kg
Supplied complete with:
Latch Bracket as shown.
See "Features and installation information" page for installation instructions.



The base of the latch bracket must be in alignment with the flats at the front of the clamp base.

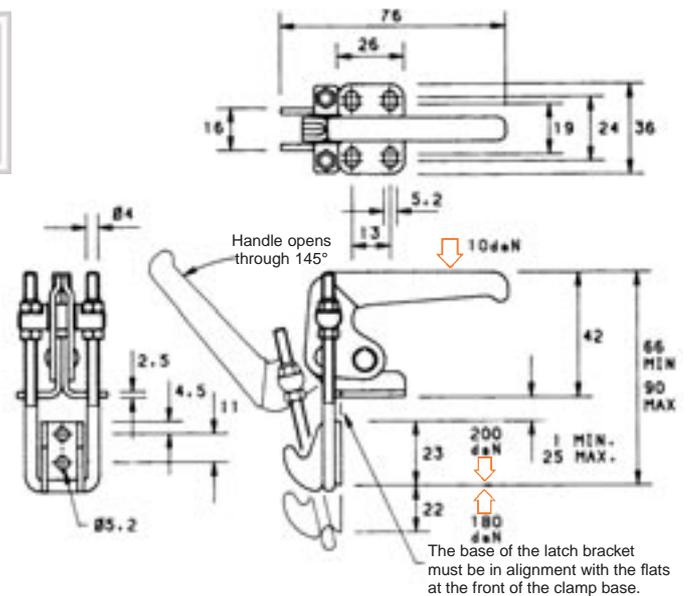
VERTICAL

MODEL LU200VSS

**STAINLESS
STEEL**



Nominal Holding Force:
200 daN
Weight:
0.05 Kg
Supplied complete with:
Latch Bracket as shown.
Material:
BS 304 S15.
See "Features and installation information" page for installation instructions.



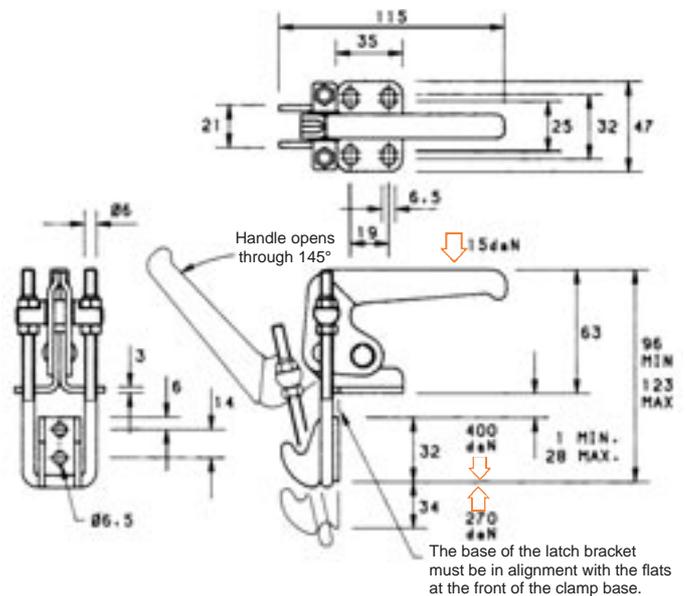
The base of the latch bracket must be in alignment with the flats at the front of the clamp base.

VERTICAL

MODEL LU400V



Nominal Holding Force:
400 daN
Weight:
0.25 Kg
Supplied complete with:
Latch Bracket as shown.
See "Features and installation information" page for installation instructions.



The base of the latch bracket must be in alignment with the flats at the front of the clamp base.

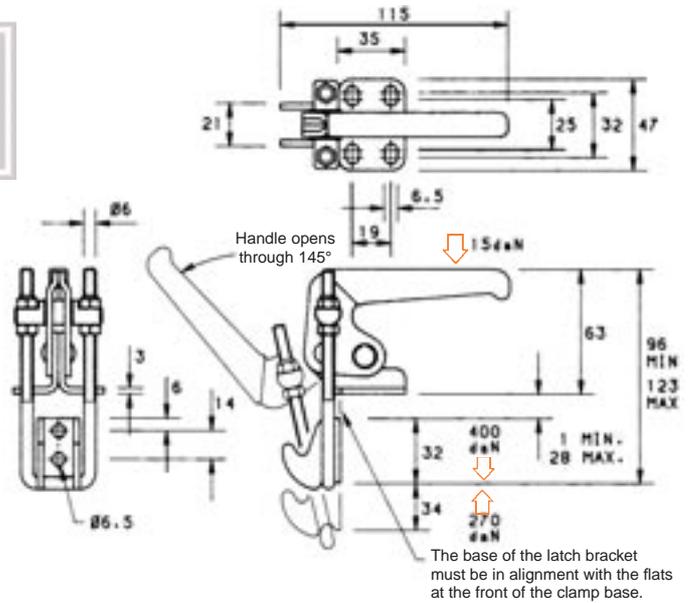
LATCH CLAMPS

VERTICAL
MODEL LU400VSS



**STAINLESS
STEEL**

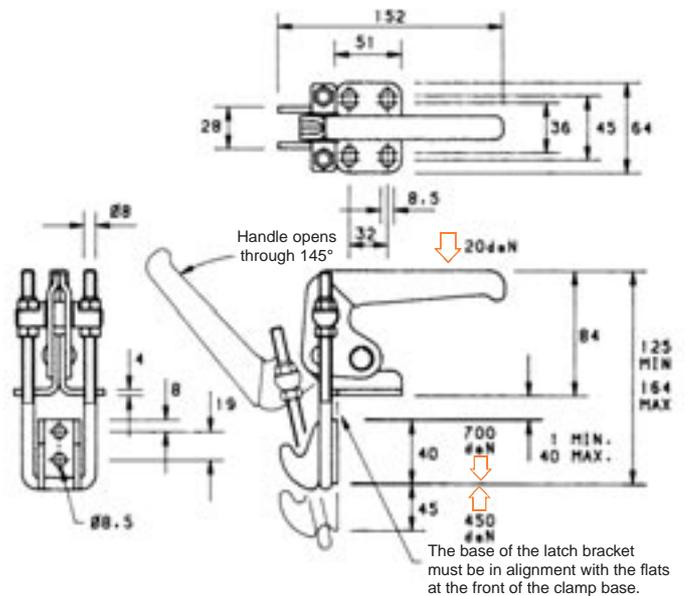
Nominal Holding Force:
400 daN
Weight:
0.25 Kg
Supplied complete with:
Latch Bracket as shown.
Material:
BS 304 S15.
See "Features and installation
information" page for installation
instructions.



VERTICAL
MODEL LU700V



Nominal Holding Force:
700 daN
Weight:
0.70 Kg
Supplied complete with:
Latch Bracket as shown.
See "Features and installation
information" page for installation
instructions.

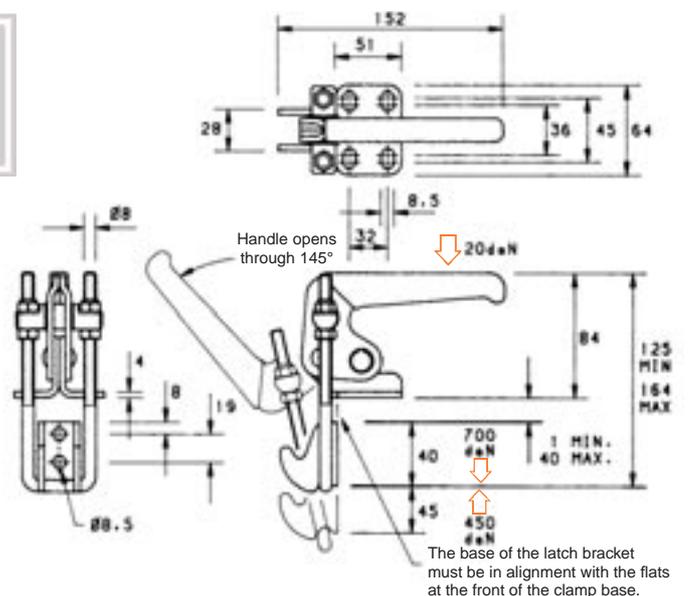


VERTICAL
MODEL LU700VSS



**STAINLESS
STEEL**

Nominal Holding Force:
700 daN
Weight:
0.70 Kg
Supplied complete with:
Latch Bracket as shown.
Material:
BS 304 S15.
See "Features and installation
information" page for installation
instructions.





VERTICAL CAM CLAMPS

- **Features:**

Cam clamps are similar to vertical clamps but the clamping force is generated not by a toggle linkage, but by the action of a roller on a cam.

The cam action allows components of differing thickness to be clamped without readjustment of the clamping spindle.

Model CV75 can clamp parts with thickness varying by up to 1.5mm, and models CV250 and CV350 thickness varying by up to 2mm.

A comfortable, cushioned PVC handle grip is fitted to all three models of cam clamp.

- **Specification:**

The main components are of zinc plated and passivated steel, the cam and its roller being case hardened to resist wear.

Rivets are of stainless steel, which burnishes and work-hardens with use, the rivets of models CV250 and CV350 rotating in hardened bushes. The setscrews are of steel with a chemi-black finish.

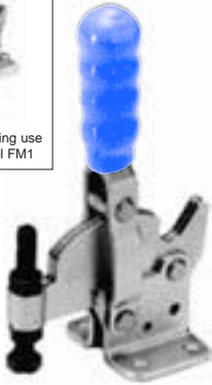
VERTICAL CAM CLAMPS

VERTICAL CAM CLAMPS

MODEL CV75



for front mounting use bracket Model FM1



Arm:
The spindle is in a fixed position.

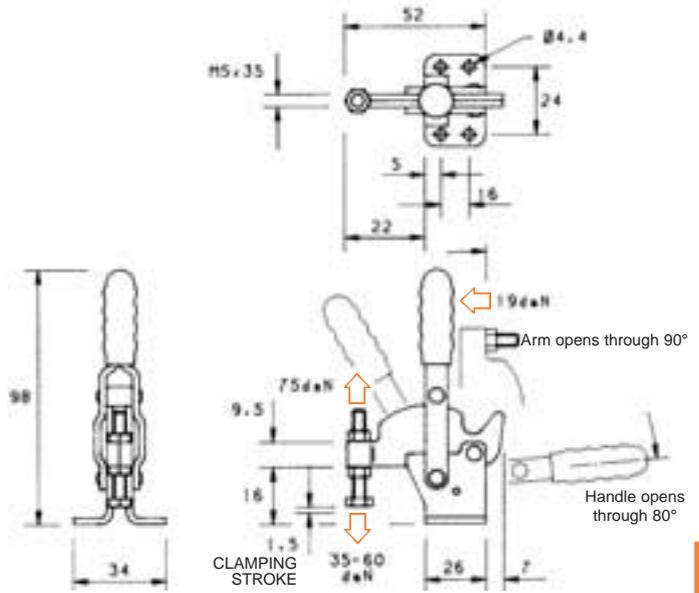
Base:
Flanged.

Nominal Holding Force:
75 daN

Weight:
0.05 Kg

Supplied complete with:
MB0535 Setscrew & nuts.

See "Accessories" for other items.



VERTICAL CAM CLAMPS

MODEL CV250



for front mounting use bracket Model FM2



Arm:
The spindle is in a fixed position.

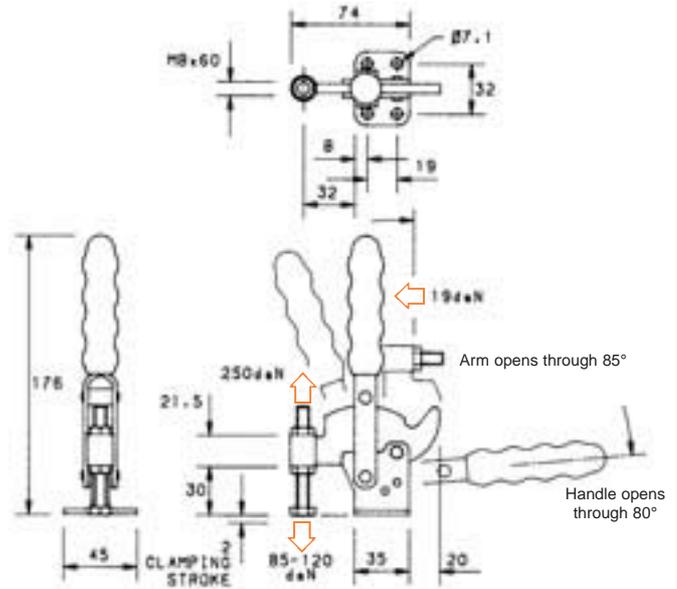
Base:
Flanged.

Nominal Holding Force:
250 daN

Weight:
0.35 Kg

Supplied complete with:
MB0860 Setscrew & nuts.

See "Accessories" for other items.

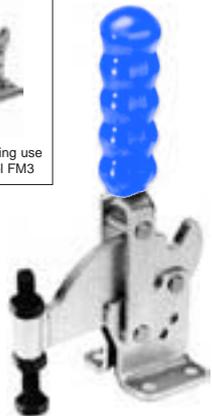


VERTICAL CAM CLAMPS

MODEL CV350



for front mounting use bracket Model FM3



Arm:
The spindle is in a fixed position.

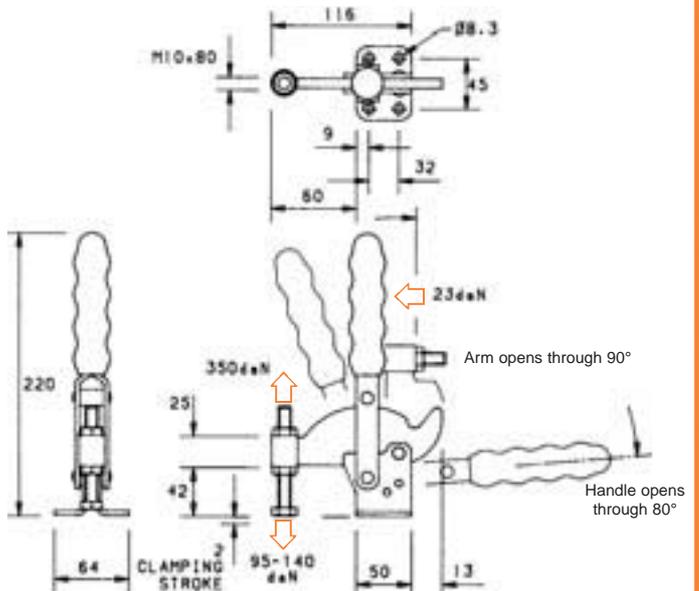
Base:
Flanged.

Nominal Holding Force:
350 daN

Weight:
0.70 Kg

Supplied complete with:
MB1080 Setscrew & nuts.

See "Accessories" for other items.





.....
**TOGGLE CLAMPING
ACCESSORIES**

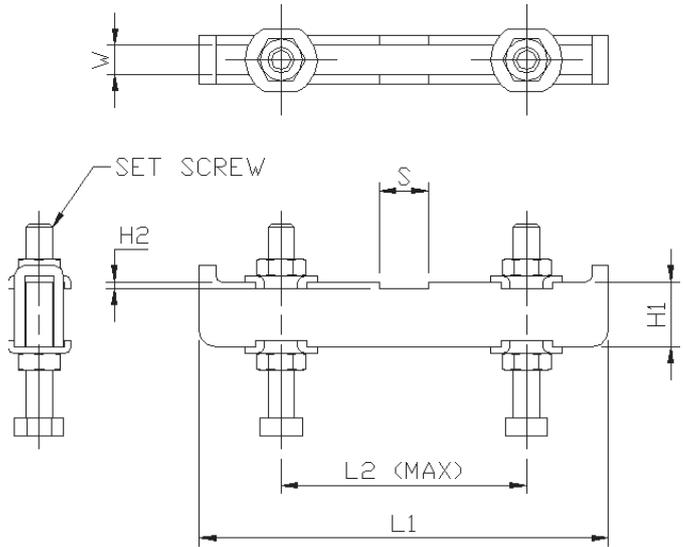
CLAMPING ACCESSORIES

'T' BAR ASSEMBLIES

MODELS T250, T350, T450



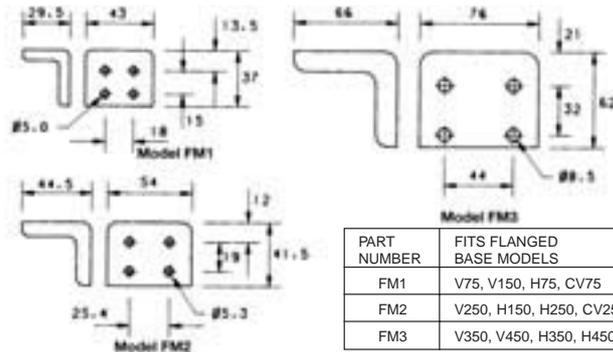
Neoprene tipped spindles, set screw covers or pads can also be used in conjunction with this 'T' Bar Assembly – see below.



MODEL	FOR USE WITH	SUPPLIE SET SCREW	L1	L2	H1	H2	S	W
T250	H250, V250, V300	MB0860	125	95	20	2	15	9
T350	H350, V350	MB1085	145	110	24	2	19.5	11
T450	H450, V450, H700	MB12100	200	160	25	2	23.3	13

FRONT MOUNTING BRACKETS

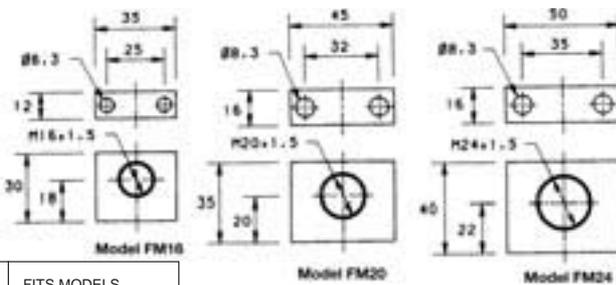
—VERTICAL AND HORIZONTAL CLAMPS



PART NUMBER	FITS FLANGED BASE MODELS
FM1	V75, V150, H75, CV75
FM2	V250, H150, H250, CV250
FM3	V350, V450, H350, H450, CV350

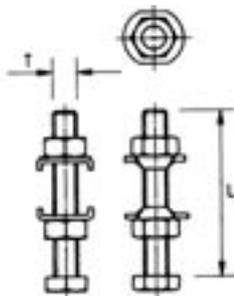
MOUNTING BRACKETS

—NOSE MOUNTING PUSH-PULL CLAMPS



PART NUMBER	FITS MODELS
FM16	P100, P350
FM20	P200, P250, P550
FM24	P400, P450, P750

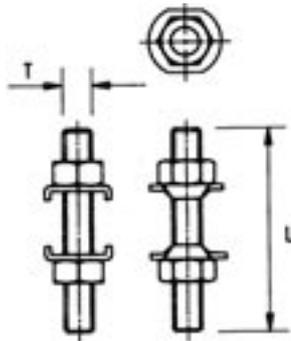
SETSCREWS



PART NUMBER	TH'D	T	L	FITS MODELS
MB0420	M4	20	P50	
MB0520	M5	20	H50	
MB0535	M5	35	V75, H75, V100, CV75, V75X	
MB0625	M6	25	P100, P250, P350	
MB0650	M6	50	V150, V200, H150, V150X	
MB0840	M8	40	P200, P550, P600, P600L, P600X	
MB0860	M8	60	V250, V300, CV250, H250, V250X	
MB1050	M10	50	P400, P450, P750, P1200, P1200L, P1200X	
MB1080	M10	80	V350, H350, CV350	
MB1250	M12	50	P2500, P2500L, P2500X	
MB12100	M12	100	V450, V450X, H450, H700, VA700, VA1200	
MB1680	M16	80	P5000, P5000L	
MB16150	M16	150	V550, VA2400	

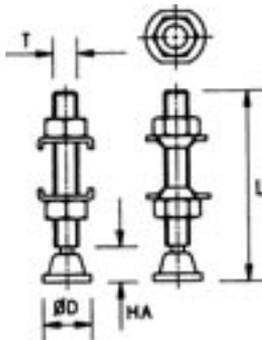
CLAMPING ACCESSORIES

PLAIN SPINDLES



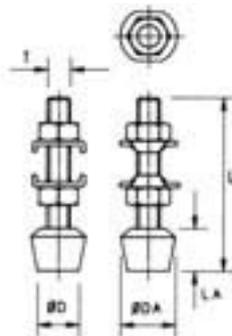
PART NUMBER	THD T	L	FITS MODELS
M0525	M5	25	H50
M0535	M5	35	V75, H75, V100, CV75, V75X
M0650	M6	50	V150, V200, H150, P250, P350
M0665	M6	65	V250, V300, CV250, P300, P550 P600, P600L, P600X, P200
M1085	M10	85	V350, CV350, H350, P400, P450, P750, P1200, P1200L, P1200X
M12100	M12	100	V450, VA700, VA1200, H450, H700, V450X
M16150	M16	150	V550, VA2400

SWIVEL FOOT SPINDLES



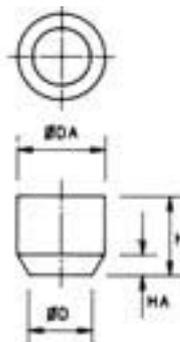
PART NUMBER	THD T	L	ØD	HA	FITS MODELS
M50535	M5	35	12	10	V75, H75, V100, CV75, V75X
M50650	M6	50	12	10	V150, V200, H150, P250, P350
M50865	M8	65	20	13	V250, V300, CV250, P300, P550, P600, P600L, P600X, P200
M51085	M10	85	20	15	V350, CV350, H350, P400, P450, P750, P1200, P1200L, P1200X
M512100	M12	100	25	20	V450, VA700, VA1200, H450, H700, V450X
M516150	M16	150	45	30	V550, VA2400

NEOPRENE TIPPED SPINDLES



PART NUMBER	THD T	L	LA	ØD	ØDA	FITS CLAMP MODEL
NTS0432	M4	32	9	8	11	P50
NTS0538	M5	38	10	10	13	H50, V75, H75, V100, CV75, V75X
NTS0645	M6	45	13	12	16	V150, V200, H150, P100, P250, P350
NTS0865	M8	63	16	16	21	V250, V300, CV250, P200, P300, P550, P600, P600L, P600X
NTS1085	M10	86	20	22	27	V350, CV350, H350, P400, P450, P750, P1200, P1200L, P1200X
NTS12100	M12	100	24	24	30	V450, VA700, VA1200, H450, H700, V450X

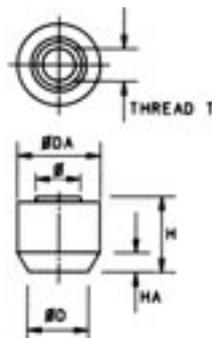
NEOPRENE SETSCREW COVERS



PART NUMBER	H	HA	ØD	ØDA	FITS SCREW
NC/04	8	4	7	11	MB0420
NC/05	10	4	8	13	MB0525, MB0535
NC/06	12	4	11	15	MB0650
NC/08	15	6	13	19	MB0860
NC/10	18	7	16	23	MB1080
NC/12	20	7	19	26	MB1250, MB12100

NEOPRENE PADS

— TO FIT PLAIN SPINDLES

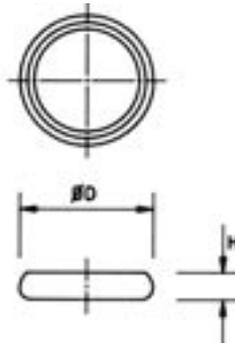


PART NUMBER	THD T	H	HA	ØD	ØDA	Ø	FITS SPINDLE
NP/05	-	10	1	-	12	-	M0525, M0535
NP/06	M6	14	4	11	15	11	M0650
NP/08	M8	18	6	13	19	15	M0865
NP/10	M10	21	7	16	23	17	M1085
NP/12	M12	23	7	19	26	21	M12100

CLAMPING ACCESSORIES

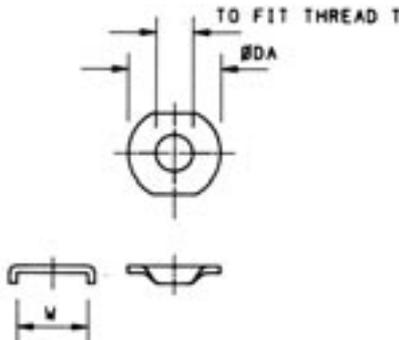
PLASTIC COVERS

TO FIT SWIVEL FOOT SPINDLES



PART NUMBER	ØD	H	FITS SPINDLE
NPS/05/06	16	6	MS0535, MS0650
NPS/08/10	24	10	MS0865, MS1085
NPS/12	30	10	MS12100

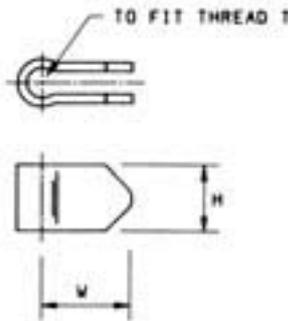
FLANGED WASHERS



PART NUMBER	TH'D T	W	ØDA	FITS CLAMP MODELS WITH TYPE B ARM
FW05/09	M5	9	13	H50
FW05/10	M5	10	15	H75, V75, V75X, V100
FW06/12	M6	12	18	H150, V150, V150X, V200
FW08/15	M8	15	22	H250, V250, V250X, V300
FW10/20	M10	20	26	H350, V350
FW12/23	M12	23	32	H450, V450, V450X, H700
FW16/27	M16	27	35	V550

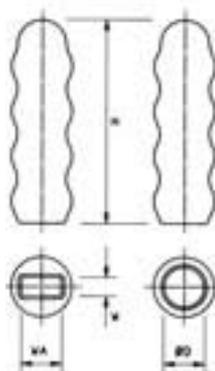
SPINDLE RETAINERS

- TO FIT SPINDLES AND SETSCREWS



PART NUMBER	TH'D T	H	W	FITS CLAMP MODELS WITH TYPE A ARM
R/08	M8	17.5	24	V250, H250, V300
R/10	M10	22	30	V350, H350
R/12	M12	26	32	V450, H450
R/16	M16	32	35	V550

PLASTIC GRIPS



PART NUMBER	H	TO FIT HANDLE DIM'S			FITS CLAMP MODEL
		W	WA	ØD	
GR/01	45	4	8		H75, V75, CV75, V100, H100
GR/02	60	5	10		H150
GR/03	53	6	10		V150, LH200
GR/04	55	5	13		H200
GR/05	58	4	13		V200, P100
GR/06	85	6	15		V250, H250, CV250, V300, LH400, P200, P350
GR/07	65	6	16		H300
GR/08	60	5	13		P250
GR/09	105	8	17		V350, CV350, H350, P400, P450, P550, TC79
GR/10	95	10	22		V450, H450, LH700
GR/11	120	10	25		V550
GR/12	105	8	19		H700
GR/13	115	8	22		P750
BR/1	70		9.5		P600L
BR/2	75		12.7		P1200L
BR/3	100		16		P2500L
B7	90		19		VA700, P5000L
B12	100		22		VA1200
B24	100		25		VA2400



MAGNA FORCE HEAVY DUTY CAM CLAMPS

- **A fraction of the cost of hydraulic system clamping**
- **Clamping forces from 300 daN to 5000 daN**
- **Rugged build quality, ideal for machine shops**
- **Significant cost benefits over clamps in repetitive machining**
- **Unique, patented range of manually operated cam clamps with advantages over hydraulic automated clamping systems**

MAGNA FORCE HEAVY-DUTY CAM CLAMPS

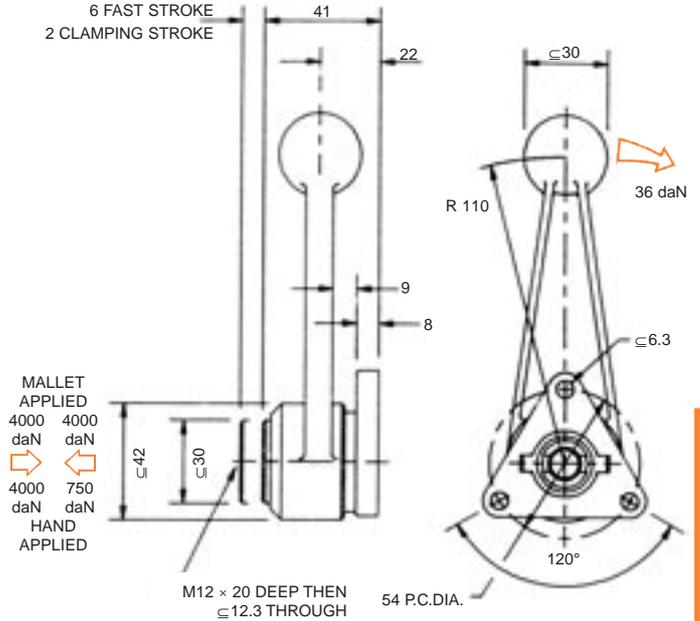
CAM RAM CLAMPS

MODELS **CR4000** (CLOCKWISE)

CR4000A (ANTI-CLOCKWISE)



Operating clamping force:
750 daN (hand applied),
4000 daN (mallet applied)
Weight:
0.55 Kg



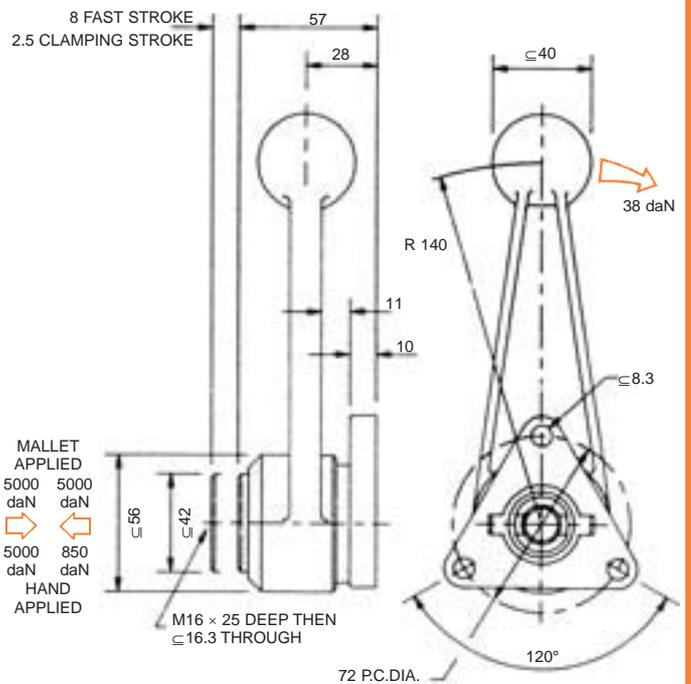
CAM RAM CLAMPS

MODELS **CR5000** (CLOCKWISE)

CR5000A (ANTI-CLOCKWISE)



Operating clamping force:
850 daN (hand applied),
5000 daN (mallet applied)
Weight:
1.3 Kg



TECHNICAL INFORMATION

Clamp No.	Applied Handle Force (Hand Push)	Clamping Force	Clamping Force using Mallet Blows	Daylight Travel	Clamping Travel
CR4000	36 daN	750 daN	4000 daN	6.0mm	2.0mm
CR4000A	36 daN	750 daN	4000 daN	6.0mm	2.0mm
CR5000	38 daN	850 daN	5000 daN	8.0mm	2.5mm
CR5000A	38 daN	850 daN	5000 daN	8.0mm	2.5mm

MAGNA FORCE HEAVY-DUTY CAM CLAMPS

CAM SWING CLAMPS

MODELS **CS300** (CLOCKWISE)

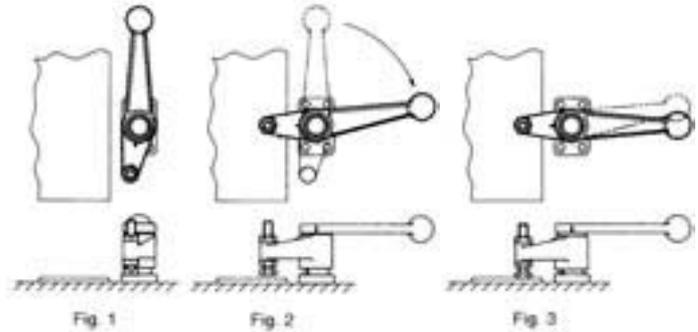
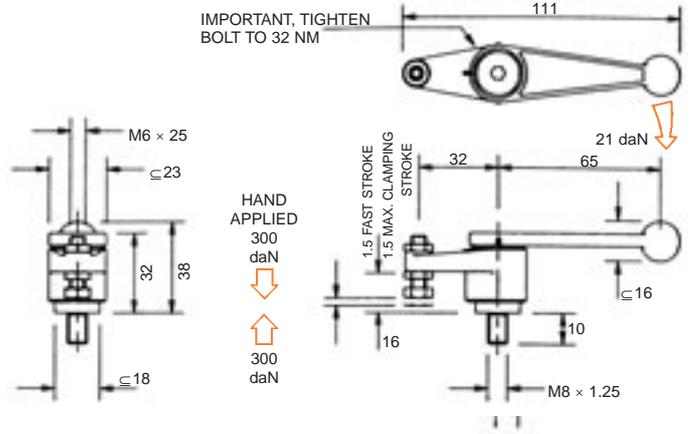
CS300A (ANTI-CLOCKWISE)



Operating clamping force:
300 daN (hand applied).

Weight:
0.20 Kg

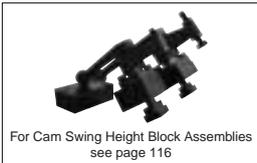
Supplied complete with:
MB0625 Set screw & nuts.



CAM SWING CLAMPS

MODELS **CS800** (CLOCKWISE)

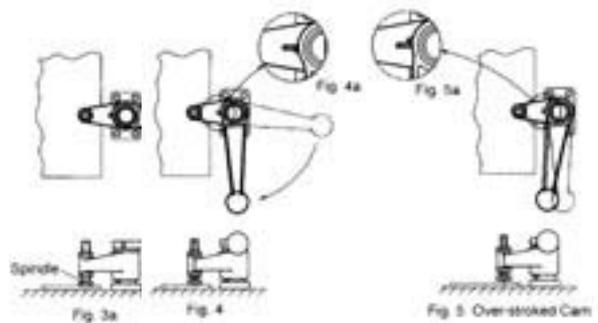
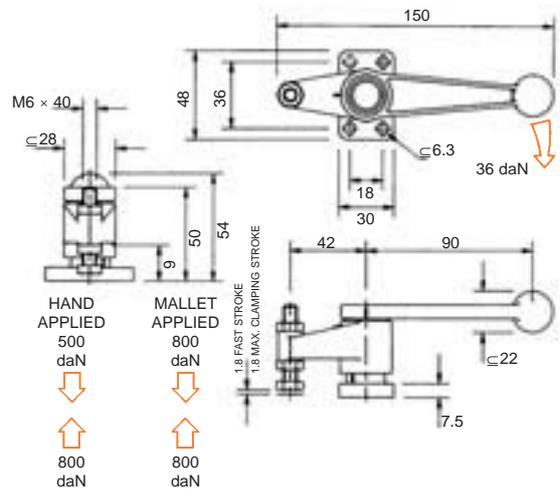
CS800A (ANTI-CLOCKWISE)



Operating clamping force:
500 daN (hand applied),
800 daN (mallet applied).

Weight:
0.40 Kg

Supplied complete with:
MB0840 Set screw & nuts.



TECHNICAL INFORMATION

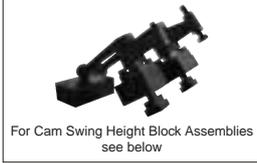
Clamp No.	Applied Handle Force (Hand Push)	Clamping Force	Clamping Force using Mallet Blows	Daylight Travel	Clamping Travel
CS300	21 daN	300 daN	N/A	1.5mm	1.5mm
CS300A	21 daN	300 daN	N/A	1.5mm	1.5mm
CS800	36 daN	500 daN	800 daN	1.8mm	1.8mm
CS800A	36 daN	500 daN	800 daN	1.8mm	1.8mm

MAGNA FORCE HEAVY-DUTY CAM CLAMPS

CAM SWING CLAMPS

MODELS **CS1200** (CLOCKWISE)

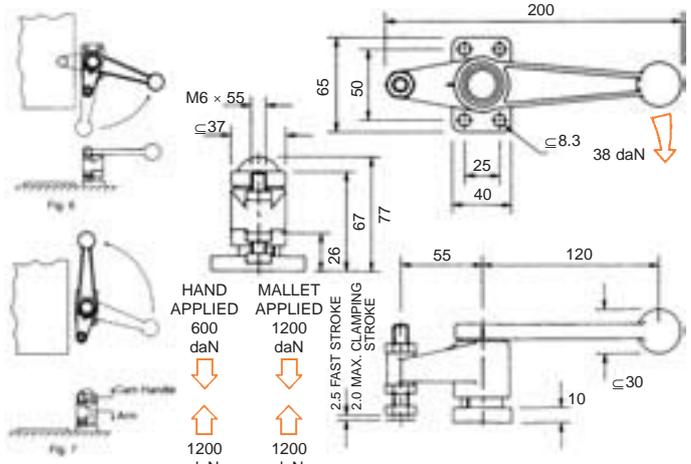
CS1200A (ANTI-CLOCKWISE)



Operating clamping force:
600 daN (hand applied),
1200 daN (mallet applied).

Weight:
0.90 Kg

Supplied complete with:
MB1055 Set screw & nuts.



TECHNICAL INFORMATION

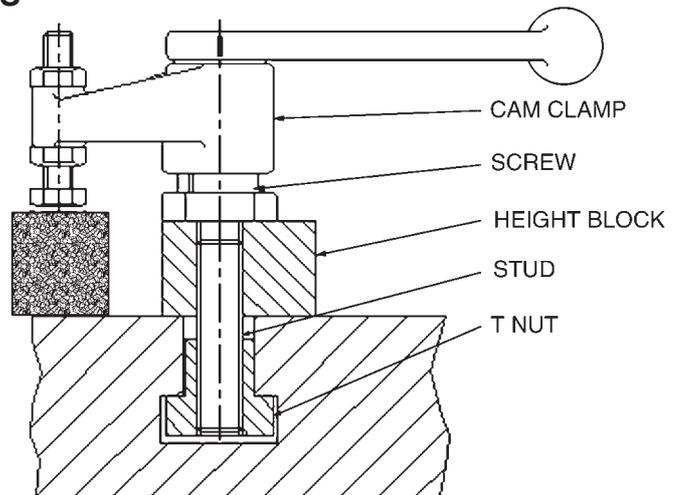
Clamp No.	Applied Handle Force (Hand Push)	Clamping Force	Clamping Force using Mallet Blows	Daylight Travel	Clamping Travel
CS1200	38 daN	600 daN	1200 daN	2.5mm	2.0mm
CS1200A	38 daN	600 daN	1200 daN	2.5mm	2.0mm

CAM SWING HEIGHT BLOCK ASSEMBLIES



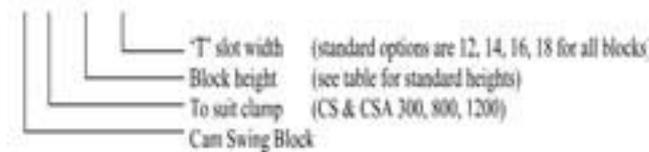
The height block assembly provides the user with a convenient method of setting the height of the Cam Swing Clamp when in operation. The act of locking the clamp onto the work piece also locks the block into position along the Tee Slot.

Note:
Clamp ordered separately

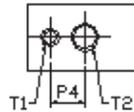


Example Part Code:

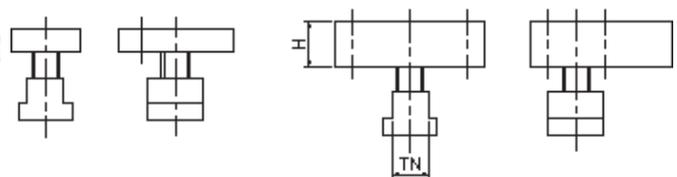
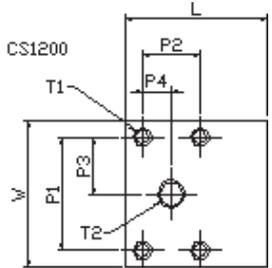
CSB1200-20-TN12



CS300 BLOCK



CS800 & CS1200 BLOCKS

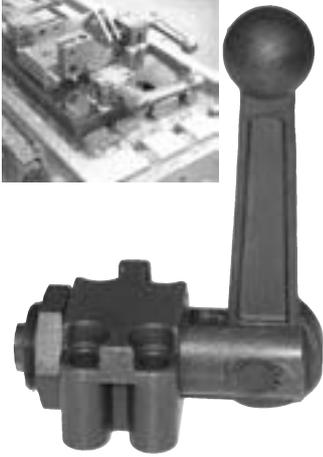


To Suit Clamp	H	W	L	TN	P1	P2	P3	P4	T1	T2	Screw ×4
CS300	10, 20, 30, 40, 50	30	50	12, 14, 16, 18	N/A	N/A	N/A	15	M8×1.25	M12×1.25	N/A
CS800	12, 25, 40, 50	48	40	12, 14, 16, 18	36	18	18	9	M6×1.0	M12×1.25	M6×18
CS1200	20, 40, 60, 76	65	62	12, 14, 16, 18	50	25	25	12.5	M8×1.25	M12×1.25	M8×25

MAGNA FORCE HEAVY-DUTY CAM CLAMPS

CAM PUSH CLAMPS

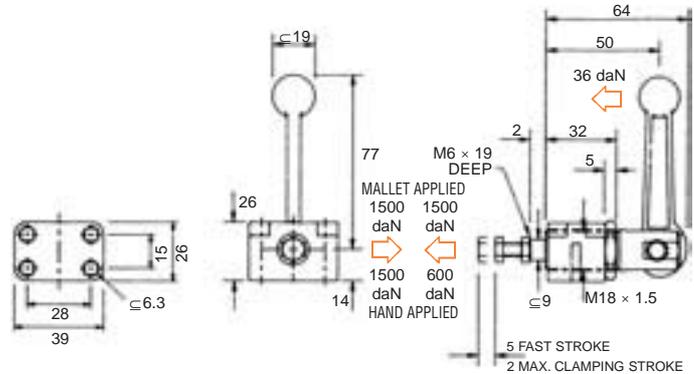
MODELS CP1500



Operating clamping force:
1500 daN (mallet applied),
600 daN (hand applied).

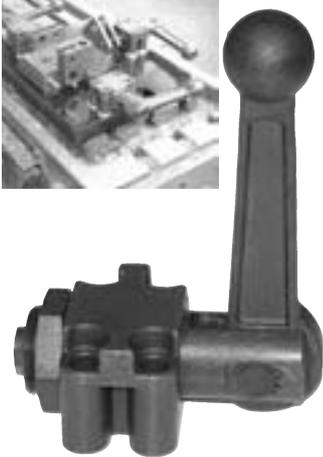
Weight:
0.27 Kg

Supplied complete with:
MB063 Set screw & nuts.
CMB18 Mounting base &
locknuts.



CAM PUSH CLAMPS

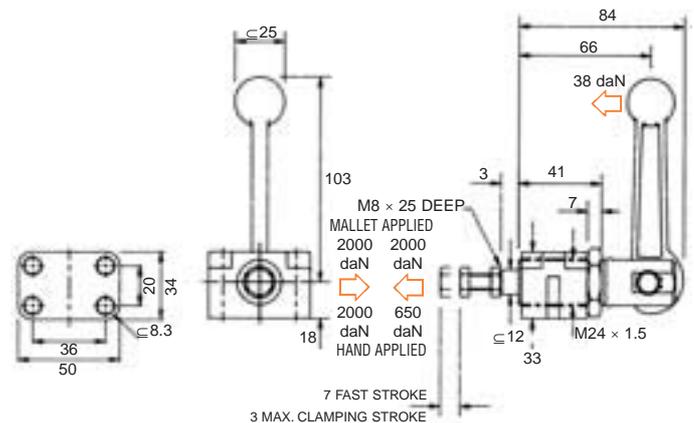
MODELS CP2000



Operating clamping force:
2000 daN (mallet applied),
650 daN (hand applied).

Weight:
0.60 Kg

Supplied complete with:
MB0840 Set screw & nuts.
CMB24 Mounting base &
locknuts.

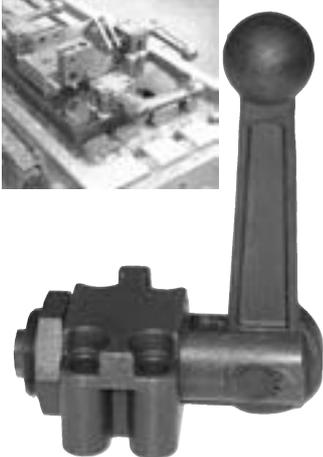


TECHNICAL INFORMATION

Clamp No.	Applied Handle Force (Hand Push)	Clamping Force	Clamping Force using Mallet Blows	Daylight Travel	Clamping Travel
CP1500	36 daN	600 daN	1500 daN	5.2mm	2.2mm
CP2000	38 daN	650 daN	2000 daN	7.0mm	3.0mm
CP3000	43 daN	650 daN	3000 daN	11.0mm	4.0mm

CAM PUSH CLAMPS

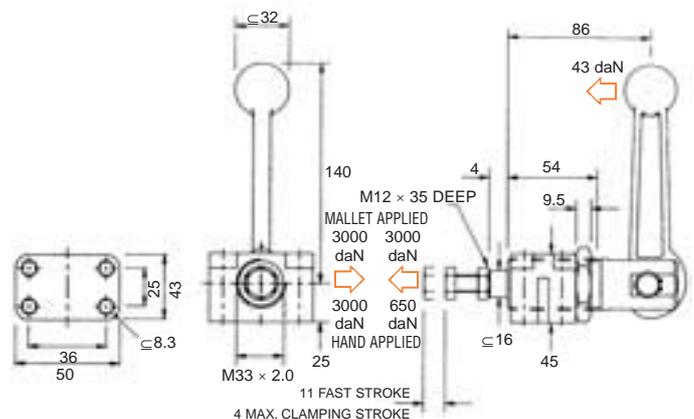
MODELS CP3000



Operating clamping force:
3000 daN (mallet applied),
650 daN (hand applied).

Weight:
1.50 Kg

Supplied complete with:
MB0840 Set screw & nuts.
CMB33 Mounting base &
locknuts.



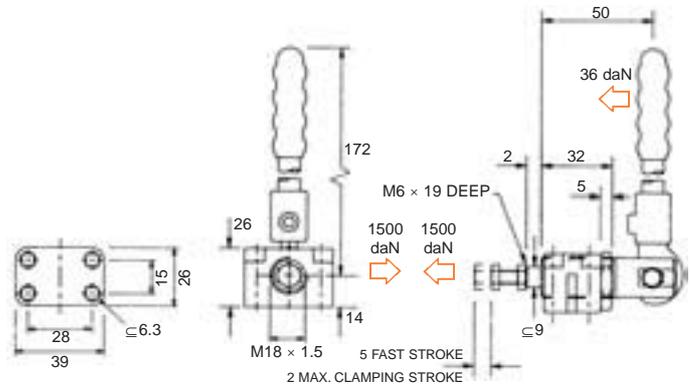
MAGNA FORCE HEAVY-DUTY CAM CLAMPS

CAM PUSH CLAMPS

MODELS CP1500L



Operating clamping force:
1500 daN
Weight:
0.35 Kg
Supplied complete with:
MB0840 Set screw & nuts.
CMB18 Mounting base & locknuts.

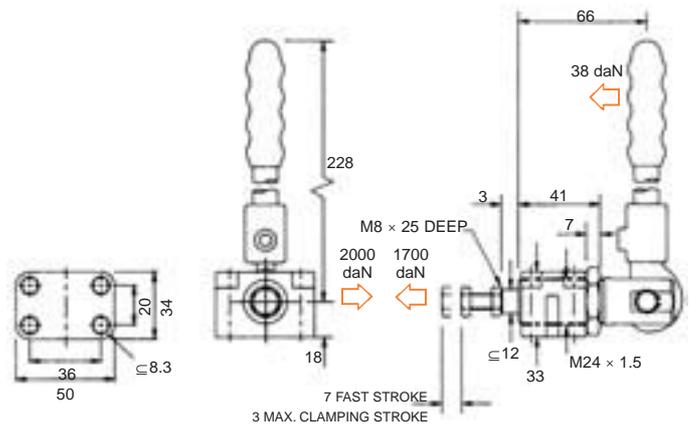


CAM PUSH CLAMPS

MODELS CP2000L



Operating clamping force:
1700 daN
Weight:
0.75 Kg
Supplied complete with:
MB0840 Set screw & nuts.
CMB24 Mounting base & locknuts.
Nominal holding force:
2000 daN



TECHNICAL INFORMATION

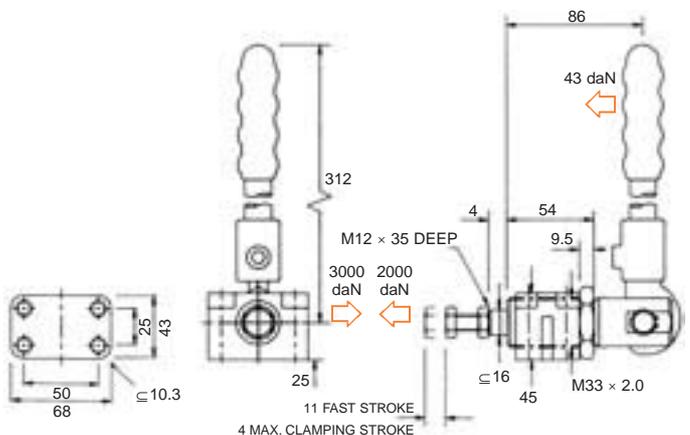
Clamp No.	Applied Handle Force (Hand Push)	Clamping Force	Clamping Force using Mallet Blows	Daylight Travel	Clamping Travel
CP1500L	36 daN	1500 daN	N/A	5.2mm	2.2mm
CP2000L	38 daN	1700 daN	N/A	7.0mm	3.0mm
CP3000L	43 daN	2000 daN	N/A	11.0mm	4.0mm

CAM PUSH CLAMPS

MODELS CP3000L



Operating clamping force:
2000 daN
Weight:
2.00 Kg
Supplied complete with:
MB1250 Set screw & nuts.
CMB33 Mounting base & locknuts.
Nominal holding force:
3000 daN





CAM PUSH/CAM PULL CLAMPS

- **Uses:**

The actima cylinder is used when the clamping space is limited. Its robust design and closed mechanism offer indisputable advantages. Actima lever cylinders are usually actuated by pushing. But when you turn the lever bush around, pulling can also actuate the cylinder.

- **Features:**

These clamps are offered in four configurations — push action or pull action in either right hand or left hand rotation. The approach travel is 10mm and does not allow for clamping. In the 2mm clamping travel, the lever remains locked in all positions. Consequently, workpieces can be fastened safely with tolerances of up to 1.5mm. The Actima lever cylinder can be fitted horizontally or vertically.

The mechanism is totally enclosed to avoid finger traps and the ingress of dirt or metal cuttings.

- **Specification:**

All external parts are finished black except the knob which is dull red plastic. The cam roller and the cam faces are case hardened to minimise wear.

- **Installation:**

It is essential that the clamps are installed to clamp on the 'clamping stroke'. Clamping on the 'fast travel' part of the stroke can result in the clamp releasing itself, and allowing the clamp to reach the end of its 'clamping stroke' does not ensure secure clamping.

Hand force only should be used in closing the clamps as over tightening with a hammer or lever can result in damage to the units.

CAM PUSH/CAM PULL CLAMPS

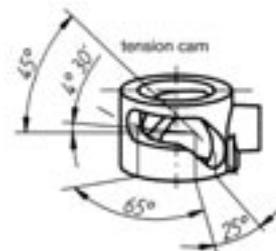
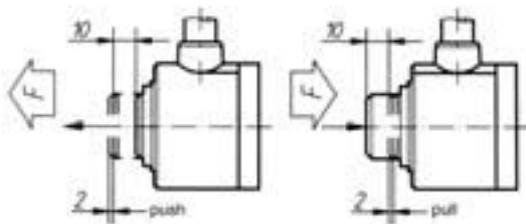
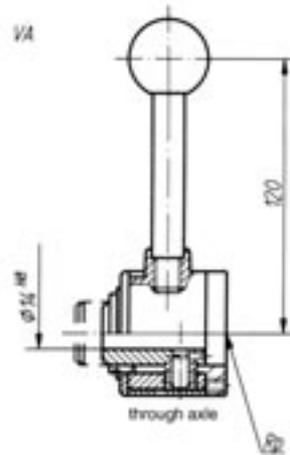
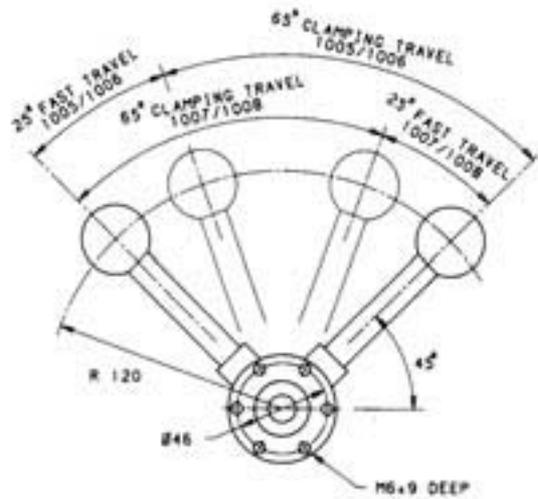
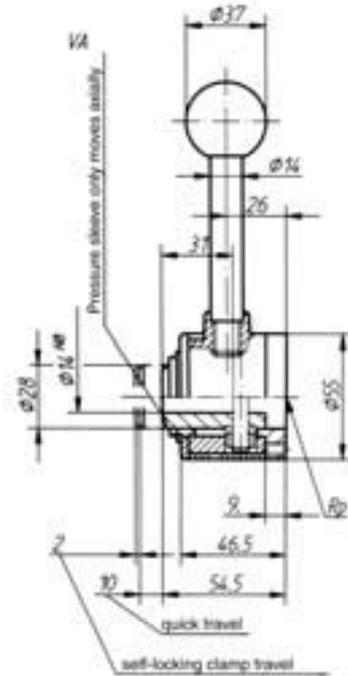
CAM PUSH/CAM PULL CLAMPS



Cam operated.
Right hand push.
Rear mounted.

TECHNICAL INFORMATION

Clamp No.	Nominal Holding Force	Weight Kg
CP1005	500 daN	0.80 daN
CP1006	500 daN	0.80 daN
CP1007	500 daN	0.80 daN
CP1008	500 daN	0.80 daN





SWING CLAMPS, SWING CLAMP ASSEMBLIES AND HEAVY-DUTY HOOK CLAMPS

- **Features:**

High clamping forces are generated by tightening the socket head bolt making these clamps suitable for applications where secure clamping is required, such as in heavy machining operations, the clamping of heavy moulds, or the holding of lids on vessels, etc.

On release, the clamping arm tends to swing open through 90 degrees automatically, but sometimes requires opening by hand, leaving the clamp arm clear for unloading.

The 1015 series comprises the clamping arm and return spring, the user providing a mounting hole to the dimensions shown in the catalogue. The 1016 series comprises complete assemblies of clamping arm, clamping bolt, return spring and housing, ready for bolting to a fixture.

- **Specification:**

The 1015 clamping arm and, the 1016 assembly, are heat treated alloy steel precision castings machined to tight tolerances to ensure a positive and smooth action. All parts except the return spring are finished chemi-black.

SWING CLAMP ASSEMBLIES

SWING CLAMP ASSEMBLIES

MODEL 1016-08

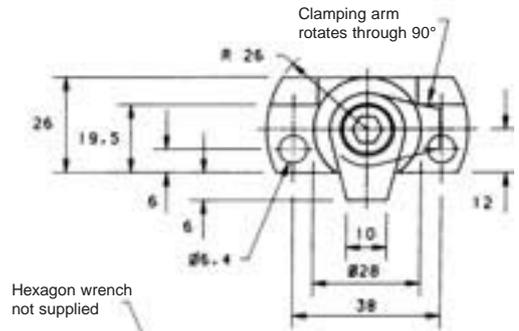


- Base or Front Mounted.
- Manually turned.
- Tightened & released by hexagonal key.
- Spring return.

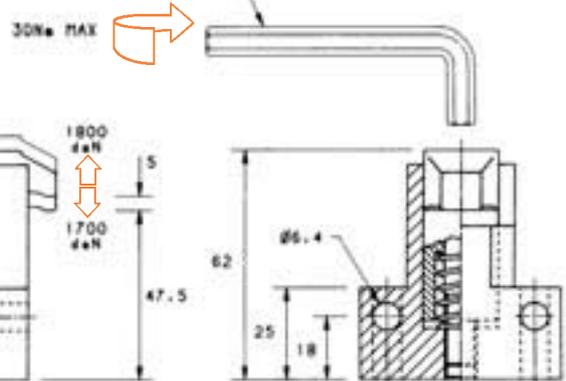
Nominal Holding Force:

1800 daN

Weight:
0.33 Kg



Hexagon wrench not supplied



SWING CLAMP ASSEMBLIES

MODEL 1016-10

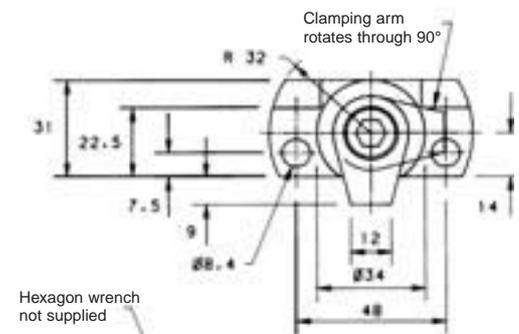


- Base or Front Mounted.
- Manually turned.
- Tightened & released by hexagonal key.
- Spring return.

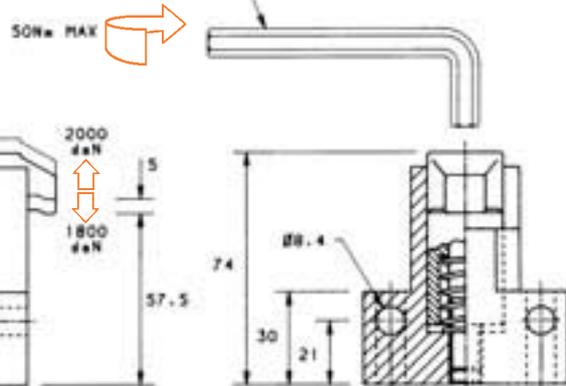
Nominal Holding Force:

2000 daN

Weight:
0.56 Kg



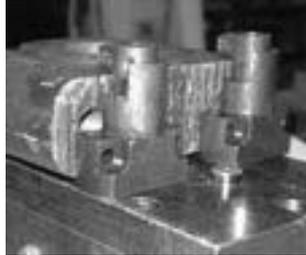
Hexagon wrench not supplied



SWING CLAMP ASSEMBLIES

SWING CLAMP ASSEMBLIES

MODEL 1016-12

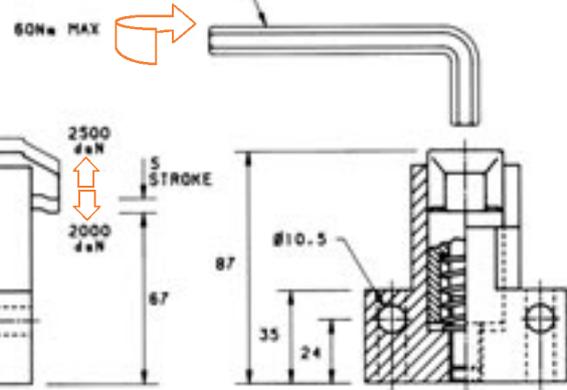
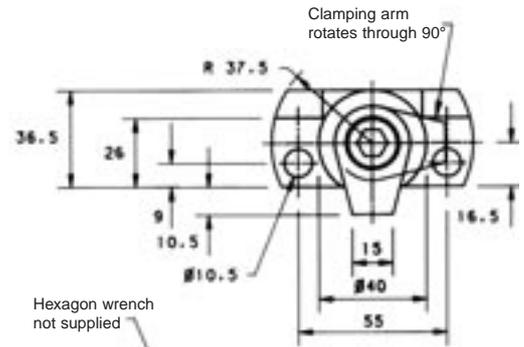


- Base or Front Mounted.
- Manually turned.
- Tightened & released by hexagonal key.
- Spring return.

Nominal Holding Force:

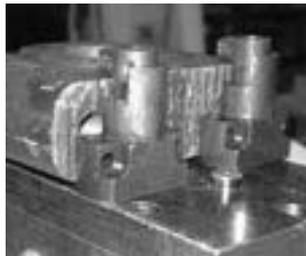
2500 daN

Weight:
0.81 Kg



SWING CLAMP ASSEMBLIES

MODEL 1016-16

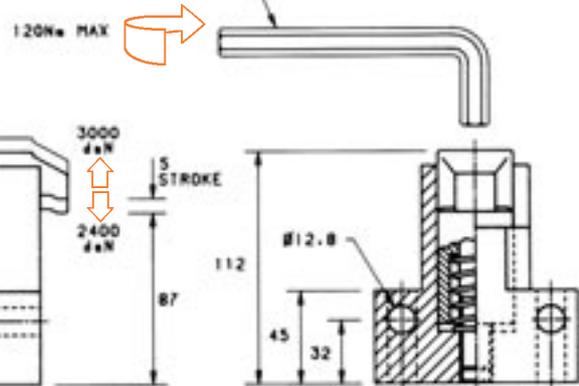
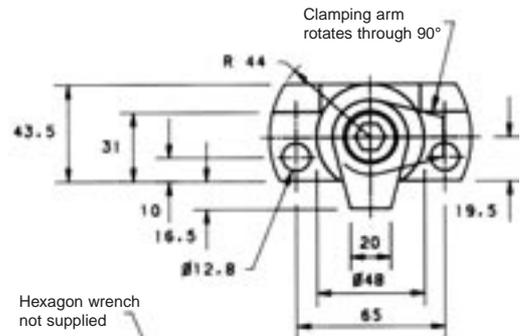


- Base or Front Mounted.
- Manually turned.
- Tightened & released by hexagonal key.
- Spring return.

Nominal Holding Force:

3000 daN

Weight:
1.60 Kg



HEAVY-DUTY SWING CLAMPS

SWING CLAMPS

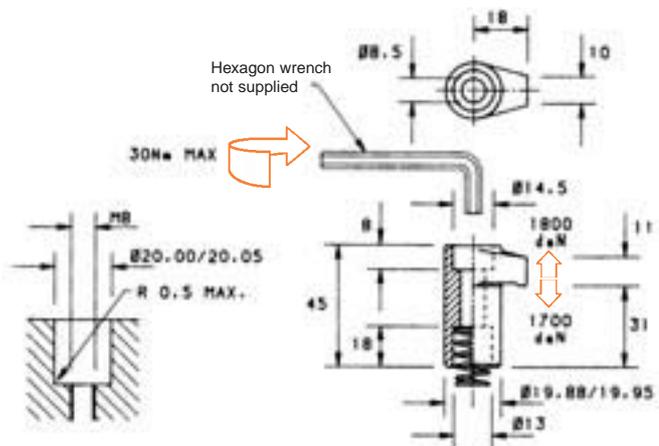
MODEL 1015-08



- Hole mounted by customer.
- Manually turned.
- Tightened & released by hexagonal key.
- Spring return.

Nominal Holding Force:
1800 daN

Weight:
0.08 Kg



SWING CLAMPS

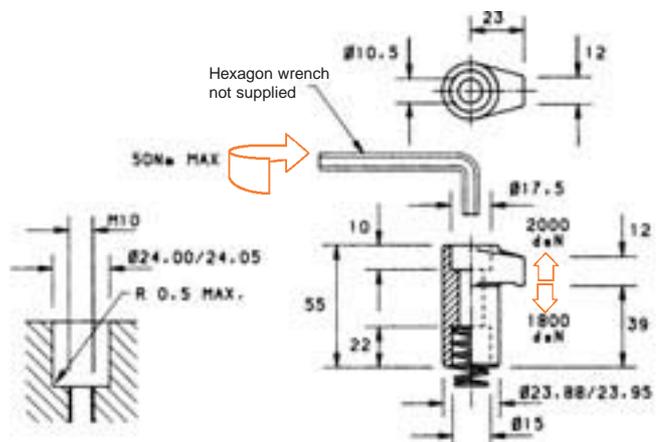
MODEL 1015-10



- Hole mounted by customer.
- Manually turned.
- Tightened & released by hexagonal key.
- Spring return.

Nominal Holding Force:
2000 daN

Weight:
0.15 Kg



SWING CLAMPS

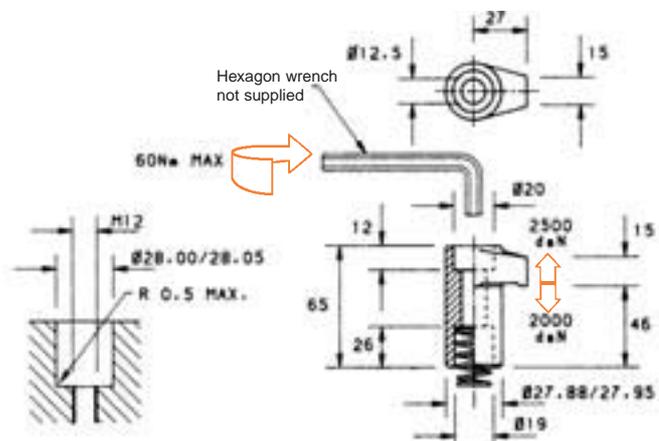
MODEL 1015-12



- Hole mounted by customer.
- Manually turned.
- Tightened & released by hexagonal key.
- Spring return.

Nominal Holding Force:
2500 daN

Weight:
0.23 Kg



SWING CLAMPS

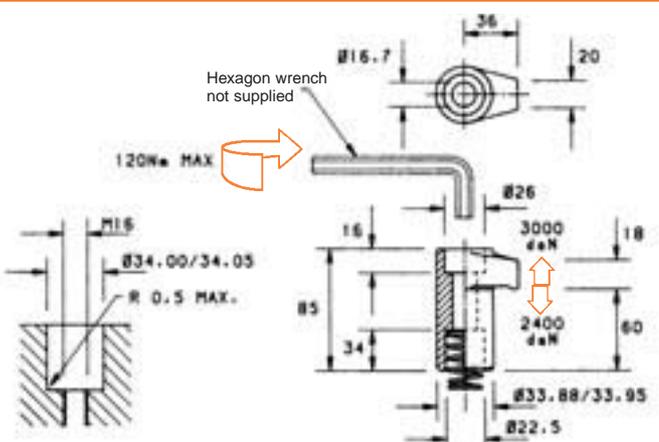
MODEL 1015-16



- Hole mounted by customer.
- Manually turned.
- Tightened & released by hexagonal key.
- Spring return.

Nominal Holding Force:
3000 daN

Weight:
0.44 Kg





TOGGLE PLIERS AND CLIP CLAMPS

- **Features:**

Toggle pliers, unlike 'G' or sash clamps, can have their clamping position pre-set for quick, repetitious clamping. The range of jaw openings and depths allow clamping over obstacles such as flanges, and the central release lever ensures easy opening.

Clip clamps are closed by means of a torsion spring and can clamp any thickness of material up to a maximum shown without having to be pre-set.

- **Specification:**

Toggle pliers models P0, P1A, P1B, P3A, P3B, P4 and P4B have jaws and handles made from machined alloy steel forgings and are finished zinc plated and passivated.

Models P1 and P3 have jaws and one handle made from machined alloy steel forgings, the other handle being a steel pressing. These two pliers have a black painted finish to the forgings, the pressed parts being finished chemi blacked.

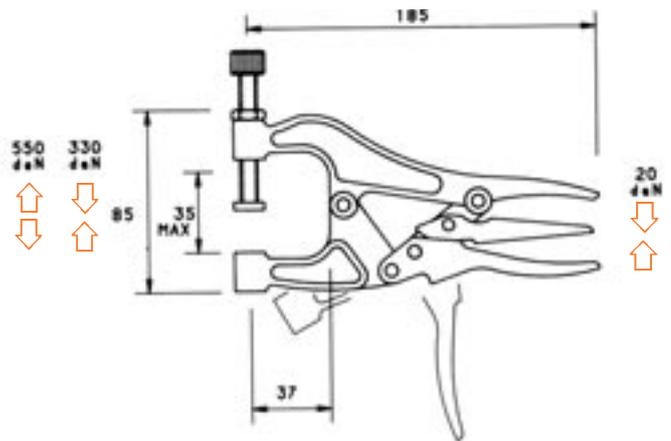
TOGGLE PLIERS AND CLIP CLAMPS

TOGGLE PLIERS

MODEL P1



Spindle:
Steel copper plated.
Nominal Holding Force:
550 daN
Weight:
0.55 Kg

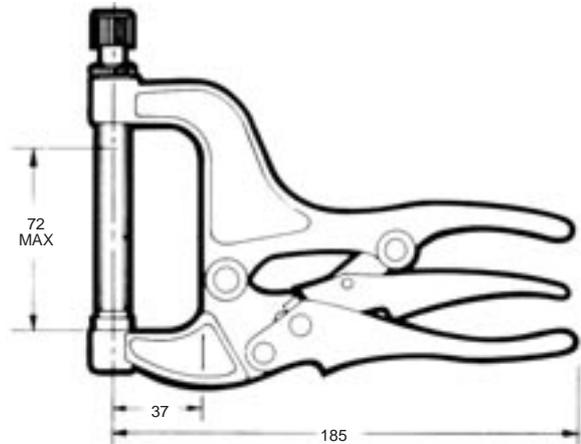


TOGGLE PLIERS

MODEL P2



Spindle:
Steel copper plated.
Nominal Holding Force:
1000 daN
Weight:
0.65 kg

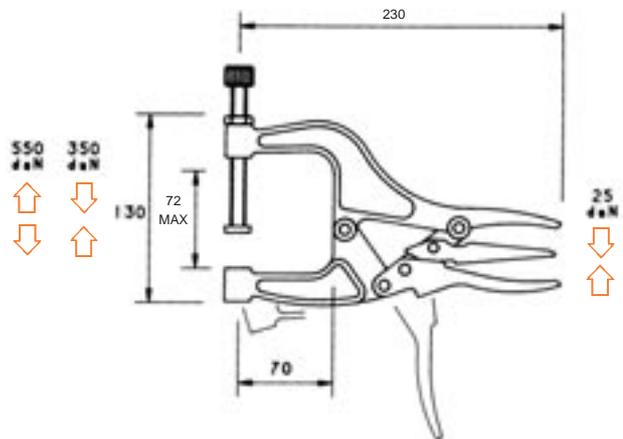


TOGGLE PLIERS

MODEL P3



Spindle:
Steel copper plated.
Nominal Holding Force:
550 daN
Weight:
0.80 Kg

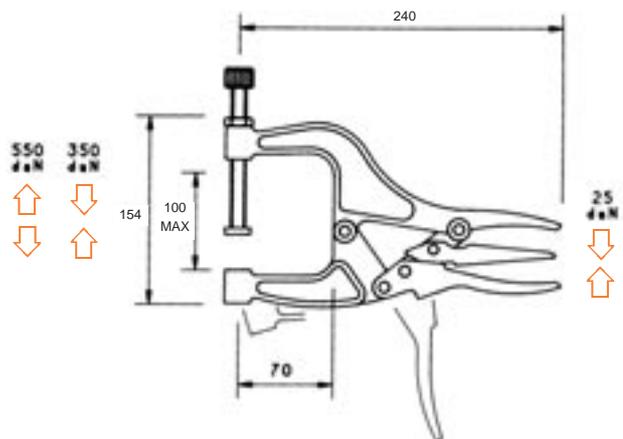


TOGGLE PLIERS

MODEL P4

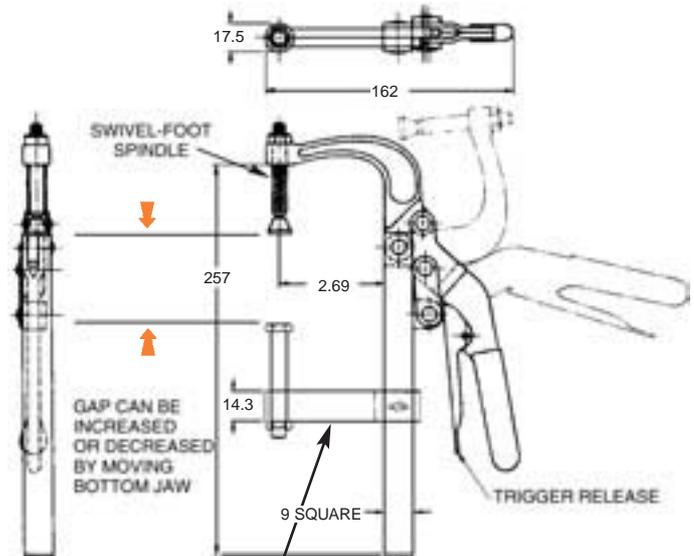
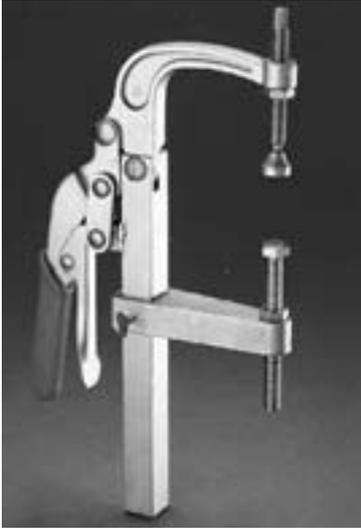


Spindle:
Steel zinc plated.
Nominal Holding Force:
200 daN
Weight:
0.75 Kg



TOGGLE PLIERS AND CLIP CLAMPS

QUICK CLAMPING TOGGLE PLIERS



Part No. TC345-PLA - BOTTOM JAW

- multi-purpose rail clamp with forged steel clamping jaw.
- quick clamping and trigger release mechanism.
- 360 daN / 800 lb. clamping force from the toggle mechanism.
- comes supplied with lower jaw (part nos. TC345-PLA) which is also available separately.
- also supplied with SA-38314-SF swivel foot spindle.

Product Code	Opening mm	Depth mm	Rail mm	Weight kg
TC345	215	68.3	19 × 19	1.3

TOGGLE PLIERS AND CLIP CLAMPS

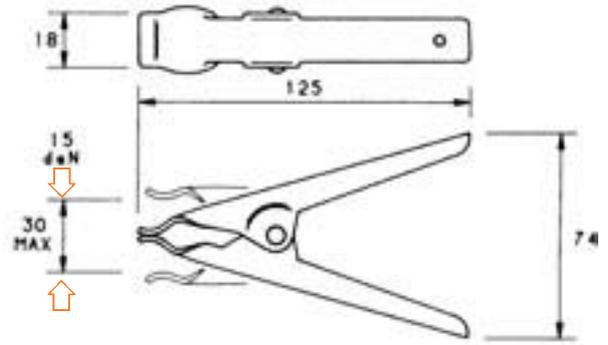
CLIP CLAMPS

MODEL CC510



Gripping Force:
6 daN closed.
15 daN open.
Weight:
0.09 Kg

6 daN
↓
↑



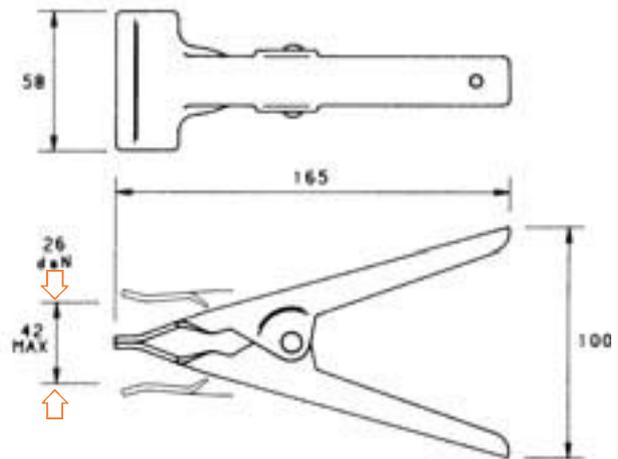
CLIP CLAMPS

MODEL CC610



Gripping Force:
15 daN closed.
26 daN open.
Weight:
0.29 Kg

15 daN
↓
↑



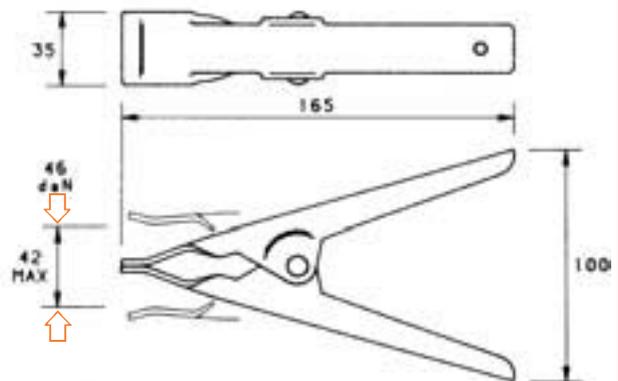
CLIP CLAMPS

MODEL CC701



Gripping Force:
25 daN closed.
46 daN open.
Weight:
0.27 Kg

25 daN
↓
↑





TOGGLE PRESSES
.....
MANUAL, PNEUMATIC & RACK
AND PINION

TOGGLE HAND PRESSES

TOGGLE HAND PRESS

MODEL P600PR



DATA

With 14 daN handle force the output force is:	daN
Fully retracted	470
5 mm extended	110
10 mm "	70
15 mm "	75
20 mm "	80
25 mm "	85
30 mm "	146
31 mm "	190
Fully extended	580

Type:
Bench mounted manual toggle press.

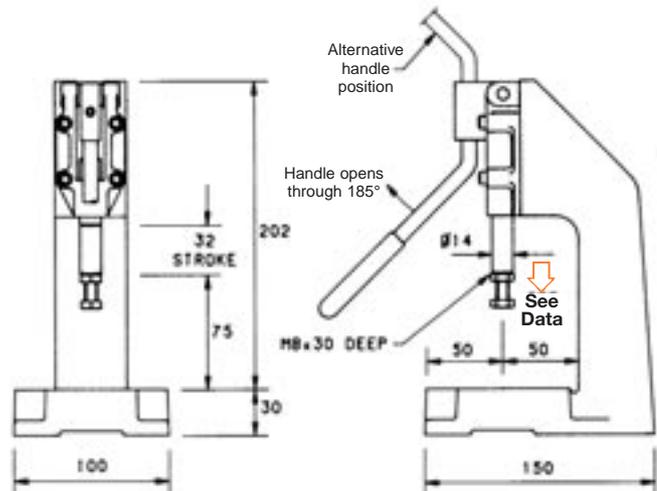
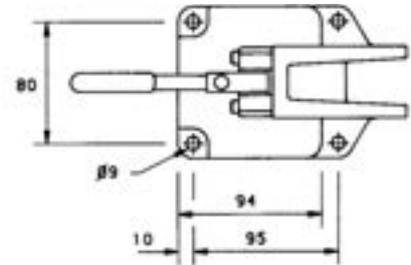
Nominal holding force:
600 daN.

Weight:
3.60 kg.

Quality Features:

- S.G. Iron framecasting.
- precision ground steel plunger.
- fixed height work head.

All toggle presses achieve their maximum force at the end of the stroke. Therefore Brauer toggle presses are best employed where the full force of the press is only used over a short length at the end of the working stroke; e.g. when punching, riveting, embossing, gluing, etc.



TOGGLE HAND PRESS

MODEL P1200PR



DATA

With 15 daN handle force the output force is:	daN
Fully retracted	705
5 mm extended	167
10 mm "	90
15 mm "	73
20 mm "	70
25 mm "	72
30 mm "	85
35 mm "	100
40 mm "	110
45 mm "	150
48 mm "	220
49 mm "	290
Fully extended	930

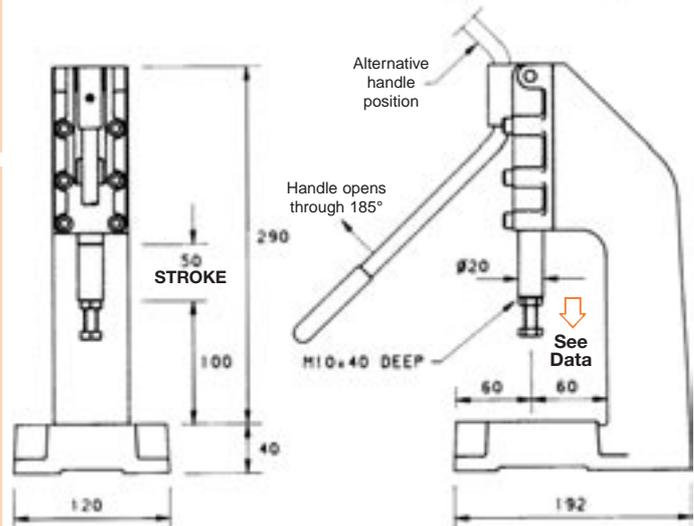
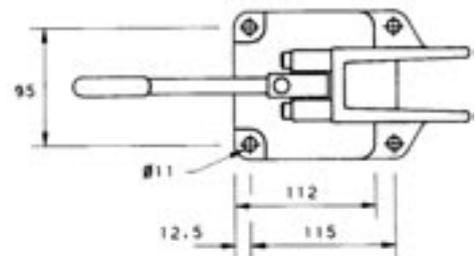
Type:
Bench mounted manual toggle press.

Nominal holding force:
1200 daN.

Weight:
7.35 kg.

Quality Features:

- S.G. Iron framecasting.
- precision ground steel plunger.
- fixed height work head.



TOGGLE HAND PRESSES

TOGGLE HAND PRESSES

MODEL P2500PR



DATA

With 17 daN handle force the output force is:

daN	mm
1000	Fully retracted
100	10 mm extended
72	20 mm "
60	30 mm "
70	40 mm "
88	50 mm "
118	60 mm "
190	70 mm "
230	72 mm "
353	74 mm "
1100	Fully extended

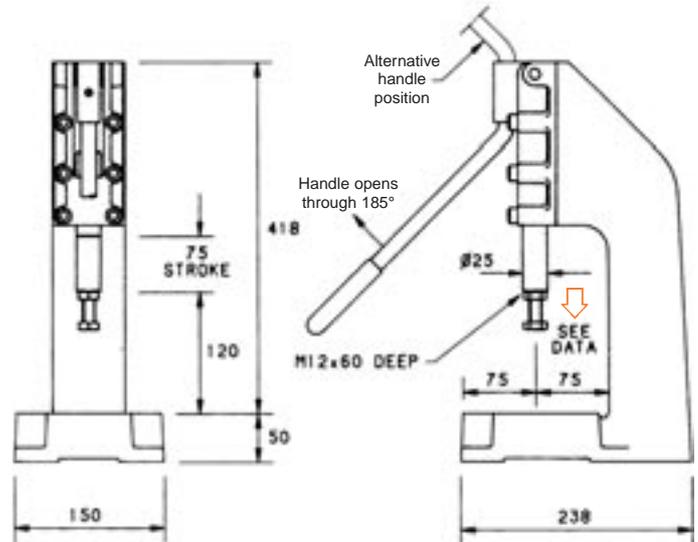
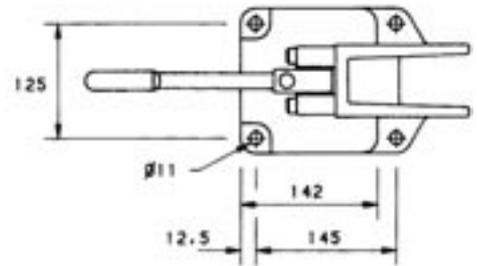
Type:
Bench mounted manual toggle press.

Nominal holding force:
2500 daN.

Weight:
15.50 kg.

Quality Features:

- S.G. Iron framecasting.
- precision ground steel plunger.
- fixed height work head.



TOGGLE HAND PRESSES

MODEL TPR 1



DATA

With 13 daN handle force the output force is:

daN	mm
48	Fully retracted
45	5 mm extended
42	10 mm "
42	15 mm "
45	20 mm "
49	25 mm "
54	30 mm "
75	35 mm "
102	38 mm "
143	39 mm "
500	Fully extended

Optional Extras: please mention when ordering

Table Bore 10 ^{H7} mm	TB
Locking Device	VS
Stroke Counter	Z

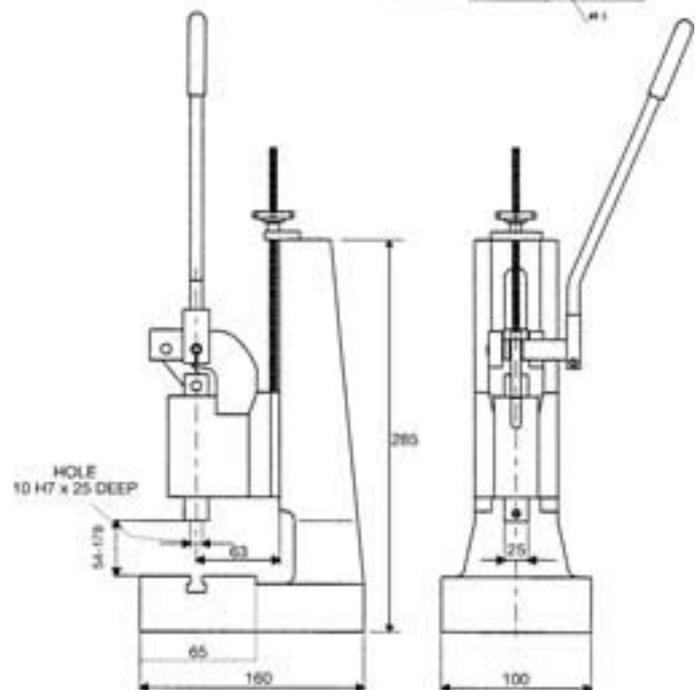
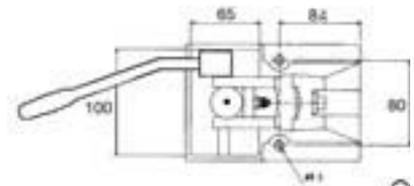
Type:
Bench mounted toggle press

Nominal holding force:
500 daN

Weight:
10 kg

Quality Features:

- hardened, ground ram.
- long-design, honed ram.
- ground table, with T-slot.
- adjustable working head height.



TOGGLE HAND PRESSES

TOGGLE HAND PRESSES

MODEL TPR 2



DATA

With 15 daN handle force the output force is:

daN	mm
Fully retracted	76
5 mm extended	74
10 mm "	65
15 mm "	65
20 mm "	72
25 mm "	80
30 mm "	98
35 mm "	125
38 mm "	200
39 mm "	255
Fully extended	750

Optional Extras: please mention when ordering

Table Bore 12 ^{H7} mm	TB
Locking Device	VS
Stroke Counter	Z

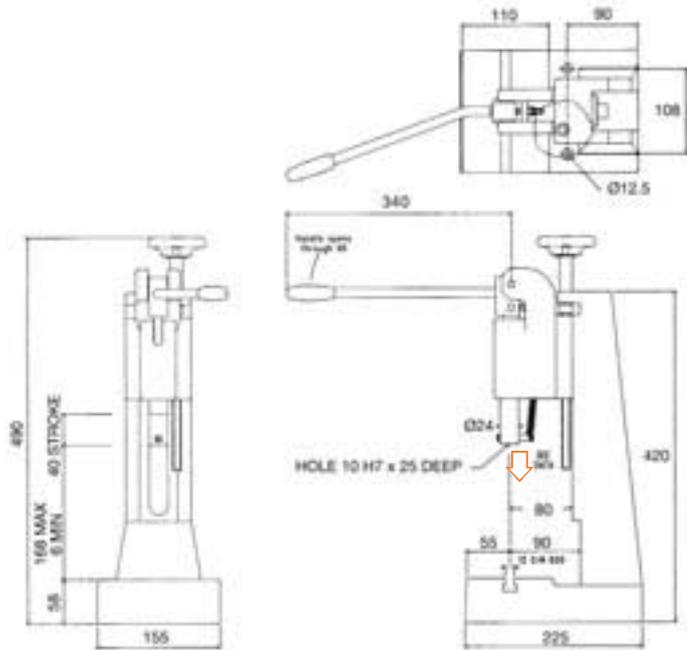
Type:
Bench mounted toggle press

Nominal holding force:
750 daN

Weight:
19 kg

Quality Features:

- hardened, ground ram.
- long-design, honed ram.
- ground table, with T-slot.
- adjustable working head height.



TOGGLE HAND PRESSES

MODEL TPR 3



DATA

With 20 daN handle force the output force is:

daN	mm
Fully retracted	145
5 mm extended	135
10 mm "	130
15 mm "	130
20 mm "	130
25 mm "	140
30 mm "	160
35 mm "	230
38 mm "	325
39 mm "	440
Fully extended	1400

Optional Extras: please mention when ordering

Table Bore 12 ^{H7} mm	TB
Stroke Counter	Z

Type:
Bench mounted toggle press

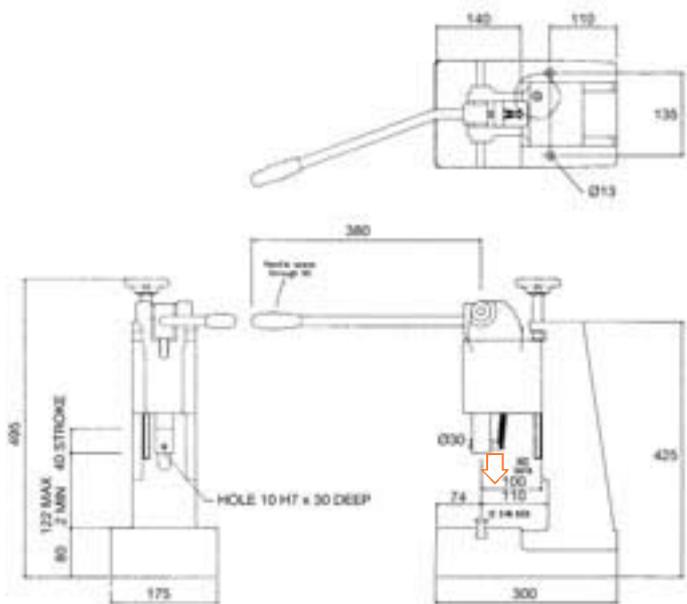
Nominal holding force:
1400 daN

Weight:
39 kg

Quality Features:

- hardened, ground ram.
- long-design, honed ram.
- ground table, with T-slot.
- adjustable working head height.

The **extra powerful** hand toggle presses in the TPR 3 series are especially suited to the often changing demands found in tool making and general workshops. Their high capacity up to 15 kN allow for flexible use in various applications.



TOGGLE HAND PRESSES

TOGGLE HAND PRESSES

MODEL RPP 1

DATA

With 18 daN handle force the output force is 150 daN

Capacity	kN	1,5
	kgf	150
Working Stroke	mm	40
Clearance	mm	63
Daylight	mm	54-178
Table Size	mm	100x65
T-Slot width to		
DIN 650	mm	10
Ram Bore Øx		
depth	mm	10 ^{H7} x25
Ram Ø	mm	20
Space required	mm	110x160
Weight	kg	8,5

Optional Extras: please mention when ordering

Table Bore 12 ^{H7}	mm	TB
Micrometer Screw		
Gauge		MICRO
Stroke Counter		Z

Type:

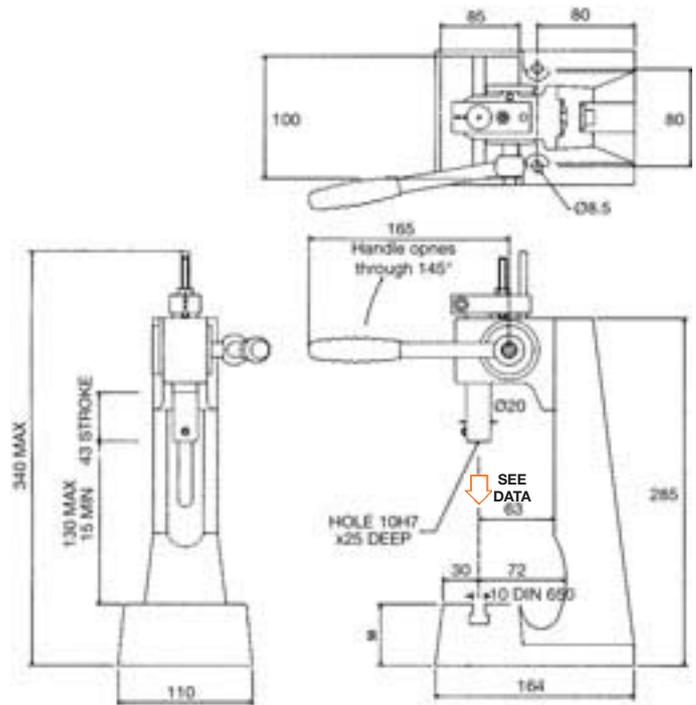
Bench mounted rack and pinion press

Quality Features:

- anti-twist ram.
- stroke adjustment by means of adjustment screw, or micrometer screw.
- hand lever adjustable through 360°.
- long, honed ram guide.
- ground table, with T-slot.



All Brauer rack and pinion presses apply their pressing force constantly throughout the entire working stroke. The direct transmission of force through the lever allows the operator to sense the load being applied. The optional micrometer stop for stroke adjustment allows high precision work.



TOGGLE HAND PRESSES

MODEL RPP 2

DATA

With 20 daN handle force the output force is 150 daN

Capacity	kN	2,5
	kgf	250
Working Stroke	mm	50
Clearance	mm	80
Daylight	mm	46-242
Table Size	mm	155x115
T-Slot width to		
DIN 650	mm	12
Ram Bore Ø		
depth	mm	10 ^{H7} x25
Ram Ø	mm	20
Space required	mm	155x220
Weight	kg	21

Optional Extras: please mention when ordering

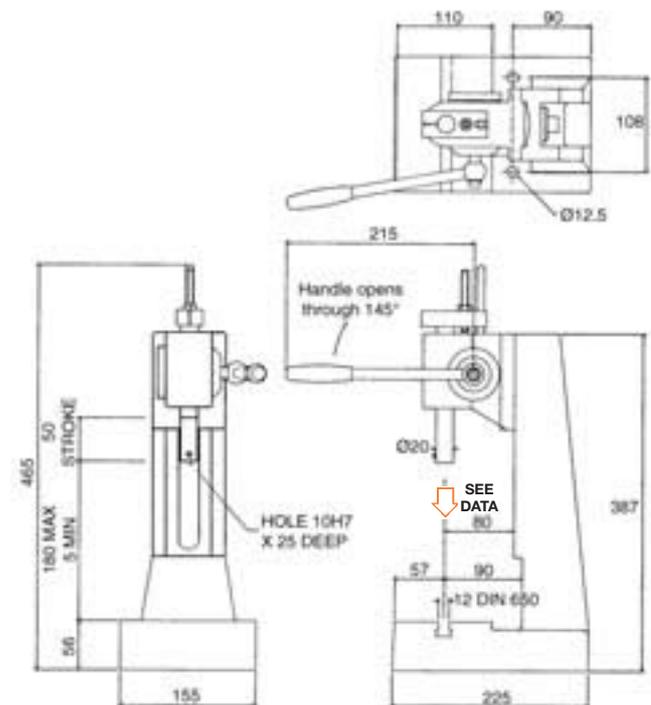
Table Bore 12 ^{H7}	mm	TB
Micrometer Screw		
Gauge		MICRO
Stroke Counter		Z

Type:

Bench mounted rack and pinion press

Quality Features:

- anti-twist ram.
- stroke adjustment by means of adjustment screw, or micrometer screw.
- hand lever adjustable through 360°.
- long, honed ram guide.
- ground table, with T-slot.



TOGGLE HAND PRESSES

PNEUMATIC TOGGLE PRESS

MODEL P600XPR

DATA

With 6 bar air supply pressure the output force is:

	daN
Fully retracted	20
5 mm extended	32
10 mm "	43
15 mm "	65
20 mm "	87
22 mm "	100
24 mm "	150
Fully extended	253

Type:
Bench mounted pneumatic toggle press.

Nominal holding force:
600 daN.

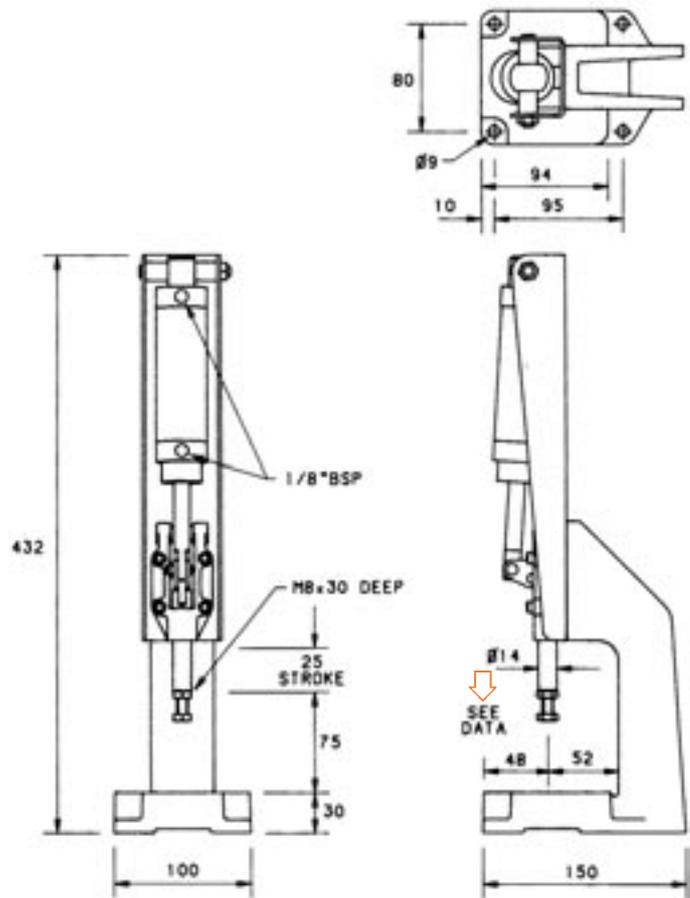
Operating pressure range:
2-6 bar (30-88p.s.i.g.)

Max. cycles/min. @ 6 bar:
60

Swept volume per cycle:
0.09 L³ (5.49 cu. in)

For stroke sensing order SK/3 Sensing Kit

Weight:
5.25 kg.



PNEUMATIC TOGGLE PRESS

MODEL P1200XPR

DATA

With 6 bar air supply pressure the output force is:

	daN
Fully retracted	110
5 mm extended	120
10 mm "	140
15 mm "	165
20 mm "	195
25 mm "	230
27 mm "	255
29 mm "	300
31 mm "	430
Fully extended	1150

Type:
Bench mounted pneumatic toggle press.

Nominal holding force:
1200 daN.

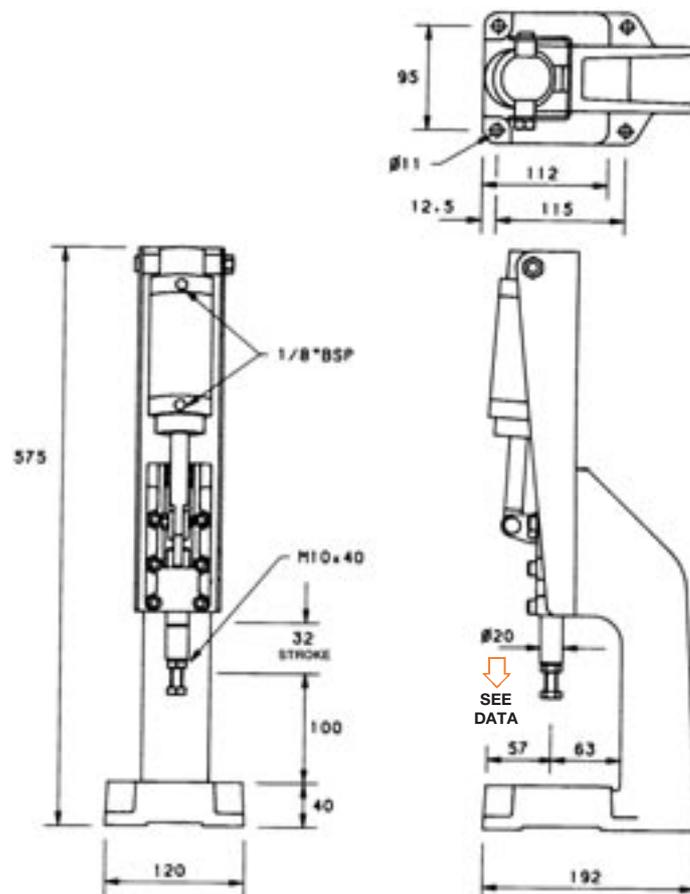
Operating pressure range:
2-6 bar (30-88p.s.i.g.)

Max. cycles/min. @ 6 bar:
50

Swept volume per cycle:
0.28 L³ (16.80 cu. in)

For stroke sensing order SK/4 Sensing Kit

Weight:
9.85 kg.



CLAMPING PRODUCTS

PNEUMATIC PRESSES

PNEUMATIC TOGGLE PRESS

MODEL P2500XPR

DATA

With 6 bar air supply pressure the output force is:

	daN
Fully retracted	130
5 mm extended	140
10 mm "	160
15 mm "	175
20 mm "	200
25 mm "	210
30 mm "	245
35 mm "	265
40 mm "	325
45 mm "	420
47 mm "	490
49 mm "	700
Fully extended	1450

Type:
Bench mounted pneumatic toggle press.

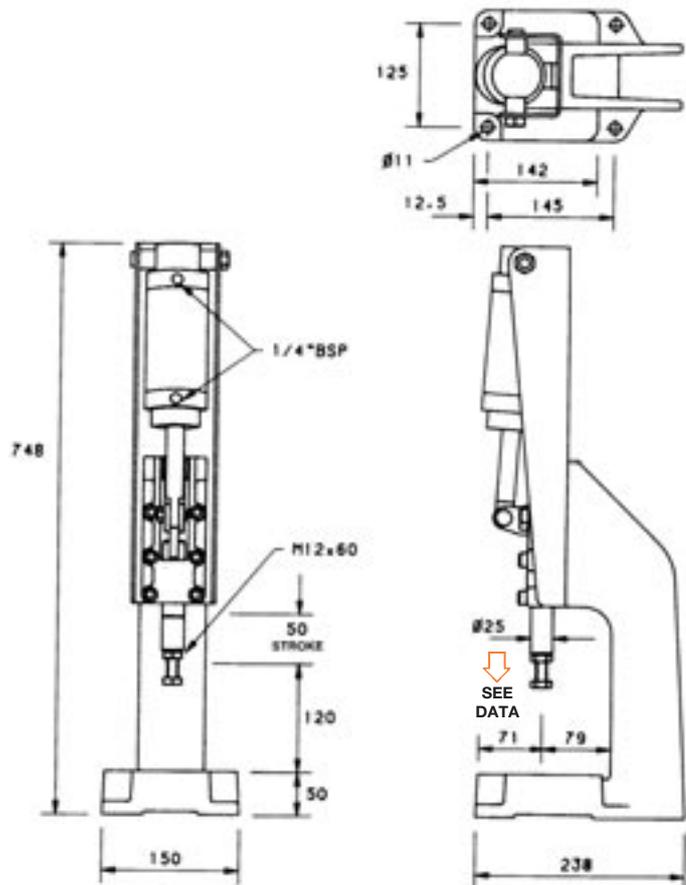
Nominal holding force:
2500 daN.

Operating pressure range:
2-6 bar (30-88p.s.i.g.)

Max. cycles/min. @ 6 bar:
45

Swept volume per cycle:
0.6 L³ (36.6 cu. in)
For stroke sensing order SK/5 Sensing Kit

Weight:
19.05 kg.



BRAUER[®]

THE COMPLETE RANGE OF MACHINE ACCESSORIES FROM ONE SUPPLIER

HIGH GLOSS CHROME HANDLE



MATERIALS:
Steel.
SURFACE FINISH:
Finely ground and high-gloss chromium plated.

OVAL BOW HANDLES



MATERIALS:
AlMgSi 0.5.
SURFACE FINISH:
Black laminated or natural anodized.

BRIDGE AND STIRRUP HANDLE



MATERIALS:
Sleeve in steel 5.8.chromed yellow.
SURFACE FINISH:
Thermoplastic, anthracite grey.

BIGHAND



MATERIALS:
Corner parts in reinforced thermo-plastic, oval tube in aluminium.
SURFACE FINISH:
Corner parts in anthracite grey, oval tube coated in anthracite grey.

SERIES RA & AE HANDLE



MATERIALS:
Profile aluminium AlMgSi 0.5.
SURFACE FINISH:
Vibratory ground and powder-coated in RAL 9002 grey white.
(Other colours available by request)

ALUMINIUM HANDLE



MATERIALS:
Aluminium section AlMgSi 0.5.
SURFACE FINISH:
Anodised in a special quality, glass ball blasted, satin finish in two standard colours.

SPRING PLUNGERS



MATERIALS:
Thermoplastic or Stainless steel.
SURFACE FINISH:
Anodised in a special quality, glass ball blasted, satin finish in two standard colours.

THREADED INSERTS



MATERIALS:
Hardened or Stainless steel.
SURFACE FINISH:
Phosphated.

CLAMPING JOINT LEVERS



MATERIALS:
High Strength aluminium, natural anodized.
Steel parts, quality class 5.8
SURFACE FINISH:
Clamp lever handle of glass-fibre reinforced thermoplastic, anthracite.

CLAMP LEVERS STANDARD PLASTIC



MATERIALS:
Handle, diecast zinc to DIN1743. Steel parts, quality class 5.8.*
SURFACE FINISH:
Handle plastic-coated, steel parts black oxide finish. *Other colours available by request*

CLAMP LEVERS COLOURED



MATERIALS:
Handle of glass-fibre reinforced plastic. Steel parts quality class 5.8.
SURFACE FINISH:
Handle anthracite, steel parts yellow chromeplated.
Any colour available.

CLAMP LEVERS ALLOY



MATERIALS:
Handle, diecast zinc to DIN 1743. Steel parts, quality class 5.8.
SURFACE FINISH:
Handle plastic-coated, steel parts black oxide finish.

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FIXED GAP AIRMOVERS

AM10



MATERIALS: Zinc alloy
WEIGHT: 0.100Kg
STANDARD GAP: 0.05mm

AM20



MATERIALS: Zinc alloy
WEIGHT: 0.250Kg
STANDARD GAP: 0.05mm

AM35



MATERIALS: Zinc alloy and aluminium
WEIGHT: 0.19Kg
STANDARD GAP: 0.05mm

AM40



MATERIALS: Zinc alloy
WEIGHT: 0.900Kg
STANDARD GAP: 0.05mm

AM75



MATERIALS: Zinc alloy
WEIGHT: 2.7Kg
STANDARD GAP: 0.05mm

TRIGGER ACTION AND REVERSIBLE AIR GUNS

AG32



MATERIALS: Aluminium alloy
WEIGHT: 0.54Kg
STANDARD GAP: Adjustable

CG22



MATERIALS: Nylon
WEIGHT: 0.15Kg
STANDARD GAP: Adjustable

CG22DH



MATERIALS: Nylon
WEIGHT: 0.20Kg
STANDARD GAP: Adjustable

SE150



MATERIALS: Aluminium/Zinc plated steel
WEIGHT: 0.3Kg
STANDARD GAP: 0.05-0.10mm

SE900



MATERIALS: Aluminium/Zinc plated steel
WEIGHT: 2.0Kg
STANDARD GAP: 0.05-0.10mm

ADJUSTABLE AIRMOVERS

AM10A



MATERIALS: Aluminium alloy
WEIGHT: 0.09Kg
STANDARD GAP: Adjustable

AM20A



MATERIALS: Aluminium alloy
WEIGHT: 0.13Kg
STANDARD GAP: Adjustable

AM35A



MATERIALS: Aluminium alloy
WEIGHT: 0.28Kg
STANDARD GAP: Adjustable

AM60A



MATERIALS: Aluminium alloy
WEIGHT: 0.83Kg
STANDARD GAP: Adjustable

AM75A



MATERIALS: Aluminium alloy
WEIGHT: 1.5Kg
STANDARD GAP: Adjustable

STAINLESS STEEL ADJUSTABLE AIRMOVERS

SS10A



MATERIALS: Stainless Steel
WEIGHT: 0.27Kg
STANDARD GAP: Adjustable

SS20A



MATERIALS: Stainless Steel
WEIGHT: 0.39Kg
STANDARD GAP: Adjustable

SS40A



MATERIALS: Stainless Steel
WEIGHT: 0.84Kg
STANDARD GAP: Adjustable

4100



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3600



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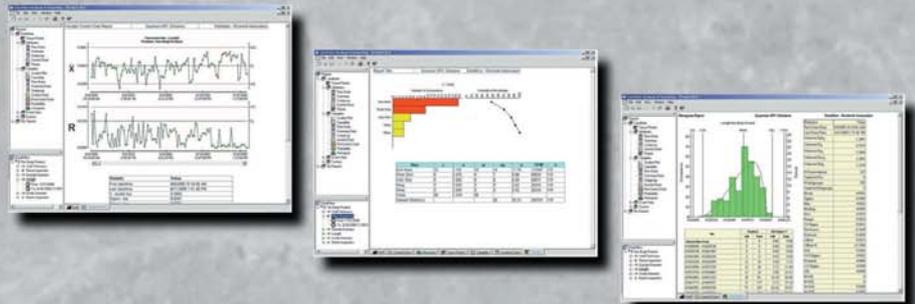
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