

Product group - straight line action clamps

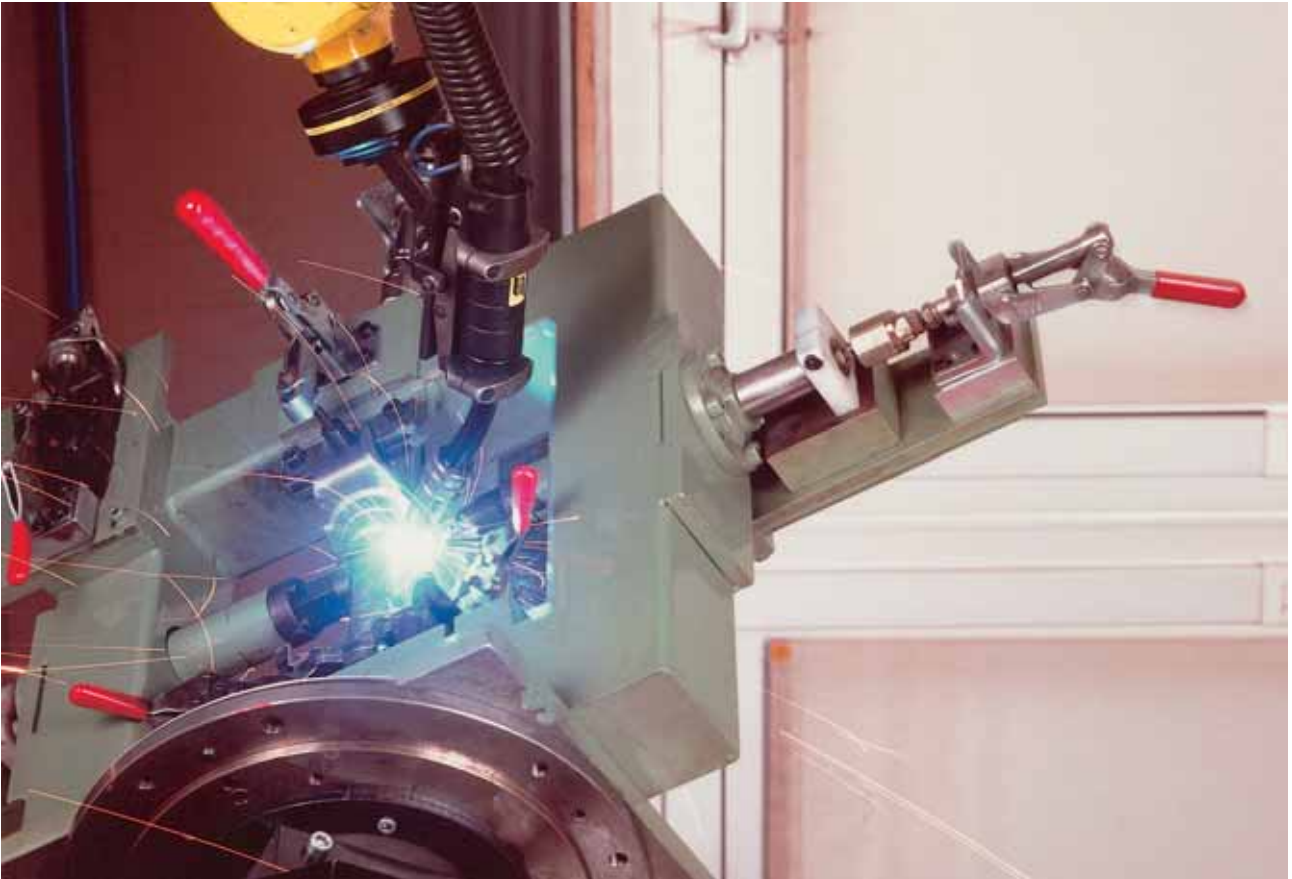
Application areas

Clamping during soldering, gluing, locking, assembling, drilling, testing, positioning and much more. The straight line action clamp range are distinguished by their compact design, locking in both the extended and retracted positions they will withstand relatively high stresses.

The essential product features

- The handle is easy to operate and moves the plunger of the clamp in an out along its axis
- Almost all of the range locks in the extended and retracted positions
- Installation by either baseplate or through drilled holes

Model 604-MM in a robot-type welding fixture



Holding force	↔ [N]	Length [mm]	Height [mm]	Model no.	Category	Page
400		66,5	34	601-M	Standard	4.3
600		66,8	21,7	6001-M	NEW! Standard	4.4
900		62	69	602-MM	Screw-in	4.12
1.300		110	95	604-MM	Screw-in	4.12
1.300		139	84,5	605-M	Standard	4.7
1.600		75	40,5	6015-M	NEW! Standard	4.5
1.600		75	40,5	6015-MR	NEW! Standard	4.6
2.500		105	59	95030	NEW! Standard	4.11
2.600		142,5	105,5	6004-MM	Screw-in	4.13
2.700		119	87	603-M	Standard	4.7
2.700		119	87	603-MR	NEW! Standard	4.8
2.700		170,5	110	610-M	Standard	4.7
3.000		169,5	130	624-MM	Screw-in	4.12
3.600		153,5	84,5	607-M	Standard	4.9
4.900		150	76,5	95040	NEW! Standard	4.11
5.000		145,5	147,5	614-M	Screw-in	4.15
6.700		267,5	207,5	670-1MBPLS	Precision	4.17
6.700		195,5	207,5	675-1MBPLS	Precision	4.18
7.400		191	90	95050	NEW! Standard	4.11
11.000		181	74	630-M	Standard	4.9
11.000		181	78	630-MR	Standard	4.10
15.600		217,5	164	685-L	NEW! Square pushrod	4.16
15.600		160	164	685-S	NEW! Square pushrod	4.16
17.600		209	104	95060	NEW! Standard	4.11
24.500		164	–	FRF-12	NEW! RAM LOCK	4.19
24.500		164	–	FRL-12	NEW! RAM LOCK	4.19
30.000		322	111	640-M	Standard	4.9
45.000		283,5	124	650-M	Standard	4.10
49.000		235	–	FRF-16	NEU! RAM LOCK	4.19
49.000		235	–	FRL-16	NEU! RAM LOCK	4.19
75.700		290	–	FRF-20	NEU! RAM LOCK	4.19
75.700		290	–	FRL-20	NEU! RAM LOCK	4.19

Standard straight line action clamps

NEW

Application areas

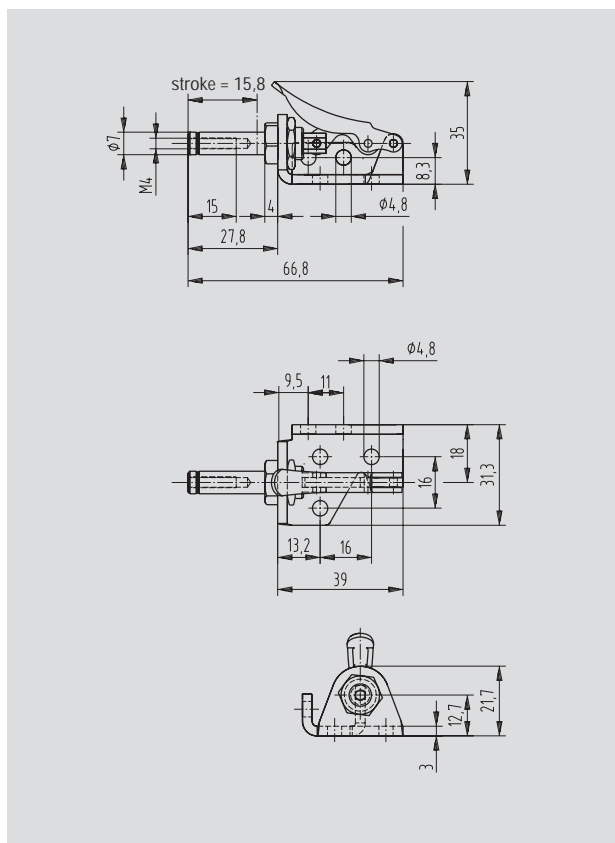
Model 6001-M is a heavier duty version of Model 601 and has 50% greater holding capacity. It is manufactured from heavy gauge material and has a more flexible mounting base to enable side-mounting the clamp.

Product features

- Plunger with internal thread
- Rivets made of stainless steel
- Zinc plated and passivated
- Oil-resistant, ergonomically shaped DE-STA-CO plastic handle

Model 6001-M

Model no.	↔ [N]	Stroke [mm]	⚖️ [kg]	🔧 recommendation
6001-M	600	15,8	0.054	205208-M
Additional adjustment spindles are listed from page 10.1 onwards				
Versions in stainless steel on page 8.8				



Application areas

In all sectors in which work is performed with holding forces of up to 2.700 N. For example, gluing, soldering, assembling, drilling, testing, positioning and other processing operations.

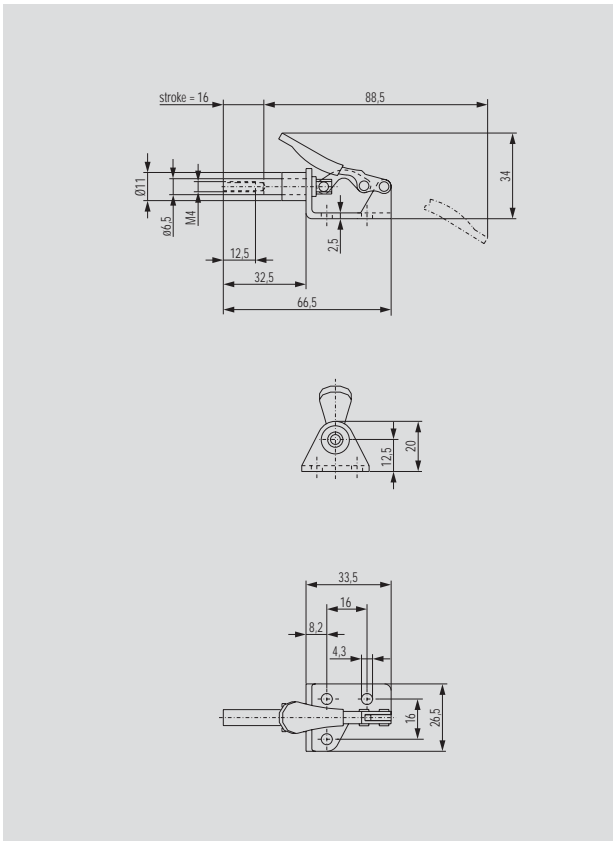
Product features

- Base attachment
- Push rod with internal thread
- Rivets made of stainless steel
- Galvanised and passivated
- Oil-resistant, ergonomically shaped DE-STA-CO plastic handle

Accessories

- Straight line action clamps are delivered without adjustment spindles. Recommendations are provided.
- Whenever required, the spindle can be purchased as an accessory part

Model 601-M



Model no.	↔ [N]	Stroke [mm]	⚖ [kg]	🔧 recommendation
601-M	400	16	0,04	205208-M
Additional adjustment spindles are listed from page 10.1 onwards				
Versions in stainless steel on page 8.7				



Standard straight line action clamps

NEW




Application areas

Model 6015-M is the smallest of the straight-line, machined-cast base clamps. Its compact size allows it to be used in confined areas and on small fixtures. The plunger is threaded to accept any M6 clamping spindle. Handles are red vinyl dipped for greater operator comfort.

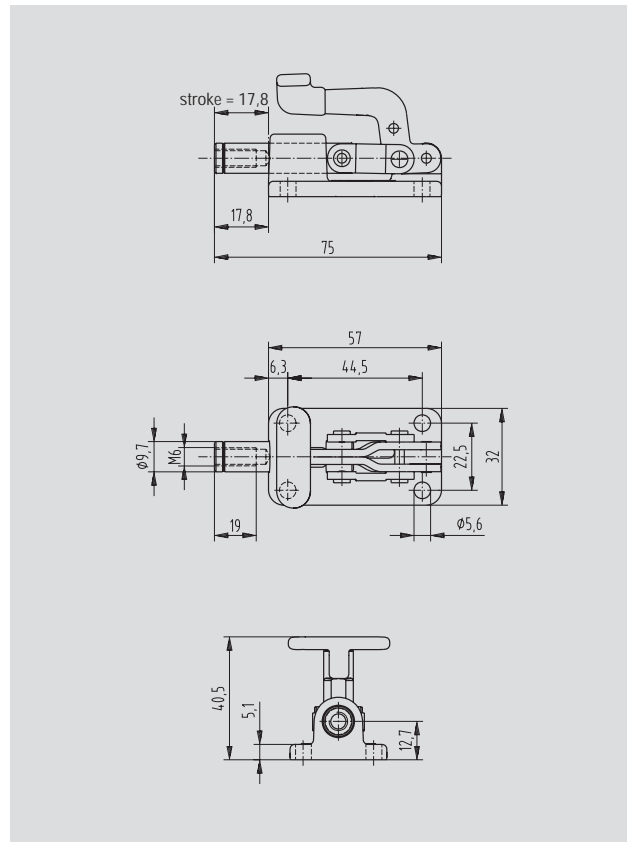
Product features

- Plunger with internal thread
- Rivets made of stainless steel
- Clamp base cast steel, burnished
- Other parts zinc plated and passivated

Model 6015-M

Model no.	 [N]	Stroke [mm]	 [kg]	 recommendation
6015-M	1.600	17,8	0,15	205203-M

Additional adjustment spindles are listed from page 10.1 onwards



NEW

Standard straight line action clamps

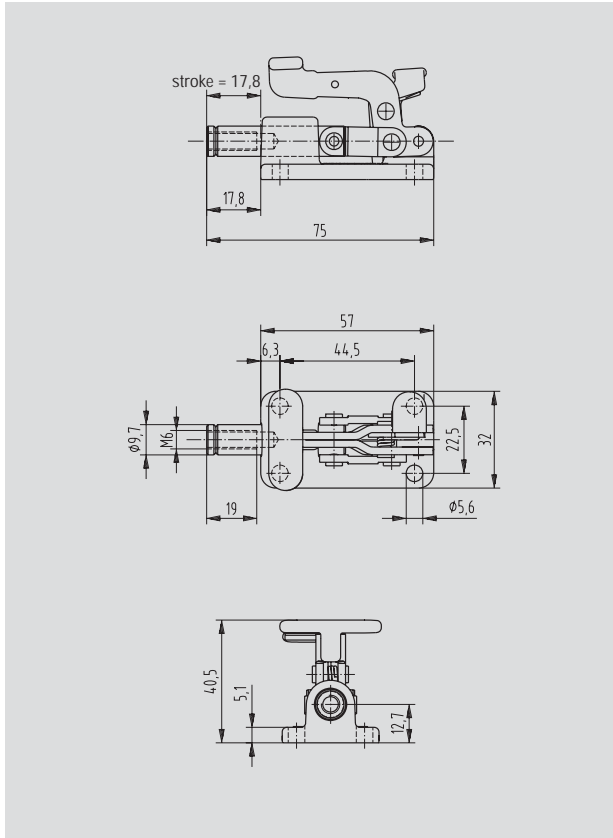
Application areas

Model 6015-M-R is another new addition to our line of Toggle-Lock Plus clamps. Its compact size allows use in confined areas and on small fixtures where safety is a concern.

Product features

- Plunger with internal thread
- Rivets made of stainless steel
- Clamp base cast steel, burnished
- Other parts zinc plated and passivated

Model 6015-MR






Model no.	↔ [N]	Stroke [mm]	⚖ [kg]	🔧 recommendation
6015-MR	1.600	17,8	0,15	205203-M

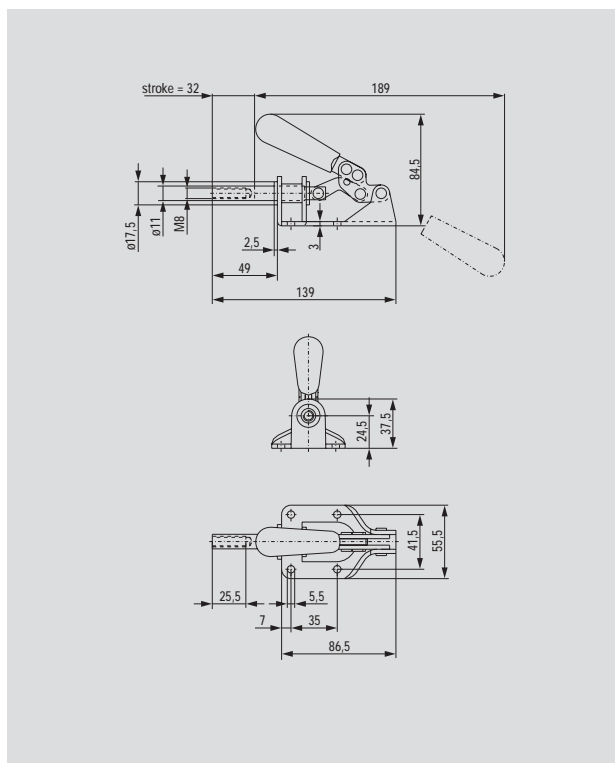
Additional adjustment spindles are listed from page 10.1 onwards






Model 605-M

Model no.	 [N]	Stroke [mm]	 [kg]	 recommendation
605-M	1.300	32	0,31	207203-M

Additional adjustment spindles are listed from page 10.1 onwards



Models 603-M, 610-M

Model no.	 [N]	Stroke [mm]	 [kg]	 recommendation
603-M	2.700	32	0,32	207203-M
610-M	2.700	41	0,68	210203-M

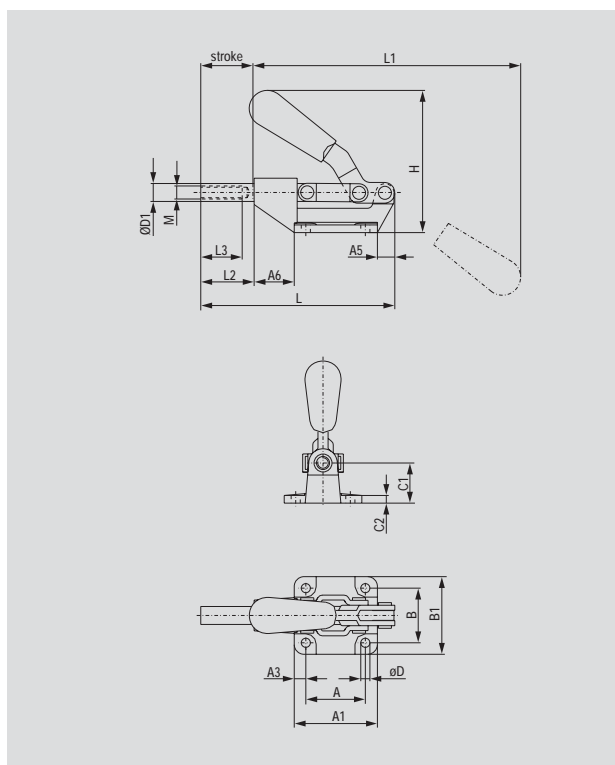
Additional adjustment spindles are listed from page 10.1 onwards



Model 603-M



Model 610-M



Model no.	A	A1	A3	A5	A6	B	B1	C1	C2	øD	øD1	L	L1	L2	L3	H	M				
603-M	36,6	51	7	11	24,5	33,2	47,5	24,5	4,5	6,7	12	119	164	32,5	25,5	87	M8				
610-M	41,5	57	8	-	49	41,5	57	43	6,5	8,5	16	170,5	260	49	32	110	M10				

NEW

Standard straight line action clamps

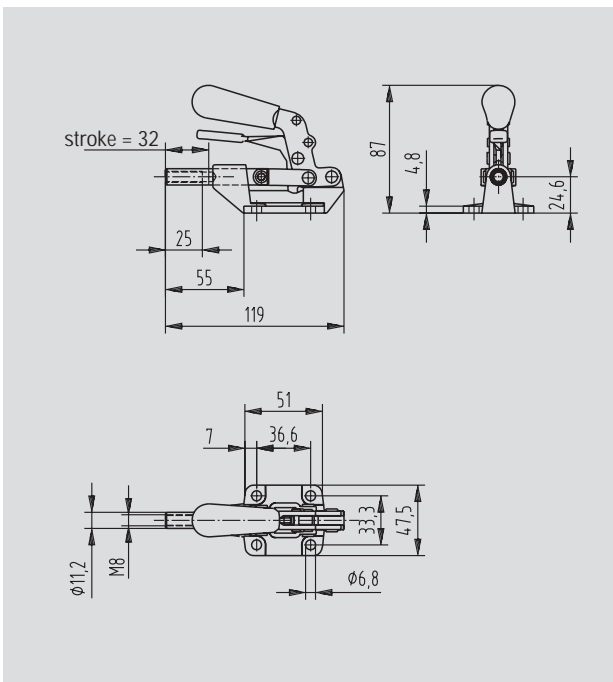
Application areas

Patented design locks the release lever into the forged steel base to prevent accidental opening. The 603-R is well adapted for use in confined areas because of its small package size and low height. The ergonomic handle is slanted forward to provide an adequate grip and yet enhance the low silhouette. Clamp locks in both the extended and retracted positions while the release lever secures the clamp in the extended position only.

Product features

- Plunger with internal thread
- Rivets made of stainless steel
- Clamp base cast steel, burnished
- Other parts zinc plated and passivated

Model 603-MR



Model no.	↔ [N]	Stroke [mm]	⚖ [kg]	🔧 recommendation
603-MR	2.700	32	0,38	207203-M

Adjustment spindles are listed from page 10.1 onwards



Standard straight line action clamps

Application areas

In all applications in which work is performed with holding forces of up to 30.000 N. For example, assembling, drilling, testing, positioning and other processing operations.




Product features

- Base attachment
- Push rod with internal thread
- Cast base, burnished
- Rivets made of stainless steel
- Galvanised and passivated
- Oil-resistant, ergonomically shaped DE-STA-CO plastic handle

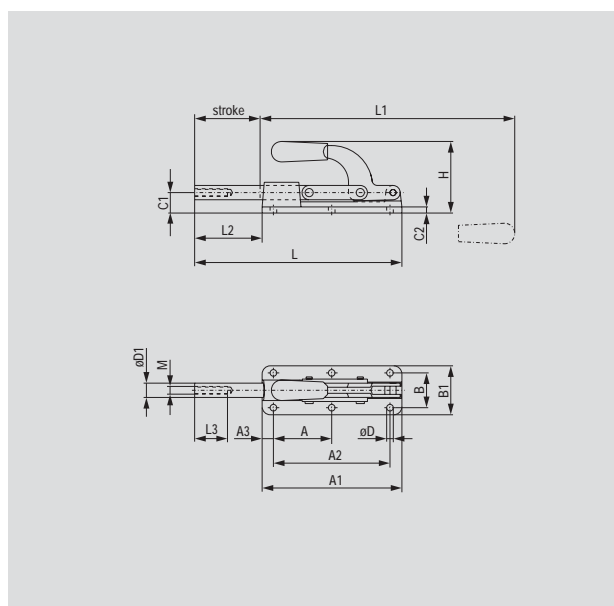
Accessories

- Straight line action clamps are delivered without adjustment spindles. Recommendations are provided.
- Whenever required, the spindle can be purchased as an accessory part

Models 607-M, 630-M, 640-M

Model no.	 [N]	Stroke [mm]	 [kg]	 recommendation
607-M	3.600	41	0,63	207203-M
630-M	11.000	51	0,9	210203-M
640-M	30.000	101,5	3,2	220203-M

Adjustment spindles are listed from page 10.1 onwards



Model no.	A	A1	A2	A3	B	B1	C1	C2	øD	øD1	L	L1	L2	L3	H	M				
607-M	35	108	76,5	16	41,5	56	17,5	4,5	7	13	153,5	217	45,5	25,5	90	M8				
630-M	35	128	76	12,5	41,2	57	20,6	5	8,5	16	181	270	53	32	74	M10				
640-M	90,5	217	181	17,5	54	76	31,8	9,5	10,5	22,3	322	395,5	105	51	111	M12				

Application areas

In all applications in which work is performed with holding forces of up to 45.000 N. For example, assembling, drilling, testing, positioning and other processing operations.

The stop latch on model 630-MR locks the clamp securely in place only in the extended position. This model is highly suitable for applications in which strong vibrations occur.

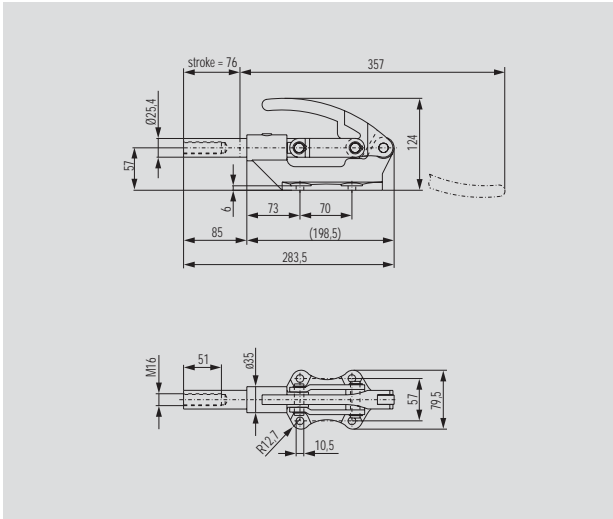
Product features

- Base attachment
- Push rod with internal thread
- Cast base, burnished
- Rivets made of stainless steel
- Galvanised and passivated
- Partially oil-resistant, ergonomically shaped DE-STA-CO plastic handle

Accessories

- Straight line action clamps are delivered without adjustment spindles. Recommendations are provided.
- Whenever required, the spindle can be purchased as an accessory part

Model 650-M

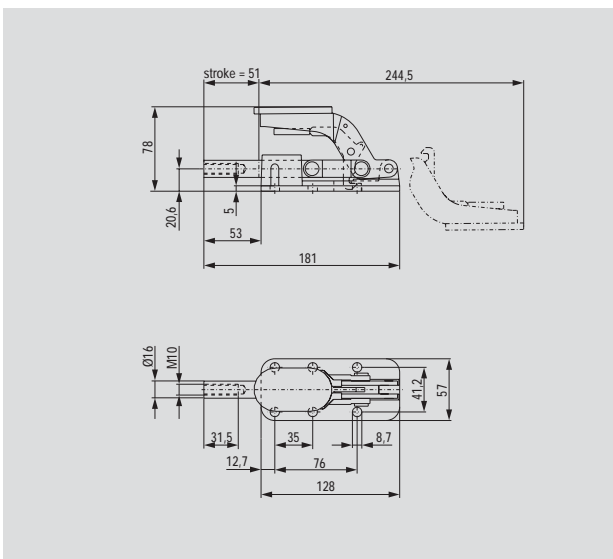


Model no.	↔ [N]	Stroke [mm]	⚖️ [kg]	🔧 recommendation
650-M	45.000	76	2,5	250203-M

Adjustment spindles are listed from page 10.1 onwards



Model 630-MR



Model no.	↔ [N]	Stroke [mm]	⚖️ [kg]	🔧 recommendation
630-MR	11.000	51	0,95	210203-M

Adjustment spindles are listed from page 10.1 onwards



Standard straight line action clamps, low profile version



Application areas

These new low-profile plunger clamps can be used where overhead clearance is a problem. The large holding capacities for these clamps are packaged in a small compact design. Equipped with an ergonomic handle grip for added operator comfort. Supplied with a metric plunger. Compact, low profile design allows for use in areas where overhead clearance is a problem. Handle is easily disassembled and reassembled in the reverse position allowing more flexibility.

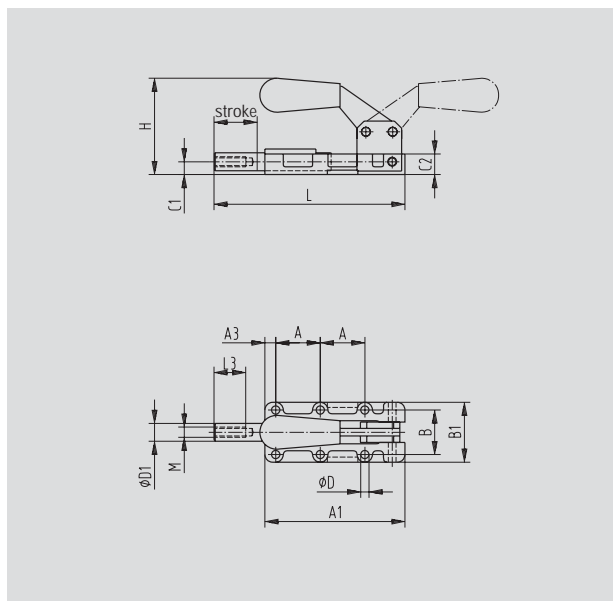
Product features

- Handle with dowel pin
- Clamp base cast steel, burnished
- Other parts zinc plated and passivated
- Oil-resistant, ergonomically shaped DE-STA-CO plastic handleff

Models 95030, 95040, 95050, 95060

Model no.	↔ [N]	Stroke [mm]	⚖️ [kg]	🔧 recommendation
95030	2.500	24,9	0,36	205203-M
95040	4.900	38,1	0,72	207203-M
95050	7.400	50	0,95	220203-M
95060	17.600	60	2,9	220203-M

Adjustment spindles are listed from page 10.1 onwards



Model no.	A	A1	A3	B	B1	C1	C2	øD	øD1	H	L	L3	M
95030	25	78	5	25	35	8	12	5,5	10	59	105	20	M6
95040	35	110	8,5	35	50	10	18	6,5	14	76,5	150	25	M8
95050	45	142	10	45	65	14	24	8,3	19	90	191	40	M12
95060	55	173	11	55	75	16	27,5	10,4	22	104	209	40	M12

Application areas

In all applications in which work is performed with holding forces of up to 3.000 N. For example, gluing, soldering, assembling, drilling, testing, positioning, also locking of containers and other processing operations.

This series is distinguished by its compact design. The single hole attachment permits rotation in any direction, allowing complete flexibility in the fixture.

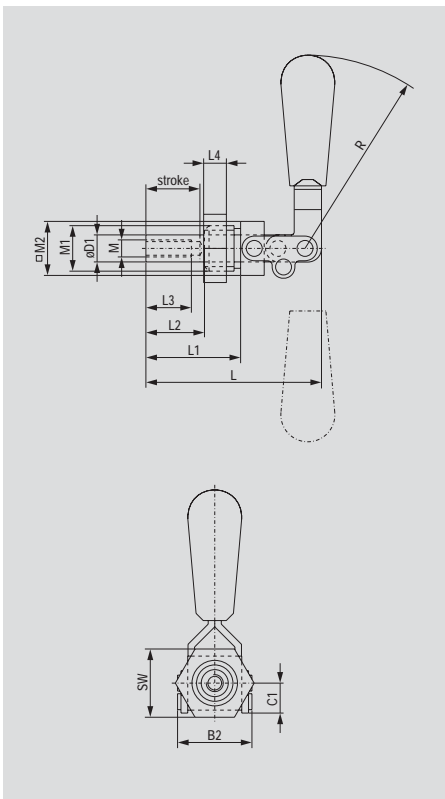
Product features

- Front-side external threads for direct installation in sheet-metal plates and fixtures
- Push rod with internal thread
- Rivets made of stainless steel
- Galvanised and passivated
- Oil-resistant, ergonomically shaped DE-STA-CO plastic handle

Accessories

- This series is delivered with a fastening nut as standard. Spindles can be ordered as an accessory part
- You will find the matching fastening angle piece in the table at the bottom of this page. Please specify the corresponding model number with your order

Models 602-MM, 604-MM, 624-MM



Model no.	↔ [N]	Stroke [mm]	⚖ [kg]	🔩 recommendation	Mounting base Accessories	Mounting nut standard equipment
602-MM	900	19	0,11	205203-M	602106-M	602105-M
604-MM	1.300	38	0,28	207203-M	604106-M	606104-M
624-MM	3.000	66	0,75	210203-M	624106-M	624105-M

Adjustment spindles are listed from page 10.1 onwards




Versions in stainless steel on page 8.9

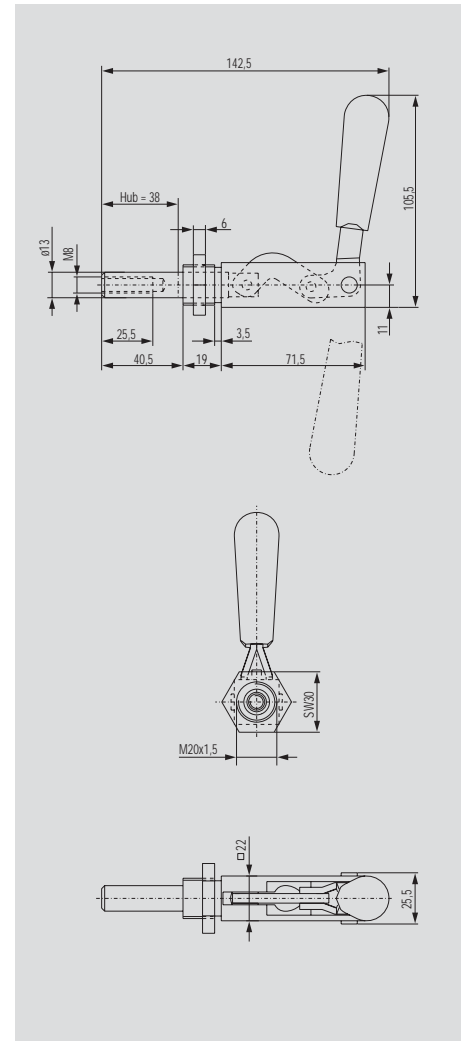
Dimensions of mounting base on page 4.14



Model no.	C1	øD1	L	L1	L2	L3	M	M1	□M2	R	SW							
602-MM	10,5	10	62	33,5	20,5	16	M6	M16x1,5	□M2	68	24							
604-MM	11	11	108	55,5	39,5	25,5	M8	M20x1,5	19	95,5	30							
624-MM	20	16	169,5	91,5	69,5	32	M10	M27x2	22	127	41							

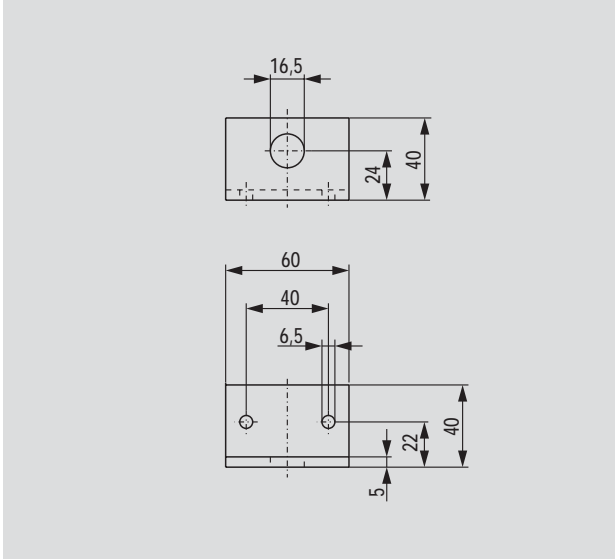
Model 6004-MM

Model no.	 [N]	Stroke [mm]	 [kg]	 recommendation	Mounting base Accessories	Mounting nut standard equipment
6004-MM	2.600	38	0,3	207203-M	604106-M	606104-M
Dimensions of mounting base on page 4.14						
Additional adjustment spindles are listed from page 10.1 onwards						

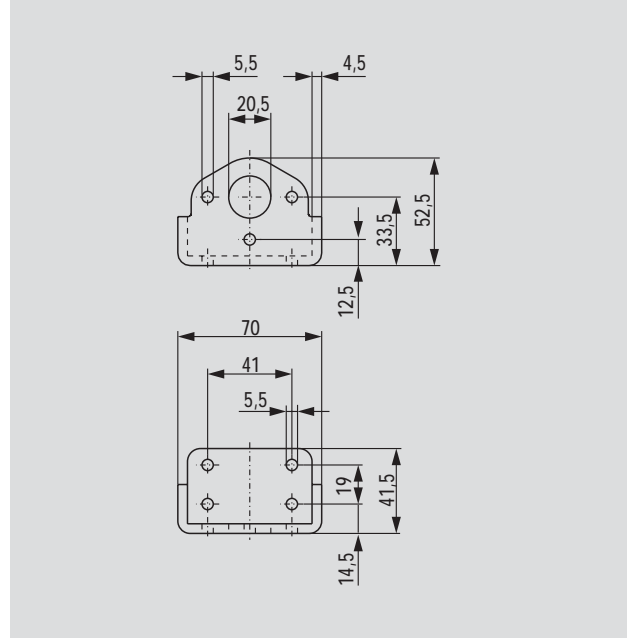


Mounting Base for models 602-MM, 604-MM, 624-MM, 6004-MM

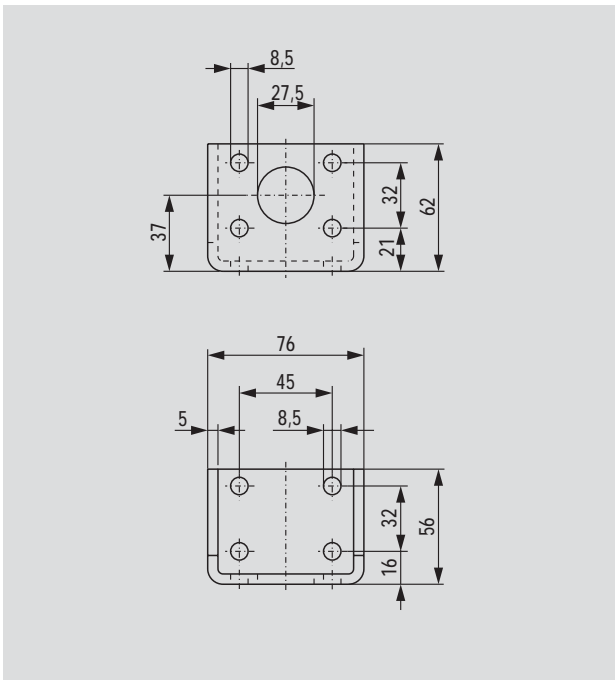
For model **602-MM**
Order no.: 602106-M



For model **604-MM, 6004-MM**
Order no.: 604106-M



For model **624-MM**
Order no.: 624106-M



Screw-in straight line action clamps for high precision

Application areas

In all applications in which highly precise clamping is required with holding forces of up to 5.000 N. For example assembling, drilling, testing, positioning, locking of containers and other processing operations.

This series is distinguished by its compact design. The single hole attachment permits rotation in any direction, allowing complete flexibility in the fixture.

Product features

- Precision model
- Hardened and polished push rod
- Front-side external threads for direct installation in sheet-metal plates and fixtures
- Push rod with internal thread
- Oil-resistant, ergonomically shaped DE-STA-CO plastic handle

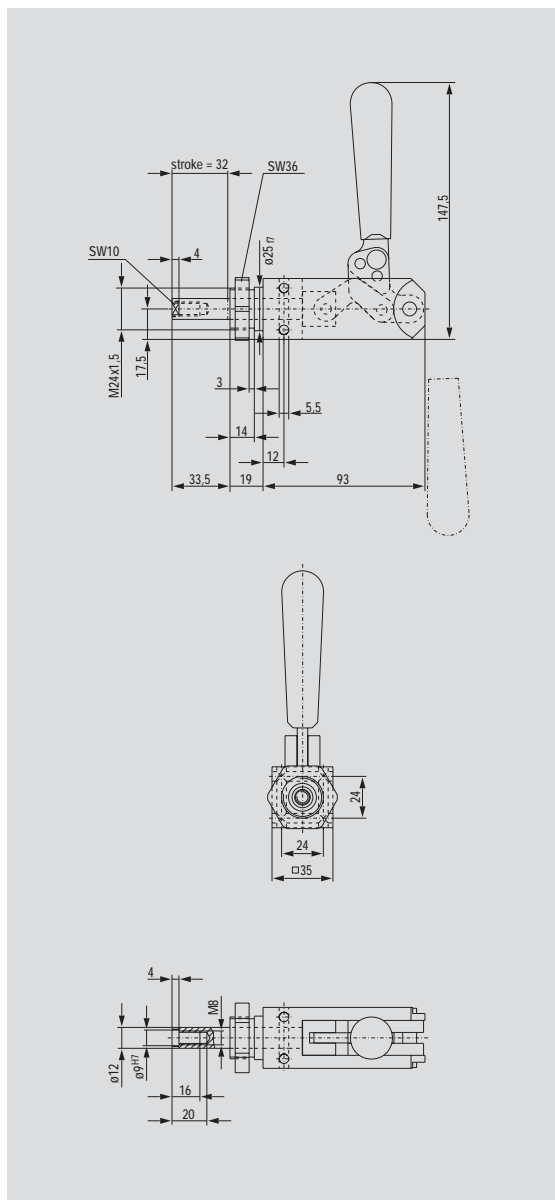
Accessories

- Straight line action clamps are delivered without adjustment spindles. Recommendations are provided.
- Whenever required, the spindle can be purchased as an accessory part

Model 614-M

Model no.	[N]	Stroke [mm]	[kg]	recommendation	Mounting nut standard equipment
614-M	5.600	32	0,82	207203-M	614-1-10

Adjustment spindles are listed from page 10.1 onwards



NEW

Straight line action clamps in heavy duty version

Application areas

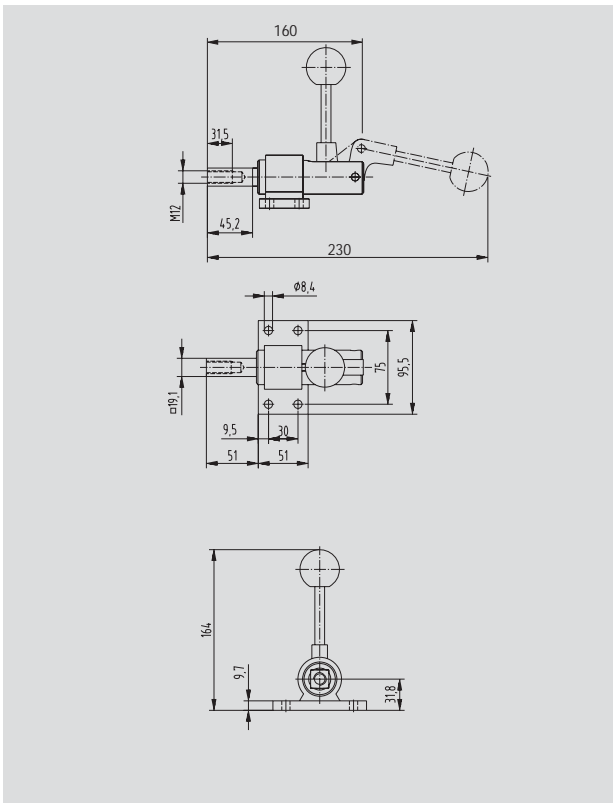
The newest offering in DE-STA-CO's heavy-duty plunger clamp line, Models 685-S and 685-L feature high strength steel. Model 685-S offers shorter plunger travel than Model 685-L.

Can be mounted in any desired position by using pre-drilled mounting holes or welding in place. Designed for mid-range applications. Base is supplied loose and may be welded at desired angle. The square plunger has a threaded hole at the end for spindles or fixture details. The plunger locks in the extended position only for Model 685-S, but locks in both the extended and retracted position for Model 685-L. Metric Plunger available with M12 internal thread.

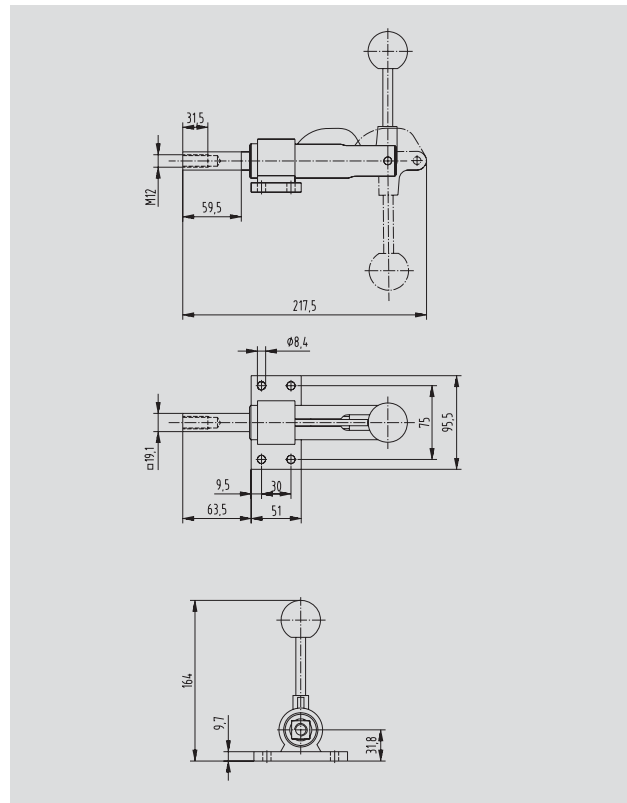
Product features

- Parts made of high strength steel
- Oil-resistant, ergonomically shaped actuator ball

Model 685-S, 685-L



Model 685-S



Model 685-L

Model no.	↔ [N]	Stroke [mm]	⚖ [kg]	
685-S	15.600	45	1,68	
685-L	15.600	59,5	1,68	
Mat. C22				



Straight line action clamps in heavy duty precision version

Application areas



In all areas in which clamping work is performed with holding forces of up to 6.700 N. The model 670-1MBPLS also works under tension. Due to its construction, this precision clamping model is extremely suitable for positioning.

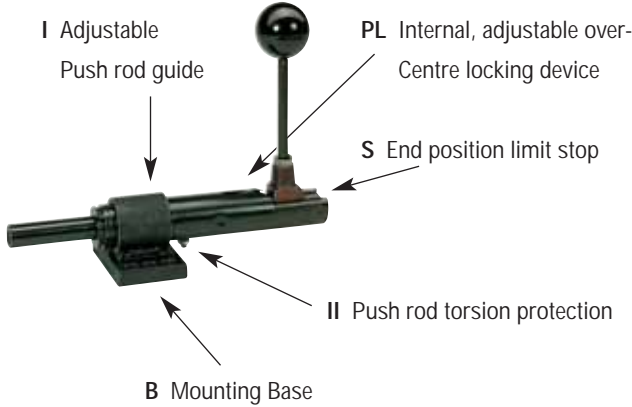
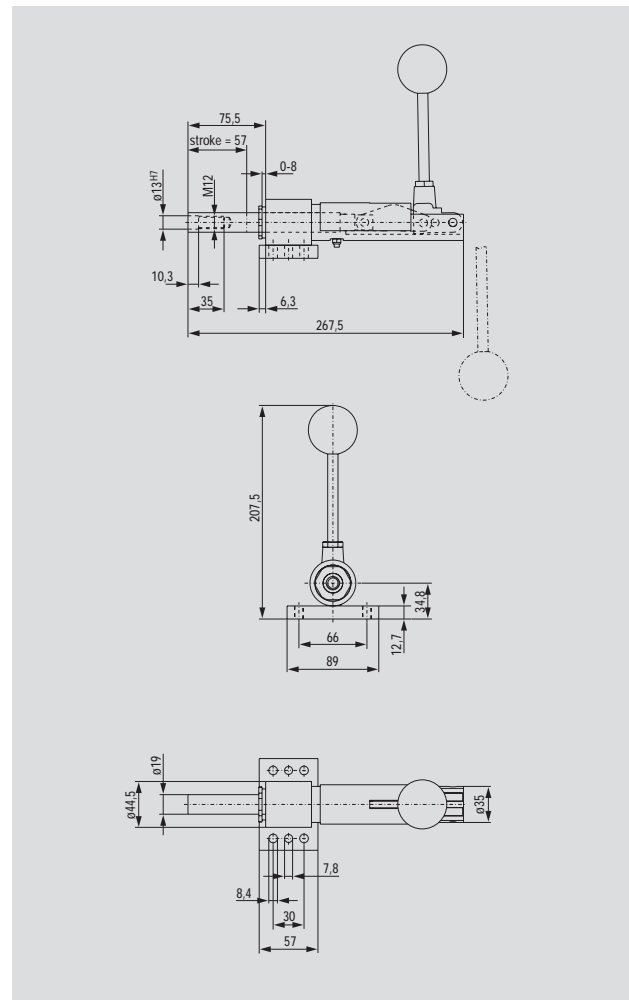
This series is distinguished by its compact design. The single hole attachment permits rotation in any desired direction, allowing complete flexibility in the fixture.

Product features

- Adjustable push rod guide prevents lateral play of the push rod
- Adjustable internal over-centre locking device
- High repeating accuracy
- Handle position according to your choice
- Push rod torsion-protected
- Oil-resistant, ergonomically shaped operating ball

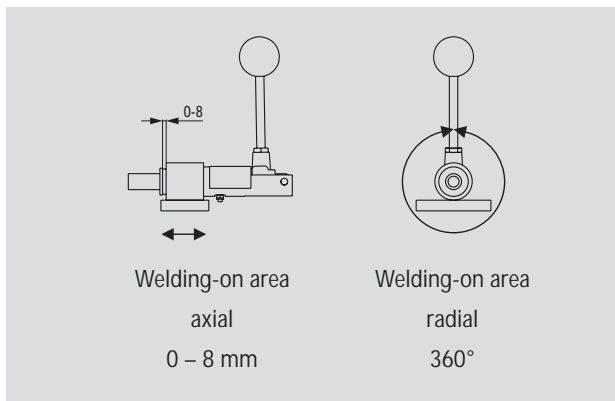
Model 670-1MBPLS

Model no.	 [N] Tension + Compression	Stroke [mm]	 [kg]
670-1MBPLS	6.700	57	1,9
Mat. C22			

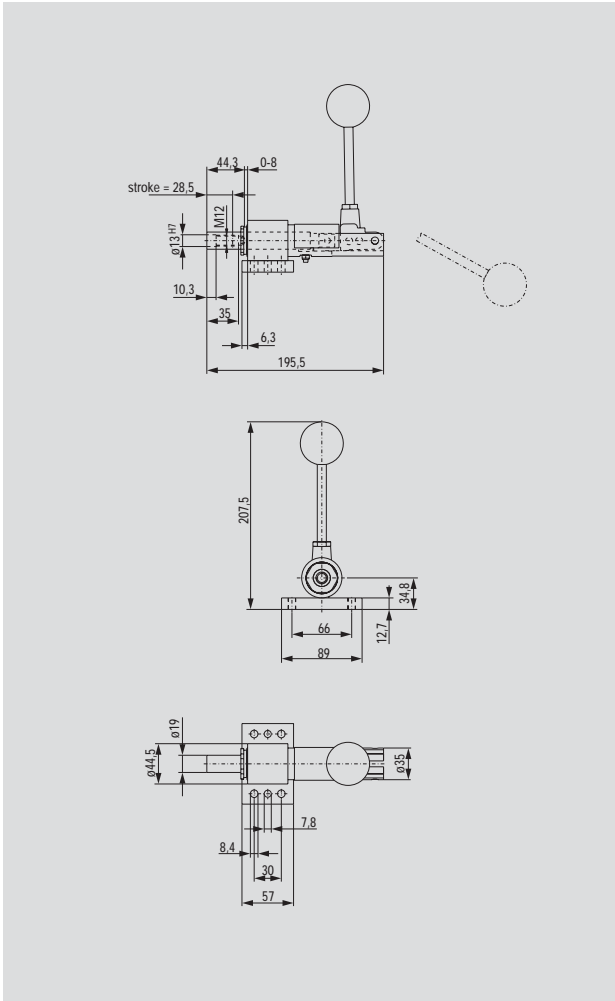


Straight line action clamp in clamping position “push”

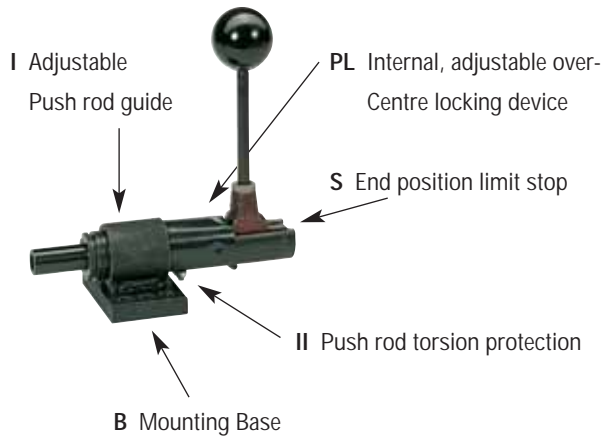
Note: Clamping position “pull” is also possible.



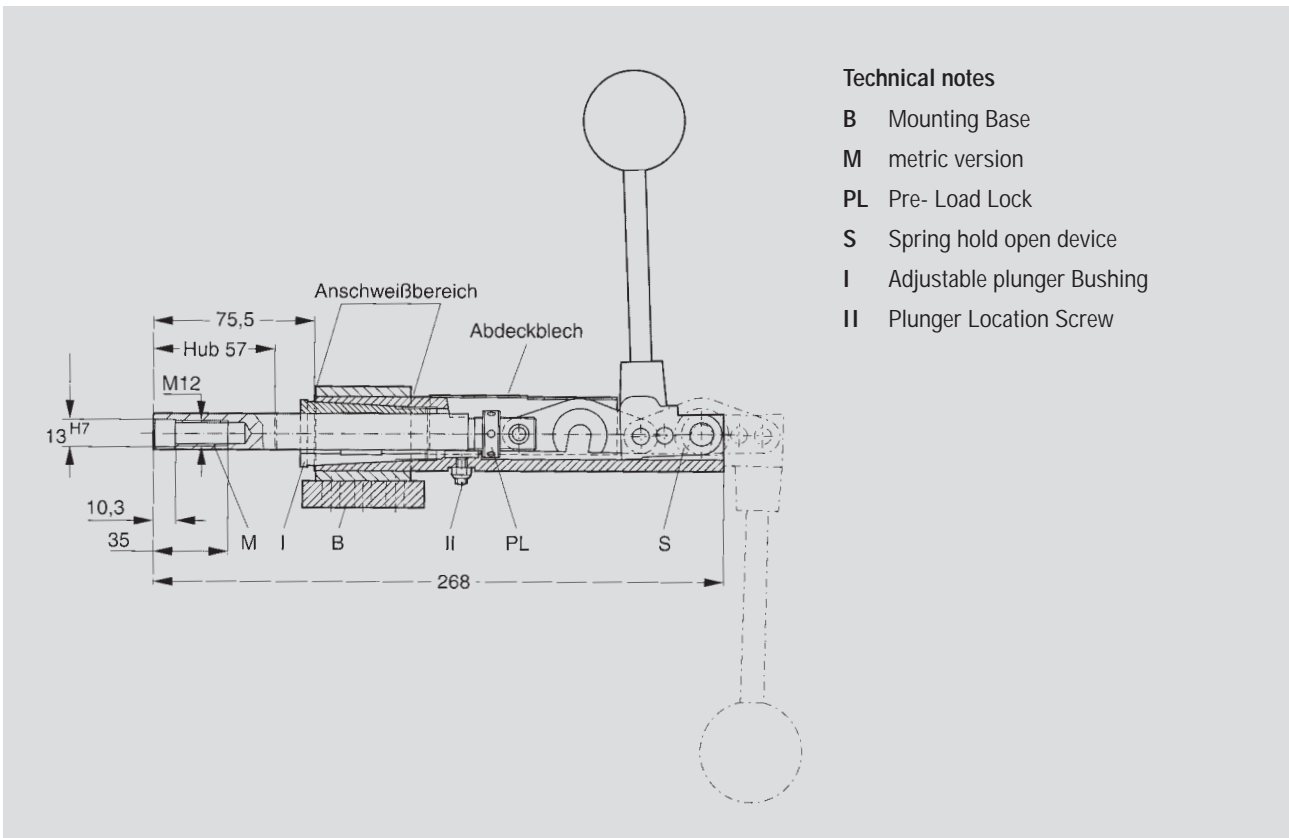
Before being welded together, the basic body is aligned in axial and radial direction with respect to the mounting base.



Model no.	 [N]	Stroke [mm]	 [kg]
675-1MBPLS	6.700	28,5	1,7
Mat. C22			



Straight line action clamp in clamping position "push"



Technical notes

- B Mounting Base
- M metric version
- PL Pre- Load Lock
- S Spring hold open device
- I Adjustable plunger Bushing
- II Plunger Location Screw

Straight line clamps, RAM LOCK system



Application areas

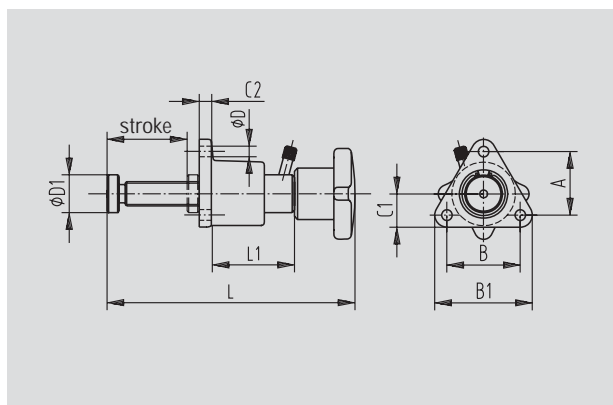
These new quick-acting Ram Lock clamps are ideal for bridging of different workpiece thicknesses and can be front or base mounted. Each version offers high holding forces and is available in three different maximum stroke lengths. The clamp's unique design allows "fine" clamping force adjustments once the locking lever is activated.

To operate:

1. Slide spindle bar forward to contact the workpiece.
2. Turn the locking lever clockwise to engage the locking mechanism.
3. Turn knob handle to "fine" adjust the clamping force.
4. After operation is finished, turn the locking lever counter-clockwise to disengage locking mechanism.

Models FRF-12, FRF-16, FRF-20, FRL-12, FRL-16, FRL-20

Model no.	Holding capacity [N]	Stroke [mm]	[kg]	Thread pitch
FRL-12	24.500	0-86	0,5	2
FRL-16	49.000	0-135	0,7	3
FRL-20	75.700	0-175	1,6	5
FRF-12	24.500	0-86	0,5	2
FRF-16	49.000	0-135	0,7	3
FRF-20	75.700	0-175	1,6	5



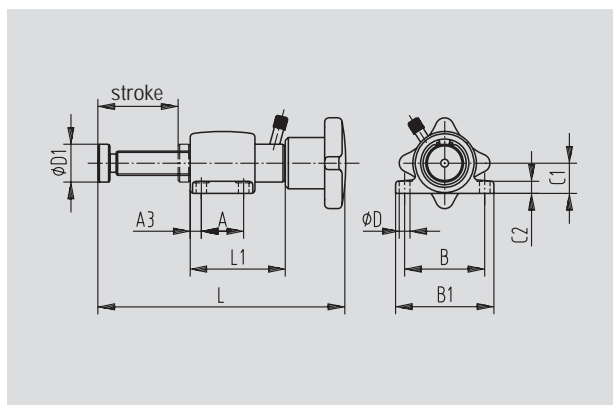
Series FRF



Series FRL



Series FRF



Series FRL

Model no.	A	A3	B	B1	C1	C2	øD	øD1	L	L1
FRL-12	20	6	45	55	16,5	5,6	5,5	19	161	34
FRL-16	28	5,9	53	58	20	8	7	25	238	51
FRL-20	32,5	9,0	68,8	85	26	10	8,5	32	273	62
FRF-12	33		38,1	50	17	5,6	5,5	19	161	34
FRF-16	42		50	64,5	22	8	7,1	25	238	51
FRF-20	49,5		57,5	76	26	9	8,3	32	273	62