

# STANDARD CLAMPING ELEMENTS



## WE GENERATE EXCITEMENT.

Since its founding by Andreas Maier in 1890, our company has lived through many exciting times. Today we are the leading manufacturer in Europe, supplying over 5,000 different products from the fields of clamping, hand tools and locks. With this extensive product range we can meet all of our customers' needs and requirements. But providing optimal quality means meeting the challenges at all levels: Expert consultation, modern team organisation, individual solutions (including special developments), flexibility in response to changing conditions, etc. And we ourselves find this so exciting that we look forward every day to shaping the market together with our employees and our customers – both now and in the future. That is something you can count on.



### THE AMF SERVICE GUARANTEE

> Assuredly on the way to the top

### COMPANY HISTORY

- 1890** Company founded as a lock manufacturer by Andreas Maier.
- 1920** Product range extended to include spanners.
- 1928** Production line assembly of „Fellbach locks“.
- 1951** AMF introduces clamping elements and diversifies into workpiece and tool clamping technology.
- 1965** Toggle clamps extend the AMF product range. AMF catalogues are now printed in ten languages.
- 1975** Further specialisation into hydraulic clamping technology.
- 1982** Clamping and fixture systems round off AMF's clamping expertise.
- 1996** AMF team organisation in all sectors of the business. Quality management with certification to ISO 9001.
- 2001** AMF Service Guarantee for all products.
- 2004** Introduction of the ZPS zero-point clamping system.
- 2007** The magnetic clamping technology extends the AMF product range.
- 2009** Development and marketing of AMF Vacuum clamping technology
- 2012** Marking and cleaning tools included in the AMF product range.

#### 5 Individual development

And if the product you need doesn't exist? Just ask us: We will find the best solution for you – whether it is a special version or a completely new development.

#### 4 Warranty

We stand by our high quality standards. We handle customer complaints very liberally and without red tape – whenever possible even after the end of the warranty period.

#### 3 Guaranteed quality standard

AMF stands for manufacturing in-house with the utmost care. A tradition we have upheld since 1890 – and naturally for many years now with a modern quality management system to ISO 9001.

#### 2 Short delivery times

AMF's finished goods inventory with over 5,000 items guarantees a delivery readiness of 98%. You can also count on each warehouse item you order being shipped to you on the same day.

#### 1 Service from genuine experts

„Different tasks, different solutions. In AMF's professional product range, you can find the right solution quickly and reliably: either from your local dealer or with help from the specialists in our teams. A phone call is all it takes.“

#### E Made in Germany

It goes without saying that our range of products is developed and manufactured by our team of employees in Germany.

#### PRODUCTS ON THE COVER

Step clamp, page 21  
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## PARALLEL SUPPORTS-SET, SUPER-PRECISION

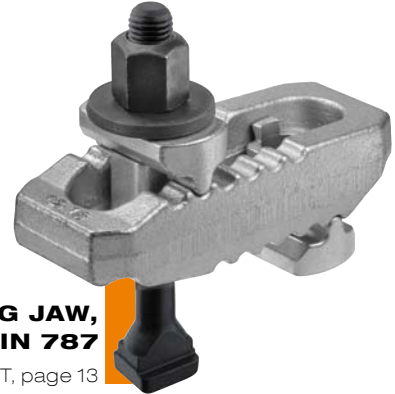
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Optimised wooden case  
for perfect handling!

## „CROCODILE“ CLAMPING JAW, COMPLETE WITH DIN 787

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## ALUMINIUM BASE

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**NEW!**



## POWER CLAMP

No. 7600, page 6  
New size!



- + Low installation height
- + Clamping force up to 22 kN or 49 kN
- + Continuously adjustable

## SPACER ELEMENT

No. 7600Z, page 7  
New size!



## PRESSURE PAD

No. 7600D, page 8  
New sizes!



## NOT ONLY INCREDIBLE IN TERMS OF USE - OUR POWER CLAMP ALSO BOASTS AN IMPRESSIVE PRODUCT DESIGN.

Powerful and reliable in use and now also with an outstanding product design.

The AMF power clamp wins the **GERMAN DESIGN AWARD 2017** in the „Special Mention“ category. This award recognises achievements with designs that feature especially successful styling - an accolade that honours the dedication of companies and designers.

**TAKE A LOOK AT OUR PRIZE WINNER!**  
MORE FROM PAGE 6 ...



# THE POWER CLAMP THAT KEEPS ITS PROMISES

- > **Uses:** All clamping tasks in cutting and non-cutting finishing operations. There are no limits to the possible uses in tool-making, injection moulding, presses and die-cutters as well as in model- and mould-making.
- > **Characteristics:**
  - > Clamping force up to 22 kN or 49 kN
  - > Low installation height
  - > Fast and simple clamping possible
  - > Continuously adjustable

When using clamps in non-cutting and cutting metal finishing processes, as well as in mould making, clamping force and precision that meet the highest demands are required. With the sliding power clamp made of alloyed tempered steel, we offer an exceptionally robust and versatile mechanical clamping element, which can achieve extremely high clamping force of up to 49 kN. The power clamp, which is usable both horizontally and vertically, can be fastened to regular T-slot tables using T-nuts or, alternatively, to grid pallets using threaded mounting.

## No. 7600

### Power clamp

Continuously adjustable clamping element made of alloyed tempered steel in forged, black galvanised design. Complete with mounting kit 7600BFS. Thrust piece in smooth and ribbed variant, optionally available.

**NEW!**



Order no.	Size	max. load [kN]	M	Slot	H	V	L	Weight [g]
556406	22*	22	M12	14	5 - 38	15 - 50	65	700
556186	30	30	M12	14	6 - 68	13 - 110	135	2013
556187	30	30	M16	18	6 - 68	16 - 114	135	2045
556189	32	32	M12	14	6 - 50	12 - 82	95	1462
556190	40	40	M16	18	6 - 50	15 - 95	110	2262
556188	43	43	M16	18	5 - 80	16 - 134	155	3158
554198	49	49	M20	22	7 - 88	19 - 165	175	5928

\* Size 22 kN available from May 2018.

### Application:

1. Position carrier element on the tool table and secure with the specified tightening torque Md.
2. Move the clamp arm to the desired position.
3. Moving the adjusting screw clamps the workpiece.

### Advantage:

- Low installation height
- High clamping force of 22 - 49 kN
- Height and length continuously adjustable
- The very robust design enables quick and easy clamping
- Elements easy to install
- For use in T-slots 14 - 28 mm and/or grid plates M12, M16, M20
- 2 thrust piece variants

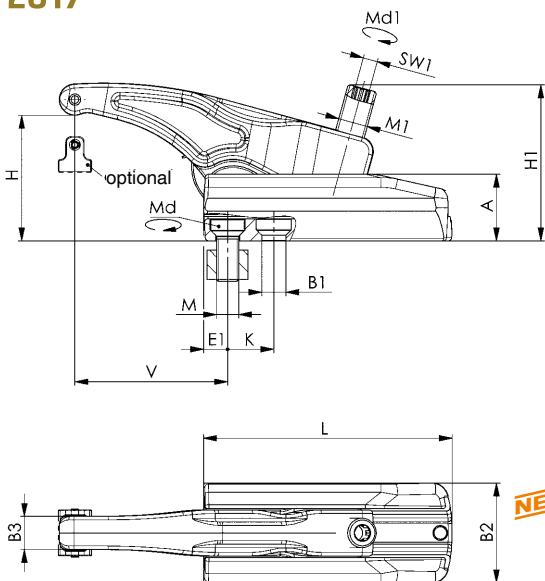
### Note:

- The max. load may differ, depending on the manner of clamping and condition of the threads (lubrication).
- To reduce the wear on the adjusting screw, we recommend the use of AMF screw compound no. 6339. It possesses a synergistic combination of highly-effective solid lubricants and is heat-resistant and does not wash out.
- Use only with the associated AMF mounting kit 7600BFS.

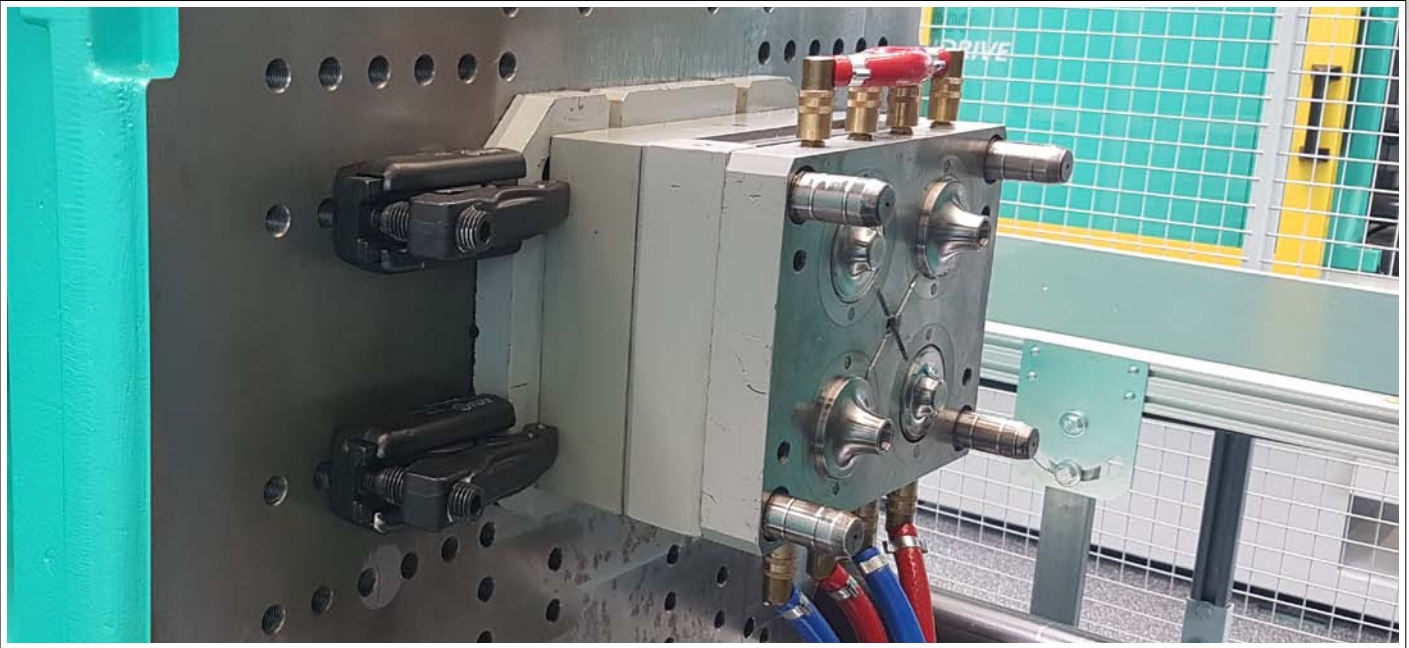
### Dimensions:

Order no.	Size	A	B1	B2	B3	E1	H1	K	M1	SW1	Md 1 [Nm]	Md [Nm]
556406	22*	30	13	45	13	11	58	-	M12	6	-	-
556186	30	36	13	54	18	13	85	25	M16	8	110	70
556187	30	36	17	54	18	16	85	28	M16	8	110	150
556189	32	36	13	54	18	12	78	20	M16	8	120	70
556190	40	42	17	60	20	15	92	26	M20	10	150	150
556188	43	42	17	60	20	16	105	32	M20	10	220	150
554198	49	52	21	75	25	19	125	36	M24	12	220	200

**NEW!**



Subject to technical alterations.



## No. 7600Z

### Spacer element

Made of alloyed tempered steel in forged, black galvanised design. Complete with mounting kit.

**NEW!**

Order no.	Size	M	Slot	A	L	Weight [g]
556407	22*	M12	14	35	65	480
554821	30	M12	14	60	135	2300
554822	32	M12	14	60	95	1570
554823	40	M16	18	70	110	2290
554824	43	M16	18	70	155	3344
554825	49	M20	22	80	175	5286

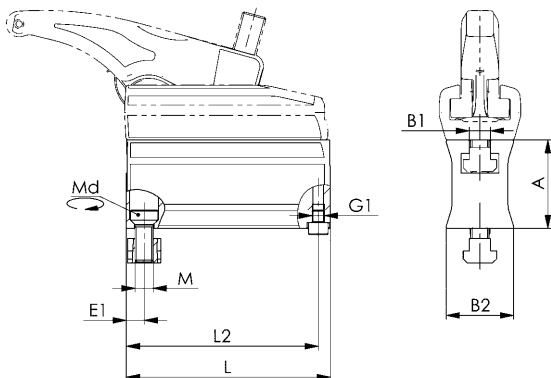
\* Size 22 kN available from May 2018.

### Advantage:

- Additional clamping heights can be achieved by installing multiple spacer elements
- Continuous transition between the clamping heights
- For use in T-slots 14 - 28 mm and/or grid plates M12, M16, M20

### Note:

Use only the corresponding AMF mounting kit 7600BFS.



### Recommendations



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### Dimensions:

**NEW!**

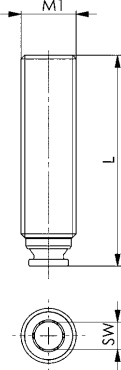
Order no.	Size	B1	B2	E1	G1	L2	Md [Nm]
556407	22*	14	36,0	12	M6	58,5	-
554821	30	14	44,5	12	M8	127	70
554822	32	14	44,5	12	M8	88	70
554823	40	18	47,5	16	M8	100	150
554824	43	18	47,5	16	M8	145	150
554825	49	22	58,0	19	M10	165	200

Subject to technical alterations.

## No. 7600S

### Ball pressure screw

Tempered steel, burnished.



**NEW!**

Order no.	Size	M1	L	SW	Weight [g]
556408	22	M12	43	6	30
553353	30	M16	62	8	80
554214	32	M16	55	8	70
554215	40	M20	65	10	128
553441	43	M20	78	10	165
554216	49	M24	93	12	275

## No. 7600D

### Pressure pad

Complete with dowel pin.  
Stainless steel.



**NEW!**  
**NEW!**

Order no.	Size	Form	A	A1	B	C	Weight [g]
556409	22	DG	14	4,5	19	12	11
556410	22	DR	14	4,5	19	12	10
553351	30/32	DG	19,5	6,0	25	18	28
553352	30/32	DR	19,5	6,0	25	18	27
553442	40/43	DG	24,0	6,5	30	20	47
553443	40/43	DR	24,0	6,5	30	20	48
554301	49	DG	28	7,0	36	25	75
554302	49	DR	28	7,0	36	25	78

DG = smooth contact surface, DR = wavy contact surface

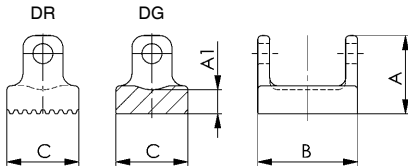
#### Recommendations



ISO 2936C



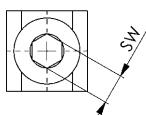
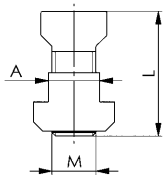
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## No. 7600BFS

### Mounting kit

comprising flat-head screw strength class 12.9 and T-nuts  
DIN 508.



**NEW!**

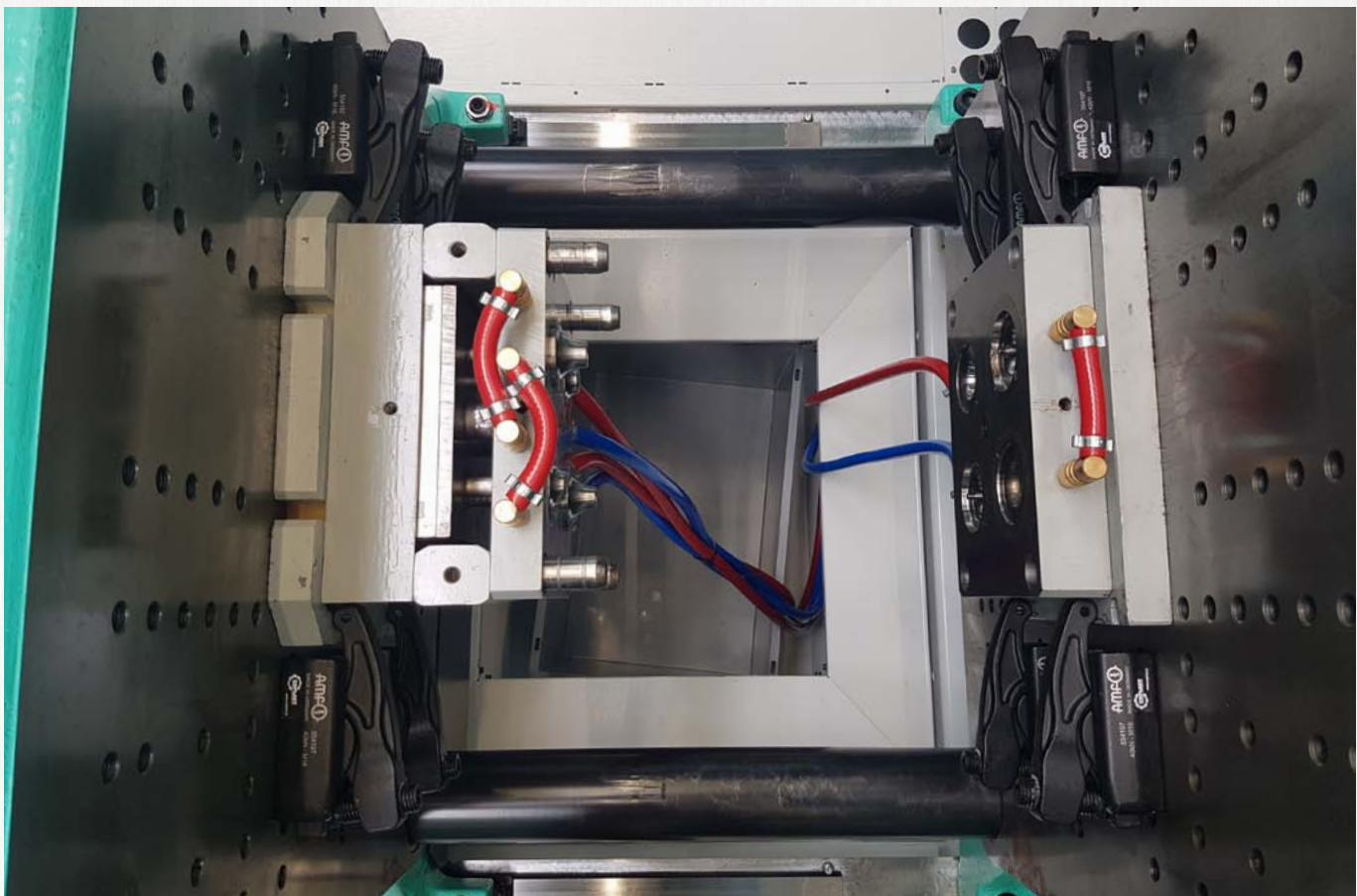
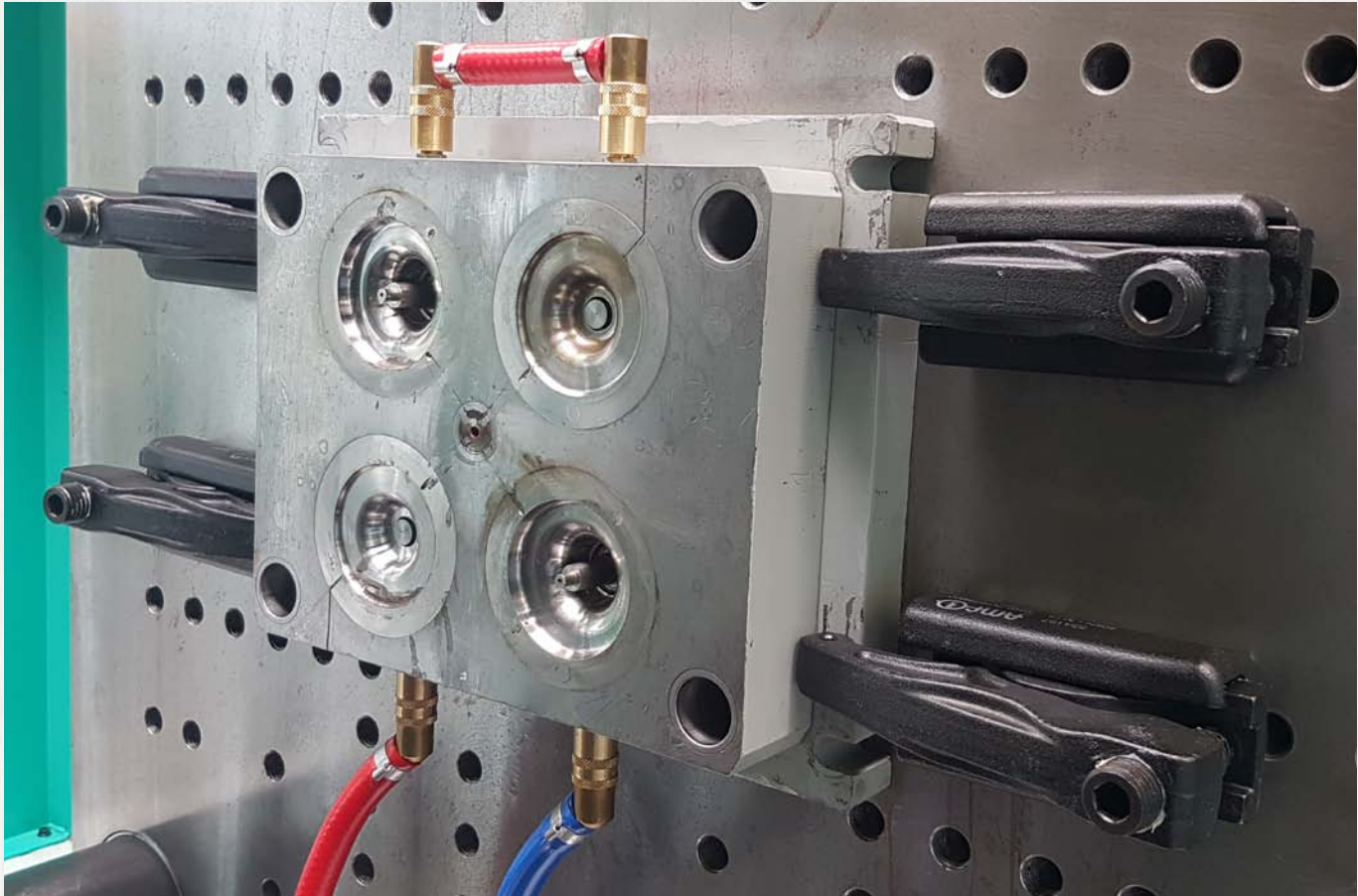
**NEW!**

Order no.	Size	A	M	L	SW	Weight [g]
556576	22	14	M12	25,5	6	36
556152	30 / 32	14	M12	27,5	8	70
556153	30 / 32	16	M12	31,5	8	98
556154	30 / 32	18	M12	31,5	8	125
556155	30	18	M16	33,0	8	143
556156	30	20	M16	37,0	8	208
556157	30	22	M16	41,0	8	270
556158	30	24	M16	41,0	8	348
556159	40 / 43	18	M16	35,0	10	145
556160	40 / 43	20	M16	39,0	10	195
556161	40 / 43	22	M16	43,0	10	264
556162	40 / 43	24	M16	43,0	10	350
554298	49	22	M20	43,5	12	300
554299	49	24	M20	46,5	12	390
554300	49	28	M20	53,5	12	505

Subject to technical alterations.







Subject to technical alterations.

## CLAMPING WITH SINGLE CLAMPS OR WITH COMPACT CLAMPING UNITS

- > **Material:** Tempering steel to DIN regulations.
- > **Machining:** Plane-parallel base- and clamping faces ensure safe force transmission.
- > **Tempering:** According to DIN regulations.
- > **Finishing:** All clamps are abrasionproof quality varnished, or of equal quality finish.

Where high clamping forces or flexible adaption to shapes and sizes of workpieces are demanded, we offer our single clamps or clamping combinations by using our adjustable clamps.

All AMF-clamps shown in this catalogue be combined with different support blocks and are therefore adaptable to different shaped and sized workpieces.

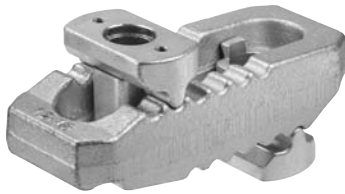
The Advantages of these adjustable clamps are their universal application abilities for single parts up to medium series production with changing clamping dimensions. They allow simple and fast horizontal and vertical application, are interchangeable and price worthy. Their compact design ensures high clamping forces even at large clamping dimensions.



## No. 6312V

### „Crocodile“ clamp

Continuously adjustable, tempered, galvanized, with undetachable compression piece and back support.



Order no.	B1	Slot	Clamping force max.* [kN]	H1	Weight [g]
79756	13	10, 12, 14	30	0-55	661
79798	17	12, 14, 16, 18	40	0-70	1494
79855	21	16, 18, 20, 22	60	0-80	2252
79913	25	20, 22, 24, 28	75	0-100	3635
376475	25	20, 22, 24, 28	75	0-100	4335

\* Specified clamping forces in optimal clamping position (smallest distance from the clamping screw to the clamping point). Clamping forces can vary depending clamping, strength class of the clamping screw and condition of the thread (lubrication).

### Application:

The crocodile clamping claw is used for all clamping tasks using T-slots and threaded holes. Thrust piece and counter-bearing are connected permanently to the clamping jaw, and thus the crocodile is quickly ready to use. The clamping jaw features two ridges and can be turned around easily depending on the application. In this way, it is possible to cover all fields of application involving cutting and non-cutting processes (e.g. injection moulding and pressure forming).

### Advantage:

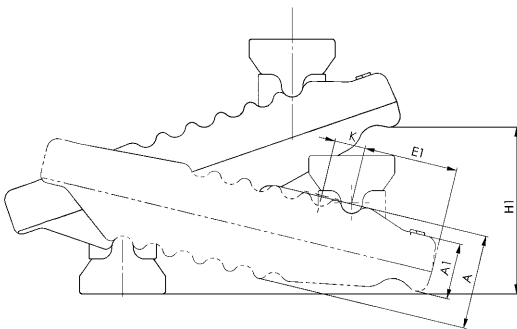
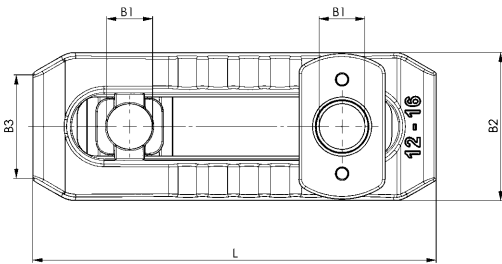
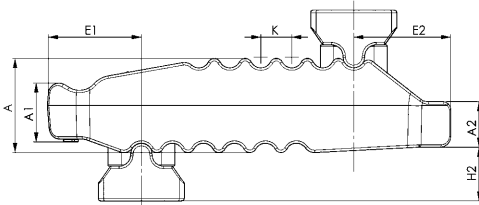
- Variable and fast adjustment option at a distance from the workpiece
- Use in all areas involving cutting and non-cutting processes
- Especially well-suited for use on injection moulding machines and presses
- No additional supports needed to achieve the required clamping height
- Thrust piece and counter-bearing are connected permanently to the clamping jaw
- The crocodile can be extended easily for every clamping height.

### Note:

Your choice of tensioning screws DIN 787, stud screws DIN 6379 and the cylinder screws ISO 4762 can be used for clamping. Greater clamping heights can be achieved through use of the support extension no. 6312S.

### Dimensions:

Order no.	A	A1	A2	B2 x L	B3	E1	E2	H2	K
79756	27	17	12	44x115	30	25	30	18	11
79798	36	21	17	55x150	41	35	36	20	12
79855	42	27	20	62x187	30	44	44	30	14
79913	51	34	24	70x235	30	60	47	31	17
376475	56	35	24	73x285	30	62	51	35	17



### Recommendations



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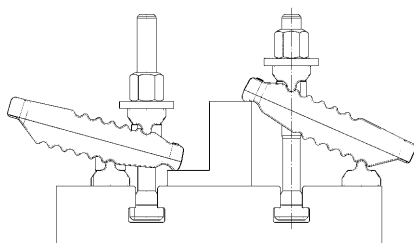
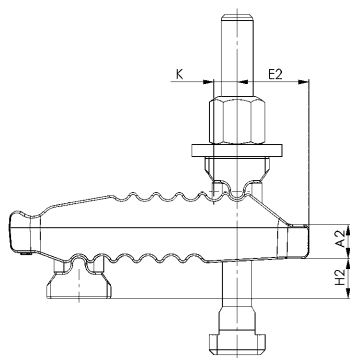
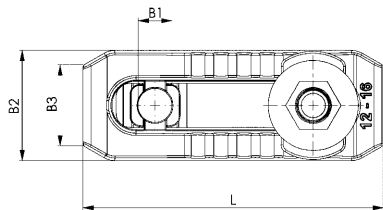
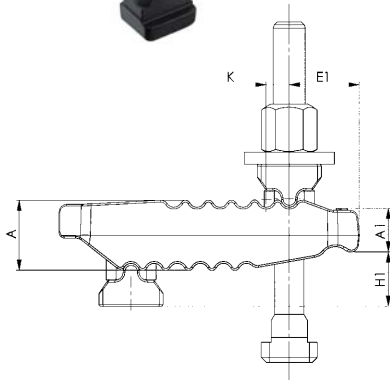
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Subject to technical alterations.

## No. 6312VT

### „Crocodile“ clamp, complete with DIN 787

with clamping bolt DIN 787, washer DIN 6340 and nut DIN 6330B. Infinitely adjustable, tempered, galvanised with captive compression piece and counter bearing.



Order no.	B1	Slot	Clamping bolt DIN 787	Clamping force max.* [kN]	H1	Weight [g]
79780	13	10	M10x10x100	25	0-40	613
79806	13	12	M12x12x125	30	0-55	686
79822	13	14	M12x14x125	30	0-55	705
79848	17	12	M12x12x160	35	0-70	1591
79863	17	14	M12x14x160	35	0-70	1610
79889	17	16	M16x16x160	40	0-70	1798
79905	17	18	M16x18x160	40	0-70	1818
79921	21	16	M16x16x200	55	0-80	2715
79210	21	18	M16x18x200	55	0-80	3018
79228	21	20	M20x20x200	60	0-80	3018
374926	21	22	M20x22x200	60	0-80	3060
374942	25	20	M20x20x250	70	0-100	4368
374967	25	22	M20x22x250	70	0-100	4410
374983	25	24	M24x24x250	75	0-100	4895
375006	25	28	M24x28x250	75	0-100	4966

\* Specified clamping forces in optimal clamping position (smallest distance from the clamping screw to the clamping point). Clamping forces can vary depending clamping, strength class of the clamping screw and condition of the thread (lubrication).

### Application:

The crocodile clamping claw is used for all clamping tasks using T-slots and threaded holes. Thrust piece and counter-bearing are connected permanently to the clamping jaw, and thus the crocodile is quickly ready to use. The clamping jaw features two ridges and can be turned around easily depending on the application. In this way, it is possible to cover all fields of application involving cutting and non-cutting processes (e.g. injection moulding and pressure forming).

### Advantage:

- Variable and fast adjustment option at a distance from the workpiece
- Use in all areas involving cutting and non-cutting processes
- Especially well-suited for use on injection moulding machines and presses
- No additional supports needed to achieve the required clamping height
- Thrust piece and counter-bearing are connected permanently to the clamping jaw
- The crocodile can be extended easily for every clamping height.

### Note:

For missing dimensions, see No. 6312V.

### Dimensions:

Order no.	A	A1	A2	B2 x L	B3	E1	E2	H2	K
79780	27	17	12	44x115	30	25	30	18	11
79806	27	17	12	44x115	30	25	30	18	11
79822	27	17	12	44x115	30	25	30	18	11
79848	36	21	17	55x150	41	35	36	20	12
79863	36	21	17	55x150	41	35	36	20	12
79889	36	21	17	55x150	41	35	36	20	12
79905	36	21	17	55x150	41	35	36	20	12
79921	42	27	20	62x187	30	44	44	30	14
79210	42	27	20	62x187	30	44	44	30	14
79228	42	27	20	62x187	30	44	44	30	14
374926	42	27	20	62x187	30	44	44	30	14
374942	51	34	24	70x235	30	60	47	31	17
374967	51	34	24	70x235	30	60	47	31	17
374983	51	34	24	70x235	30	60	47	31	17
375006	51	34	24	70x235	30	60	47	31	17

### Recommendations



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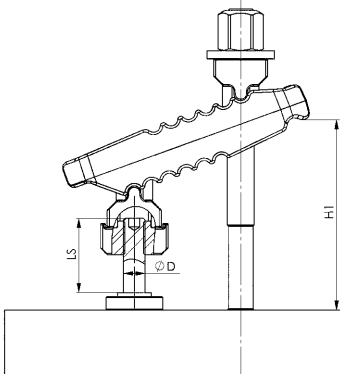
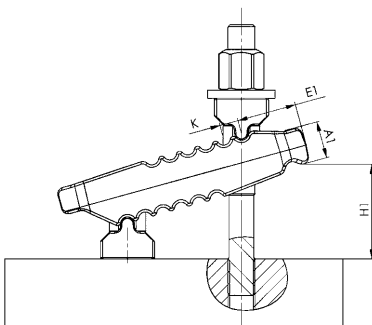
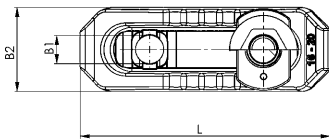
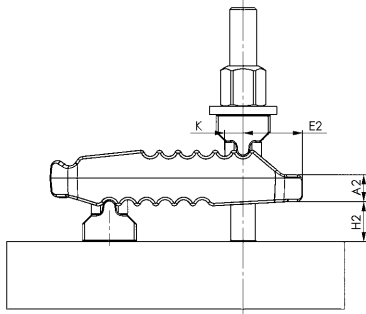
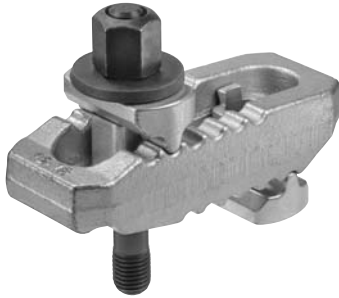
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## No. 6312VS

### „Crocodile“ clamp, complete with DIN 6379

with stud bolt DIN 6379, washer DIN 6340 and nut DIN 6330B. Infinitely adjustable, tempered, galvanised with captive compression piece and counter bearing.



Order no.	B1	Clamping bolt DIN 6379	Support extension 6312V	Clamping force max.* [kN]	H1	Weight [g]
375766	13	M12x100	-	30	0-30	639
375782	13	M12x125	-	30	0-55	659
375808	17	M12x125	-	40	0-50	1535
375824	17	M12x160	-	40	0-70	1558
375840	17	M16x125	-	40	0-40	1660
375865	17	M16x160	-	40	0-70	1718
375881	21	M20x160	-	60	0-40	2754
375907	21	M20x200	-	60	0-80	2834
375923	25	M20x200	-	75	0-70	4072
375949	25	M20x250	-	75	0-100	4172
375964	25	M24x200	-	75	0-50	4374
375980	25	M24x250	-	75	0-100	4524
375832	21	M20x315	M16x90	60	40-190	3704
375857	25	M20x315	M20x69	75	50-175	5438
375873	25	M20x400	M20x109	75	50-220	5873
375899	25	M24x315	M20x69	75	45-180	5850
375915	25	M24x400	M20x109	75	45-215	6350
375816	21	M20x250	M16x55	60	30-141	3428

\* Specified clamping forces in optimal clamping position (smallest distance from the clamping screw to the clamping point). Clamping forces can vary depending clamping, strength class of the clamping screw and condition of the thread (lubrication).

### Application:

The crocodile clamping claw is used for all clamping tasks using T-slots and threaded holes. Thrust piece and counter-bearing are connected permanently to the clamping jaw, and thus the crocodile is quickly ready to use. The clamping jaw features two ridges and can be turned around easily depending on the application. In this way, it is possible to cover all fields of application involving cutting and non-cutting processes (e.g. injection moulding and pressure forming).

### Advantage:

- Variable and fast adjustment option at a distance from the workpiece
- Use in all areas involving cutting and non-cutting processes
- Especially well-suited for use on injection moulding machines and presses
- No additional supports needed to achieve the required clamping height
- Thrust piece and counter-bearing are connected permanently to the clamping jaw
- The crocodile can be extended easily for every clamping height.

### Note:

For missing dimensions, see no. 6312V.

### Dimensions:

Order no.	A	A1	A2	B2 x L	B3	E1	E2	H2	K
375766	27	17	12	44x115	30	25	30	18	11
375782	27	17	12	44x115	30	25	30	18	11
375808	36	21	17	55x150	41	35	36	20	12
375824	36	21	17	55x150	41	35	36	20	12
375840	36	21	17	55x150	41	35	36	20	12
375865	36	21	17	55x150	41	35	36	20	12
375881	42	27	20	62x187	30	44	44	30	14
375907	42	27	20	62x187	30	44	44	30	14
375923	51	34	24	70x235	30	60	47	31	17
375949	51	34	24	70x235	30	60	47	31	17
375964	51	34	24	70x235	30	60	47	31	17
375980	51	34	24	70x235	30	60	47	31	17
375832	42	27	20	62x187	30	44	44	63-123	63
375857	51	34	24	70x235	30	60	47	72-108	72
375873	51	34	24	70x235	30	60	47	72-147	72
375899	51	34	24	70x235	30	60	47	72-108	72
375915	51	34	24	70x235	30	60	47	72-147	72
375816	42	27	20	62x187	30	44	44	63-91	63

### Recommendations



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Subject to technical alterations.

## No. 6312VI

### „Crocodile“ clamp, complete with no. 6379I

with stud no. 6379I, hexagon screwdriver ISO 2936C, washer DIN 6340 and nut DIN 6330B. Continuously adjustable, tempered, galvanised with captive thrust piece and counter bearing.



Order no.	B1	Clamping bolt No. 6379I	Clamping force max.* [kN]	H1	SW [mm]	Weight [g]
375956	13	M12x100	30	0-30	4	639
375972	13	M12x125	30	0-55	4	659
375998	17	M12x125	40	0-50	4	1535
376004	17	M12x160	40	0-70	4	1558
376012	17	M16x125	40	0-40	4	1660
376020	17	M16x160	40	0-70	4	1718
376038	21	M16x160	60	0-40	4	2587
376046	21	M16x200	60	0-80	4	2625
376053	21	M20x160	60	0-40	5	2745
376061	21	M20x200	60	0-80	5	2834
376079	25	M20x200	75	0-70	5	4072
376087	25	M20x250	75	0-100	5	4172
376103	25	M24x200	75	0-50	5	4374
376095	25	M24x250	75	0-100	5	4524

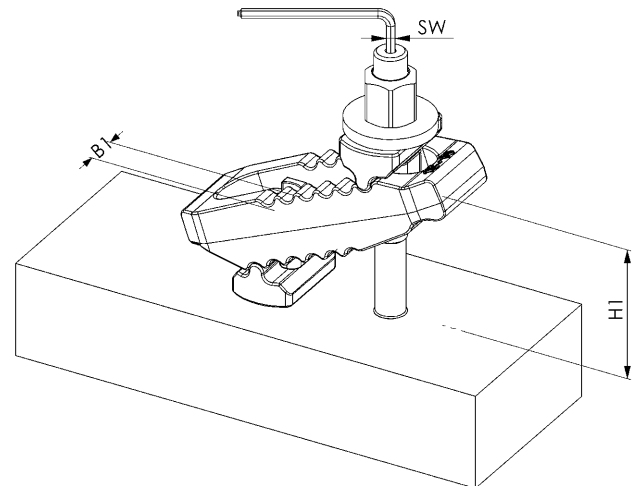
\* Specified clamping forces in optimal clamping position (smallest distance from the clamping screw to the clamping point). Clamping forces can vary depending clamping, strength class of the clamping screw and condition of the thread (lubrication).

### Advantage:

For better handling when setting up the clamping element, the threaded pin can be mounted and removed using an Allen key.

### Note:

Use the Allen key only to set up the clamping element, not for clamping!  
For missing dimension, see no. 6312V.



### Recommendations



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CAD

## No. 6312S

### Support extension

Steel, galvanised and tempered, support screw, hardened, strength class 8.8. Comprising body, support screw and fastening bolts.



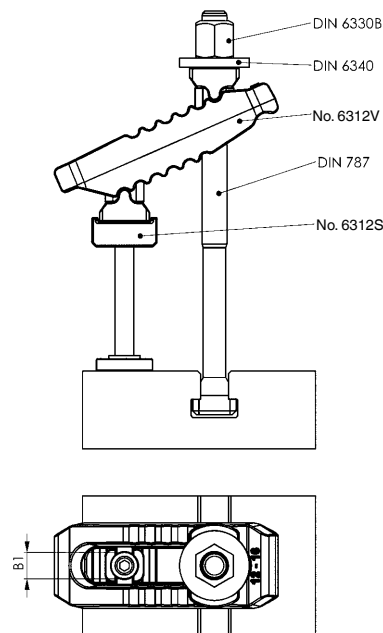
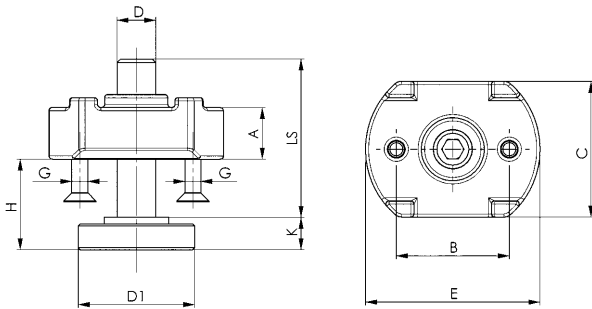
Order no.	D x LS	A	B	B1	C	D1	E	G	H	K	Weight [g]
79772	M10x39	10	30	13	30	30	44	M5	8-30	8	197
79814	M12x49	16	35	17	42	36	54	M5	10-37	10	433
79830	M12x94	16	35	17	42	36	54	M5	10-80	10	473
79871	M16x55	20	40	21	50	42	60	M5	13-41	13	608
79897	M16x90	20	40	21	50	42	60	M5	13-73	13	640
79749	M20x69	25	50	25	50	50	70	M6	16-52	16	1136
79764	M20x109	25	50	25	50	50	70	M6	16-91	16	1396

### Application:

To increase the clamping height, the support extension is screwed to the counter-bearing of the crocodile.

### Advantage:

Continuous adjustment of clamping heights.



The right size for your application is always available, for example, order no. 6312V, without clamping bolt

**Requirements:** Table slot 18 / required clamping height: 125 mm / required clamping force: 35 kN

#### 1) Select clamp no. 6312V

Groove 18 ▶ clamping force 40 kN ▶ B1 = 17 ▶ crocodile order no. 79798

#### 2) For a clamping height of 125 mm, support extension no. 6312S is used

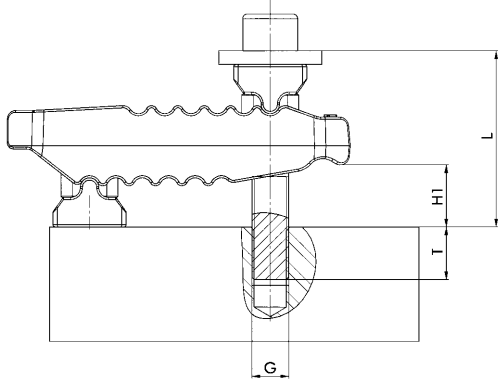
B1 = 17 ▶ groove 18 ▶ clamping height 125 mm (clamping range 26-166 mm) ▶ DxLS = M12x94  
▶ Support extension order no. 79830

#### 3) Size of the T-slot bolts DIN787, complete with washer and hexagon nut

M16x18x250 ▶ order no. 81042

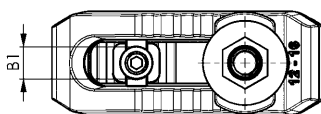
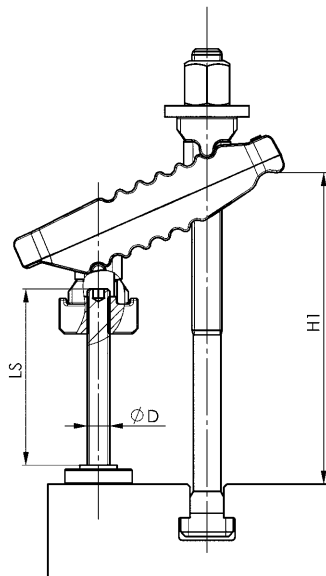


## Installation recommendations and dimensions when using the clamping bolt ISO 4762 (without support extension 6312S)



B1	Dimensions ISO 4762 G x L	Clamping height H1	Thread depth T
13	M10x80	4-25	15-31
13	M10x90	17-40	15-31
13	M10x100	31-55	15-31
13	M12x80	0-20	18-33
13	M12x90	10-34	18-36
13	M12x100	22-50	18-36
17	M12x90	0-22	18-34
17	M12x110	24-50	18-36
17	M12x120	38-66	18-36
17	M16x100	0-26	24-43
17	M16x110	12-40	24-44
17	M16x120	26-55	24-44
21	M16x120	2-29	24-44
21	M16x130	15-43	24-44
21	M16x150	43-72	24-44
21	M20x140	18-48	30-52
21	M20x150	31-63	30-52
21	M20x160	45-78	30-52
25	M20x160	23-54	30-52
25	M20x180	51-83	30-52
25	M20x195	72-100	34-52
25	M24x140	0-15	36-48
25	M24x160	10-42	36-60
25	M24x180	37-71	36-60

## Installation recommendations and dimensions when using the clamping bolt DIN 787 (with support extension 6312S)

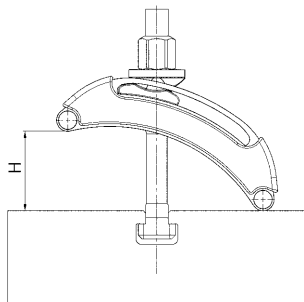
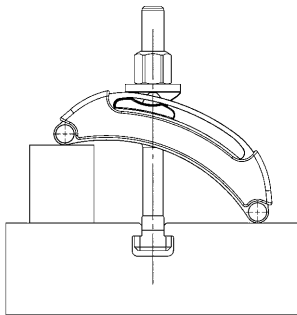
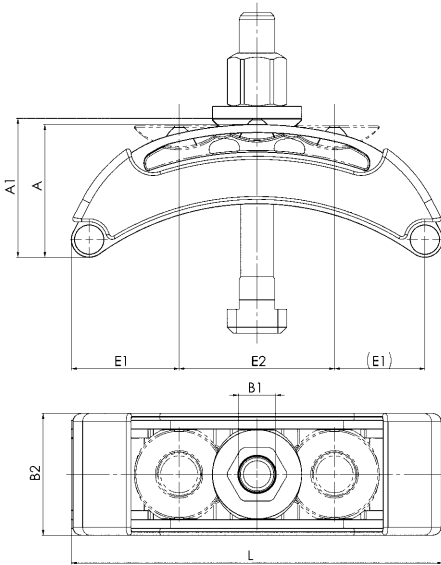


B1	D x LS	Dimensions DIN 787	Clamping range H1
13	M10x39	M10x10x100	18-31
13	M10x39	M12x12x160	18-95
13	M10x39	M12x14x160	18-95
17	M12x49	M12x12x200	26-123
17	M12x49	M12x14x200	26-123
17	M12x49	M16x16x200	26-123
17	M12x49	M16x18x200	26-123
17	M12x94	M12x12x200	26-120
17	M12x94	M12x14x200	26-120
17	M12x94	M16x16x250	26-166
17	M12x94	M16x18x250	26-166
21	M16x55	M16x16x250	33-141
21	M16x55	M16x18x250	33-141
21	M16x55	M20x20x250	33-141
21	M16x55	M20x22x250	33-141
21	M16x90	M16x16x250	33-150
21	M16x90	M16x18x250	33-150
21	M16x90	M20x20x315	33-173
21	M16x90	M20x22x315	33-173
25	M20x69	M20x20x315	41-177
25	M20x69	M20x22x315	41-177
25	M20x69	M24x24x315	41-177
25	M20x69	M24x28x315	41-177
25	M20x109	M20x20x315	41-197
25	M20x109	M20x22x315	41-193
25	M20x109	M24x24x315	41-180
25	M20x109	M24x28x315	41-180

## No. 6310

### Clamp with plastic cap

and captive thrust piece.  
Tempered steel, burnished.



Order no.	B1	Slot	Clamping bolt DIN 787	for clamping screw metric	for clamping screw inch	Weight [g]
376863	11	10	-	M10	3/8	257
376889	14	12+14	-	M12 M14	1/2	708
376905	18	16+18	-	M16 M18	5/8	1235
376921	22	20+22	-	M20 M22	3/4	1880
376947	26	24+28	-	M22 M24	3/4 1	2799
376555	11	10	M10x10x80	M10	3/8	349
376871	14	12	M12x12x100	M12	1/2	886
376897	14	14	M12x14x125	M12	1/2	905
376913	18	16	M16x16x160	M16	5/8	1648
376939	18	18	M16x18x160	M16	5/8	1668

### Application:

The clamp is used for all clamping tasks in which clamping is effected via T-grooves, grooves and threaded bores.

### Advantage:

Weight-saving thanks to lightweight design. Variable and fast adjustment option at a distance from the workpiece. No additional clamping supports are needed to reach the required clamping height. The shim cannot be detached from the clamp.

### Note:

For clamping, either clamping screws DIN 787, stud bolts DIN 6379 and cheese head screws ISO 4762 can be used.

A washer disc DIN 6340 must always be used between the hexagonal nut and compression piece!

### Dimensions:

Order no.	L	H1	A	A1	B2	E1	E2
376863	80	0-15	30,5	32,0	44	30	19
376889	125	0-33	47,0	49,5	57	37	51
376905	160	0-45	58,5	62,0	67	49	63
376921	200	0-65	71,5	75,0	72	58	83
376947	250	0-85	89,5	94,0	82	74	102
376555	80	0-15	30,5	32,0	44	30	19
376871	125	0-33	47,0	49,5	57	37	51
376897	125	0-33	47,0	49,5	57	37	51
376913	160	0-45	58,5	62,0	67	49	63
376939	160	0-45	58,5	62,0	67	49	63

### Recommendations



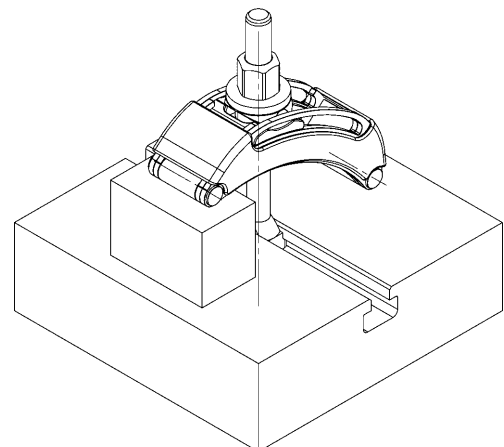
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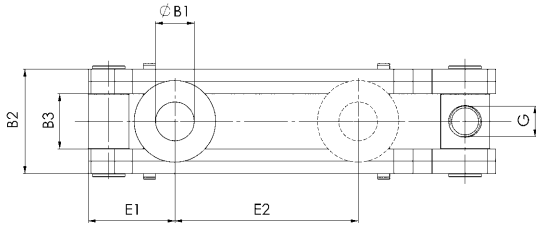
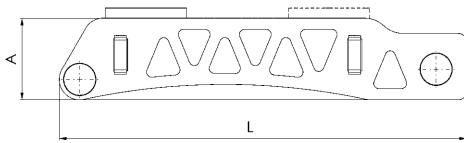


Subject to technical alterations.

## No. 6311

### Clamp, light design

Tempered steel, burnished.



#### Recommendations



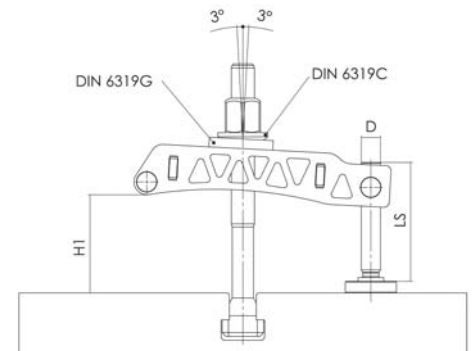
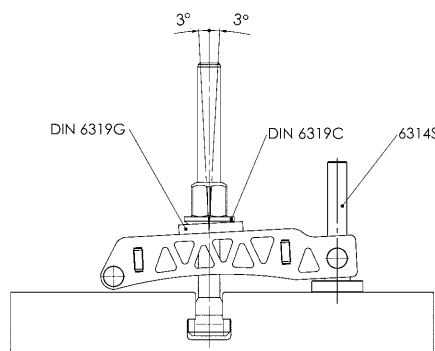
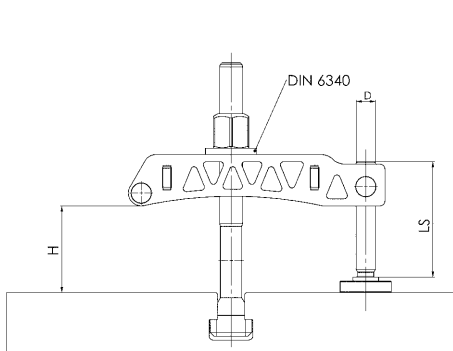
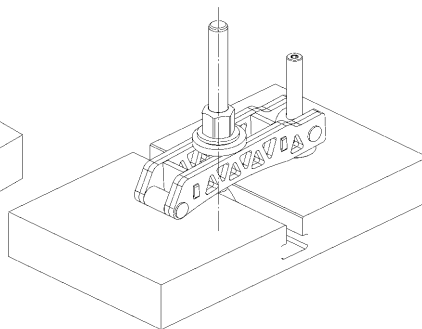
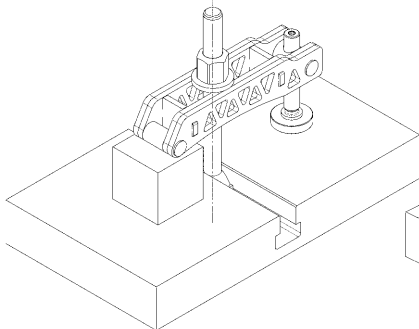
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Order no.	B1	Groove DIN 508	Clamping bolt DIN 787	for clamping screw metric	for clamping screw inch	Weight [g]
376962	22	20, 22, 24, 28	-	M20 M22	3/4	1289
377002	26	24, 28, 30, 36	-	M24	1	1630
377044	33	36, 42	-	M30	1 1/4	4522
377069	43	42, 48	-	M36 M42	1 1/2	9709
376731	22	20	M20x20x160	M20 M22	3/4	2434
376756	22	20	M20x20x200	M20 M22	1	2531
376772	26	24	M24x28x200	M24	1	3779
376798	26	24	M24x28x250	M24	1 1/4	3884
376814	33	36	M30x36x315	M30	1 1/4	9044
376830	43	48	M36x42x400	M36 M42	1 1/2	17560

#### Application:

The clamp is used for all clamping tasks in which clamping is effected via T-grooves, grooves and threaded bores.

#### Advantage:

Through the weight-saving design, the clamping iron is up to 50% lighter, but still offers 100% clamping force and can thus also be used even for rotating clamping tasks. Variable and fast adjustment option at a distance from the workpiece.

#### Note:

For clamping, either clamping screws DIN 787, stud bolts DIN 6379 and cheese head screws ISO 4762 can be used.

**Up to 50% lighter -  
100 % clamping force**

#### Dimensions:

Order no.	L	H	H1	A	B2	B3	E1	E2	G	With support screw No. 6314S D x LS
376962	200	-	-	44	49	25	43	89	M20	-
377002	250	-	-	44	54	30	46	116	M24	-
377044	315	-	-	71	72	40	59	152	M30	-
377069	400	-	-	80	102	54	74	209	M30	-
376731	200	16-49	8-58	44	49	25	43	89	M20	M20x69
376756	200	16-89,5	8-98	44	49	25	44	89	M20	M20x109
376772	250	20-69	10-81	44	54	30	46	116	M24	M24x87
376798	250	20-120	10-130	44	54	30	59	116	M24	M24x137
376814	315	18-142	7-214	71	72	40	59	152	M30	M30x180
376830	400	18-135	7-153	80	102	54	74	209	M30	M30x180

CAD

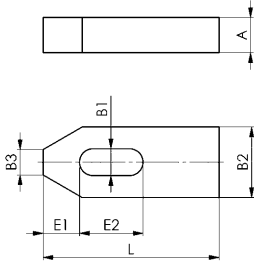


Subject to technical alterations.

## DIN 6314

### Clamp, flat

Tempering steel, varnished.



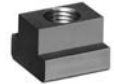
Order no.	B1	L	for clamping screw metric	for clamping screw inch	A	B2	B3	E1	E2	Weight [g]
70003	6,6	50	M6	1/4	10	20	8	10	20	63
70011	9	60	M8	5/16	12	25	10	13	22	113
70029	11	80	M10	3/8	15	30	12	15	30	226
70037	14	100	M12 M14	1/2	20	40	14	21	40	490
70045	14	125	M12 M14	1/2	20	40	14	21	50	621
70052	18	125	M16 M18	5/8	25	50	18	26	45	960
70060	18	160	M16 M18	5/8	25	50	18	26	65	1240
70078	22	160	M20 M22	3/4	30	60	22	30	60	1787
70086	22	200	M20 M22	3/4	30	60	22	30	80	2237
70094	26	200	M24	1	30	70	26	35	80	2580
70102	26	250	M24	1	(35)	70	26	35	105	3800
70110	33	250	M30	1 1/4	40	80	34	45	100	4934
70128	33	315	M30	1 1/4	50	80	34	45	130	7788
70136	(43)	400	M36 M42	1 1/2	60	100	43	100	150	15000

( ) DIN extended.

### Recommendations



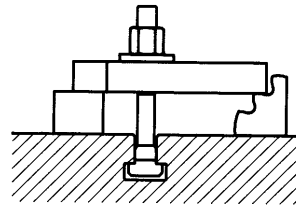
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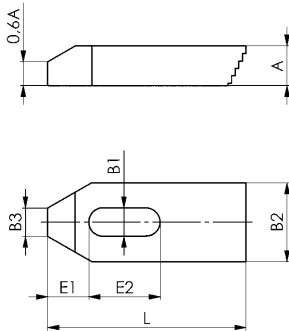


Subject to technical alterations.

## No. 6314Z

### Step clamp

Tempering steel, varnished.  
Only match step blocks no. 6500E. The longer versions are used for large clamping distances due to large T-slot distance or enlarged work depth, i.e. on graving machines.



Order no.	B1	L	for clamping screw metric	for clamping screw inch	A	B2	B3	E1	E2	Weight [g]
70359	6,6	50	M6	1/4	10	20	8	10	20	55
70227	6,6	80	M6	1/4	10	20	8	10	45	90
70367	9	60	M8	5/16	12	25	10	13	22	100
70243	9	100	M8	5/16	12	25	10	13	60	180
70375	11	80	M10	3/8	15	30	12	15	30	200
70235	11	125	M10	3/8	15	30	12	15	70	350
70383	14	100	M12 M14	1/2	20	40	14	21	40	450
70250	14	160	M12 M14	1/2	20	40	14	21	90	770
70391	18	125	M16 M18	5/8	25	50	18	26	45	900
70334	18	200	M16 M18	5/8	25	50	18	26	110	1500
70409	22	160	M20 M22	3/4	30	60	22	30	60	1700
70417	26	200	M24	1	30	70	26	35	80	2500

### Recommendations



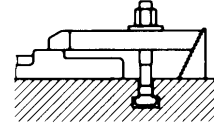
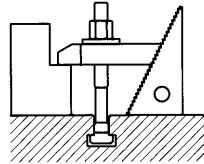
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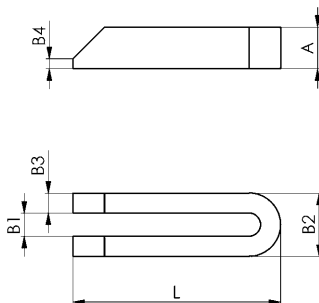
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## DIN 6315B

### Forked clamp tapered

Tempering steel, varnished.



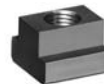
Order no.	B1	L	for clamping screw metric	for clamping screw inch	A	B2	B3	B4	Weight [g]
70466	6,6	60	M6	1/4	12	19	6	3	60
70474	9	80	M8	5/16	15	25	8	4	140
70482	11	100	M10	3/8	20	31	10	5	300
70490	14	125	M12 M14	1/2	25	38	12	6	570
70508	14	160	M12 M14	1/2	25	38	12	6	730
70516	14	200	M12 M14	1/2	25	38	12	6	910
70524	18	160	M16 M18	5/8	30	48	15	8	1080
70532	18	200	M16 M18	5/8	30	48	15	8	1360
70540	18	250	M16 M18	5/8	40	48	15	10	2250
70557	22	200	M20 M22	3/4	40	52	15	10	1800
70565	22	250	M20 M22	3/4	40	62	20	10	3000
70573	22	315	M20 M22	3/4	40	62	20	10	3850
70425	22	500	M20 M22	3/4	50	62	20	10	7500
70581	26	200	M24	1	40	66	20	10	2400
70599	26	250	M24	1	40	66	20	10	3000
70607	26	315	M24	1	40	66	20	10	3850
37390	26	400	M24	1	50	66	20	10	5962
70433	26	500	M24	1	50	66	20	10	7600
3079	26	600	M24	1	50	66	20	10	9042
30064	26	800	M24	1	50	66	20	10	12122
70615	33	250	M30	1 1/4	50	74	20	12	3700
70623	33	315	M30	1 1/4	50	74	20	12	4750
70631	33	400	M30	1 1/4	50	74	20	12	6100
70441	33	600	M30	1 1/4	50	74	20	12	9200
70458	33	1000	M30	1 1/4	60	94	30	12	28000
70649	40	400	M36	1 1/2	60	100	30	12	11000
70656	40	600	M36	1 1/2	60	100	30	12	16500
70672	(43)	600	M36 M42	1 1/2	80	123	40	12	29600

( ) DIN extended.

### Recommendations



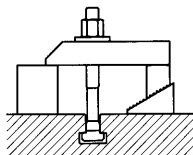
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CAD

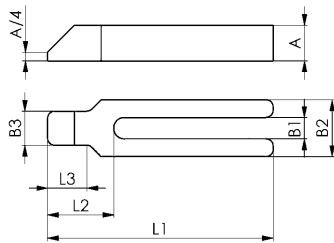


Subject to technical alterations.

## No. 6315GN

### Forked clamp with shoe

Tempering steel, varnished.

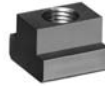


Order no.	B1	L1	for clamping screw metric	for clamping screw inch	A	B2	B3	L2	L3	Weight [g]
70862	9	100	M8	5/16	15	30	16	32	18	240
70870	11	125	M10	3/8	20	30	20	38	24	380
70888	14	160	M12 M14	1/2	25	40	24	47	30	800
70896	14	200	M12 M14	1/2	25	40	24	47	30	950
70904	18	200	M16 M18	5/8	30	50	28	57	36	1500
70912	18	250	M16 M18	5/8	30	50	28	57	36	1850
70920	22	250	M20 M22	3/4	40	60	35	68	45	2900
70938	22	315	M20 M22	3/4	40	60	35	68	45	3600
70946	26	250	M24	1	40	70	43	83	56	3400
70953	26	315	M24	1	40	70	43	83	56	4300
70961	33	315	M30	1 1/4	50	80	50	88	56	6000
70979	33	400	M30	1 1/4	50	80	50	88	56	7300

#### Recommendations



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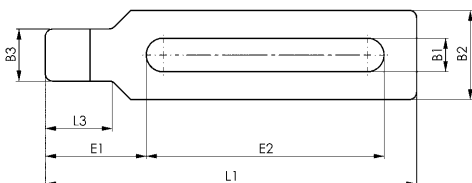
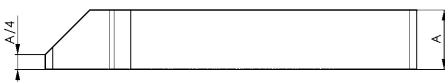
DIN 6331, page 84



## No. 6315NGG

### Clamp with nose, closed

Infinitely adjustable, tempered and painted, with closed slot for use with rotating workpieces

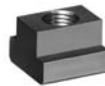


Order no.	B1	L	for clamping screw metric	for clamping screw inch	A	B2	B3	E1	E2	L3	Weight [g]
376145	22	250	M20 M22	3/4	40	60	35	68	160	45	3025
376160	22	315	M20 M22	3/4	40	60	35	68	220	45	3810
376186	22	400	M20 M22	3/4	50	60	35	68	300	45	5995
376202	22	500	M20 M22	3/4	50	60	35	68	400	45	7440
376228	26	250	M24	1	40	70	43	83	140	56	3639
376244	26	315	M24	1	40	70	43	83	200	56	4560
376269	26	400	M24	1	50	70	43	83	270	56	7243
376285	26	500	M24	1	50	70	43	83	370	56	8937
376301	33	315	M30	1 1/4	50	80	50	88	200	56	6367
376327	33	400	M30	1 1/4	50	80	50	88	283	56	7798
376343	33	500	M30	1 1/4	50	80	50	88	383	56	9607
376137	45	400	M36	1 1/2	60	115	95	125	220	90	19987
376152	45	500	M36	1 1/2	60	115	95	125	330	90	24022
376178	45	800	M36	1 1/2	80	115	95	125	630	90	36953

#### Recommendations



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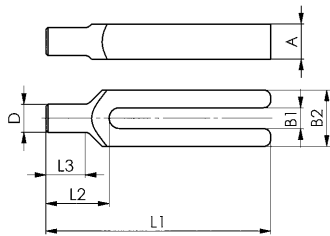


Subject to technical alterations.

## DIN 6315C

### Forked clamp with pin end

Tempering steel, varnished.

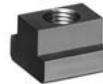


Order no.	B1	L1	for clamping screw metric	for clamping screw inch	A	B2	D	L2	L3	Weight [g]
70706	9	100	M8	5/16	15	30	12	30	18	220
70714	11	125	M10	3/8	20	30	16	36	24	350
70722	14	160	M12 M14	1/2	25	40	20	45	30	750
70730	14	200	M12 M14	1/2	25	40	20	45	30	950
70748	18	200	M16 M18	5/8	30	50	24	55	36	1400
70755	18	250	M16 M18	5/8	30	50	24	55	36	1750
70763	22	250	M20 M22	3/4	40	60	30	65	45	2700
70771	22	315	M20 M22	3/4	40	60	30	65	45	3400
70789	26	250	M24	1	40	70	38	80	56	3200
70797	26	315	M24	1	40	70	38	80	56	4100
70805	33	315	M30	1 1/4	50	80	45	85	56	5700
70813	33	400	M30	1 1/4	50	80	45	85	56	7000

#### Recommendations



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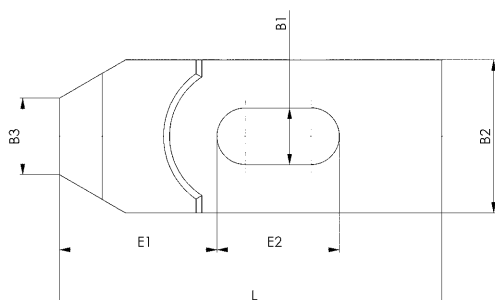
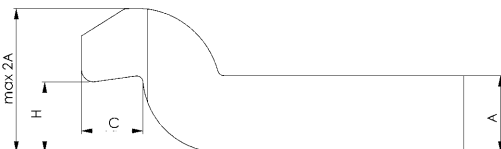
CAD



## DIN 6316

### Clamp, cranked

Tempering steel, varnished.



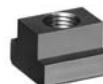
Order no.	B1	L	for clamping screw metric	for clamping screw inch	A	B2	B3	C	E1	E2	H	Weight [g]
71027	6,6	60	M6	1/4	10	20	10	8	22,0	20	9	81
71035	9	80	M8	5/16	12	25	12	9	27,5	25	11	166
71043	11	100	M10	3/8	15	30	15	12	36,0	32	14	299
71050	14	125	M12 M14	1/2	20	40	20	16	44,0	40	18	678
71068	(18)	125	M16 M18	5/8	25	50	25	20	51,5	40	23	1049
71076	18	160	M16 M18	5/8	25	50	25	20	51,5	50	23	1366
71084	(22)	160	M20 M22	3/4	30	60	30	24	59,0	55	27	1911
71092	22	200	M20 M22	3/4	30	60	30	24	59,0	70	27	2417
71100	(26)	200	M24	1	35	70	35	25	76,5	60	32	3315
71118	26	250	M24	1	35	70	35	25	76,5	80	32	4132
71126	(33)	250	M30	1 1/4	40	80	40	40	96,0	80	45	5225
71134	33	315	M30	1 1/4	50	80	40	40	96,0	100	45	8459
71159	(43)	400	M36 M42	1 7/16 1 1/2	60	100	50	50	105,0	120	55	17078

( ) DIN extended.

#### Recommendations



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CAD



Subject to technical alterations.

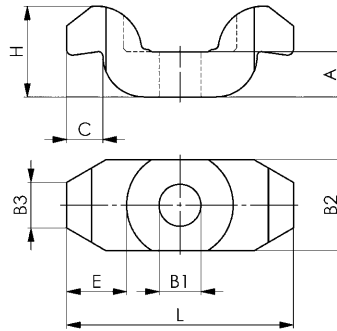
No. 6317

## Double goose-neck clamp

Tempering steel, varnished.

Order no.	B1	L	for clamping screw	A	B2	B3	C	E	H	Weight [g]
71340	18	100	M12-M18	20	40	20	16	26	40	620
71357	25	140	M20-M24	30	60	30	24	38	60	2040

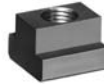
For use with washers DIN 6340 or DIN 6319G.



### Recommendations



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CAD



Subject to technical alterations.

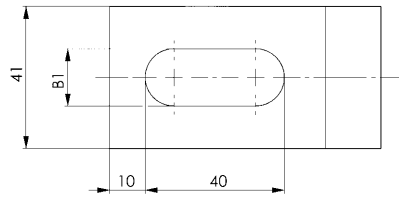
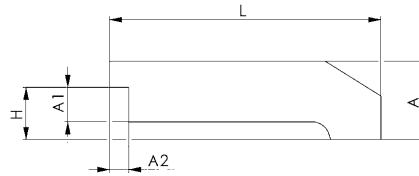


## No. 6325

### Clamps for machine vices

Tempering steel, blued, packaged in pairs.

Order no.	B1	H	L	for clamping screw metric	for clamping screw inch	A	A1x A2	Weight [g]
74682	16,5	15	78	M12, 14, 16	1/2, 5/8	22,5	10x5,5	685
74690	16,5	20	78	M12, 14, 16	1/2, 5/8	27,5	705	



#### Recommendations



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CAD

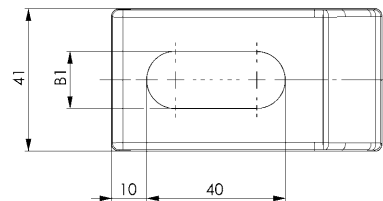
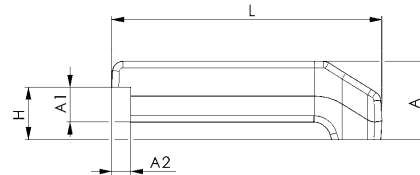


## No. 6325G

### Clamps for machine vices

Forged design, packaged in pairs.

Order no.	B1	H	L	for clamping screw metric	for clamping screw inch	A	A1x A2	Weight [g]
373878	16,5	15	78	M12, 14, 16	1/2, 5/8	22,5	10x5,5	570
373886	16,5	20	78	M12, 14, 16	1/2, 5/8	27,5	10x6,5	620



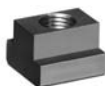
#### Recommendations



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CAD



Subject to technical alterations.

## No. 6314V

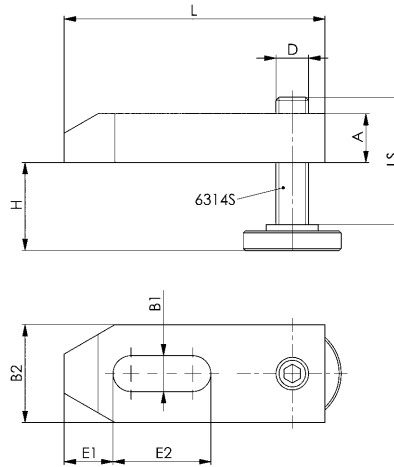
### Tapered clamp with adjusting support screw

(without clamping stud)  
Painted tempered steel.



Order no.	for clamping screw	H*	sim. DIN6314 B1 x L	D x LS	A	B2	E1	E2	Weight [g]
70177	M10	8-37	11x80	M10x39	15	30	15	30	200
70193	M12 M14	10-47	14x100	M12x49	20	40	21	40	560
70821	M12 M14	10-92	14x100	M12x94	20	40	21	40	635
70219	M16 M18	13-52	18x125	M16x55	25	50	26	45	1110
70839	M16 M18	13-87	18x125	M16x90	25	50	26	45	1230
70201	M20 M22	16-65	22x160	M20x69	30	60	30	60	2050
70847	M20 M22	16-105	22x160	M20x109	30	60	30	60	2230
70151	M24	20-83	26x200	M24x87	30	70	35	80	3200
70854	M24	20-133	26x200	M24x137	30	70	35	80	3470
373928	M24	20-80	26x250	M24x87	35	70	35	105	4340
373936	M24	20-130	26x250	M24x137	35	70	35	105	4520
374405	M30	24-150	33x315	M30x180	50	80	45	130	11215
374439	M36 M42	24-150	43x400	M30x180	80	100	80	170	24350

\*depending on depth of slot to DIN 650 and position of fixture nut.  
Clamps without T-bolts are same item for sizes 12 and 14, 16 and 18, 20 and 22, each.



## No. 6314V

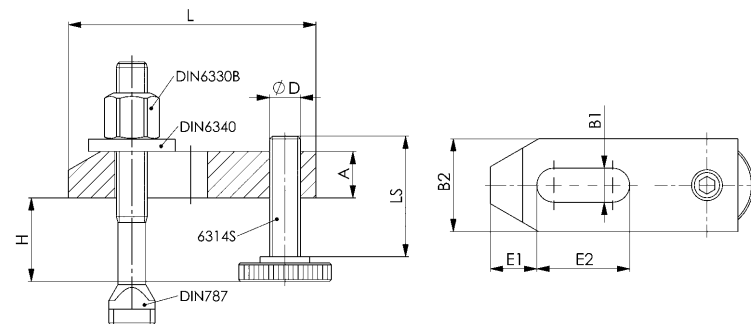
### Tapered clamp with adjusting support screw, complete

with DIN 787, DIN 6340, DIN 6330B. Painted tempered steel.



Order no.	Slot	with clamping bolt	H*	sim. DIN6314 B1 x L	D x LS	A	B2	E1	E2	Weight [g]
70268	10	M10x10x80	8-32	11x80	M10x39	15	30	15	30	340
70276	12	M12x12x100	10-40	14x100	M12x49	20	40	21	40	700
72801	12	M12x12x160	24-92	14x100	M12x94	20	40	21	40	830
70284	14	M12x14x100	10-38	14x100	M12x49	20	40	21	40	720
72827	14	M12x14x160	23-92	14x100	M12x94	20	40	21	40	845
70292	16	M16x16x125	13-48	18x125	M16x55	25	50	26	45	1400
72942	16	M16x16x160	15-83	18x125	M16x90	25	50	26	45	1610
70300	18	M16x18x125	13-46	18x125	M16x55	25	50	26	45	1400
73056	18	M16x18x160	13-81	18x125	M16x90	25	50	26	45	1630
70326	20	M20x20x160	16-65	22x160	M20x69	30	60	30	60	2600
73064	20	M20x20x200	21-105	22x160	M20x109	30	60	30	60	2930
70318	22	M20x22x160	16-65	22x160	M20x69	30	60	30	60	2770
73072	22	M20x22x200	19-105	22x160	M20x109	30	60	30	60	2980
373944	28	M24x28x200	20-80	26x250	M24x87	35	70	35	105	5486
373951	28	M24x28x250	30-130	26x250	M24x137	35	70	35	105	5716
381988	36	M30x36x315	24-150	33x315	M30x180	50	80	45	130	11995
382002	42	M36x42x400	24-150	43x400	M30x180	80	100	80	170	25683

\*depending on depth of slot to DIN 650 and position of fixture nut.  
Clamps without T-bolts are same item for sizes 12 and 14, 16 and 18, 20 and 22, each.



### Recommendations



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Subject to technical alterations.

## No. 6316V

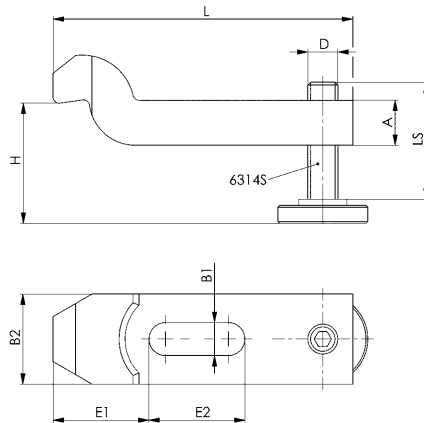
### Cranked clamp with adjusting support screw

(without clamping stud)  
Painted tempered steel.



Order no.	for clamping screw	H*	sim. DIN6316 B1 x L	D x LS	A	B2	E1	E2	Weight [g]
71183	M10	22-51	11x100	M10x39	15	30	36,0	32	344
71209	M12	28-65	14x125	M12x49	20	40	44,0	40	761
71225	M16	36-75	18x160	M16x55	25	50	51,5	50	1516
71217	M20	43-92	22x200	M20x69	30	60	59,0	70	2669
71266	M24	52-115	26x200	M24x87	35	70	76,5	60	3810

\*depending on depth of slot to DIN 650 and position of fixture nut.  
Clamps without T-bolts are same item for sizes 12 and 14, 16 and 18, 20 and 22, each.



## No. 6316V

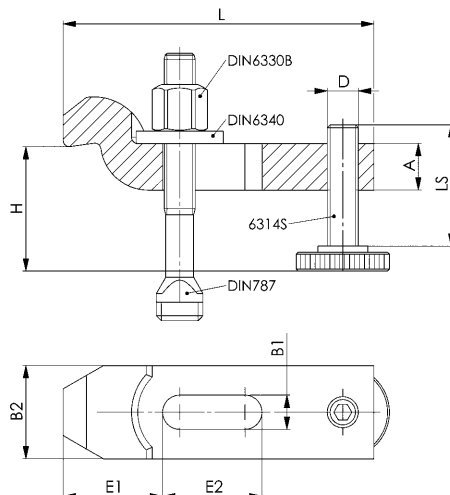
### Cranked clamp with adjusting support screw, complete

with DIN 787, DIN 6340, DIN 6330B.  
Painted tempered steel.



Order no.	Slot	with clamping bolt	H*	sim. DIN6316 B1 x L	D x LS	A	B2	E1	E2	Weight [g]
71274	10	M10x10x80	22-46	11x100	M10x39	15	30	36,0	32	440
71282	12	M12x12x100	28-58	14x125	M12x49	20	40	44,0	40	906
71290	14	M12x14x100	28-56	14x125	M12x49	20	40	44,0	40	926
71308	16	M16x16x125	36-71	18x160	M16x55	25	50	51,5	50	1859
71316	18	M16x18x125	36-69	18x160	M16x55	25	50	51,5	50	1875
71332	20	M20x20x160	43-92	22x200	M20x69	30	60	59,0	70	3322
71324	22	M20x22x160	43-92	22x200	M20x69	30	60	59,0	70	3352

\*depending on depth of slot to DIN 650 and position of fixture nut.  
Clamps without T-bolts are same item for sizes 12 and 14, 16 and 18, 20 and 22, each.



## No. 6314AV

### Stepped clamp with adjusting support screw

(without clamping stud)  
Painted tempered steel.

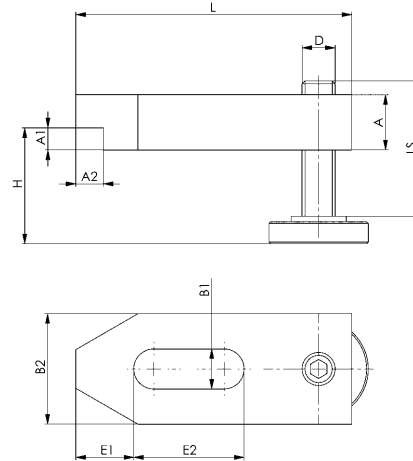


Order no.	for clamping screw	H*	sim. DIN6314 B1 x L	D x LS	A	A1xA2	B2	E1	E2	Weight [g]
74567	M12	10-55	14x100	M12x49	20	8 x10,0	40	21	40	580
74575	M16	13-62	18x125	M16x55	25	10x12,5	50	26	45	1140
74583	M20	16-77	22x160	M20x69	30	12x15,0	60	30	60	2100

\*depending on depth of slot to DIN 650 and position of fixture nut.

To clamp thin parts, turn the clamp over.

Clamps without T-bolts are same item for sizes 12 and 14, 16 and 18, 20 and 22, each.



CAD



## No. 6314AV

### Stepped clamp with adjusting support screw, complete

with DIN 787, DIN 6340, DIN 6330B.  
Painted tempered steel.

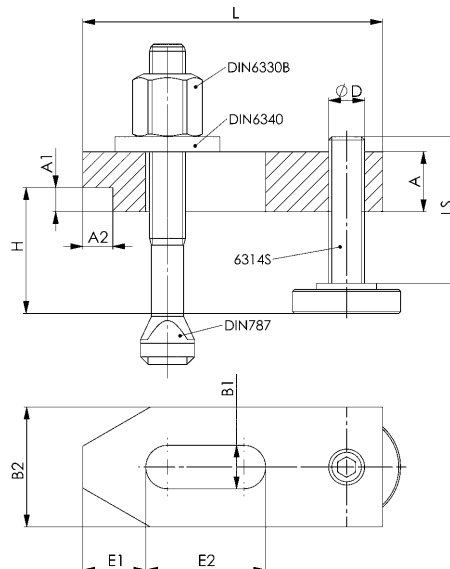


Order no.	Slot	with clamping bolt	H*	sim. DIN6314 B1 x L	D x LS	A	A1xA2	B2	E1	E2	Weight [g]
74591	12	M12x12x100	10-48	14x100	M12x49	20	8 x10,0	40	21	40	745
74625	14	M12x14x100	10-46	14x100	M12x49	20	8 x10,0	40	21	40	764
74633	16	M16x16x125	13-58	18x125	M16x55	25	10x12,5	50	26	45	1510
74641	18	M16x18x125	13-56	18x125	M16x55	25	10x12,5	50	26	45	1530
74658	20	M20x20x160	16-77	22x160	M20x69	30	12x15,0	60	30	60	2800
74666	22	M20x22x160	16-77	22x160	M20x69	30	12x15,0	60	30	60	2840

\*depending on depth of slot to DIN 650 and position of fixture nut.

To clamp thin parts, turn the clamp over.

Clamps without T-bolts are same item for sizes 12 and 14, 16 and 18, 20 and 22, each.



CAD

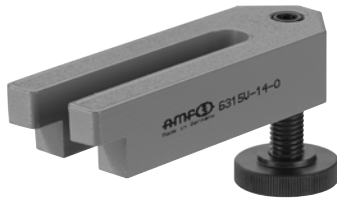


Subject to technical alterations.

## No. 6315V

### Stepped clamp with adjusting support screw

(without clamping stud)  
Painted tempered steel.

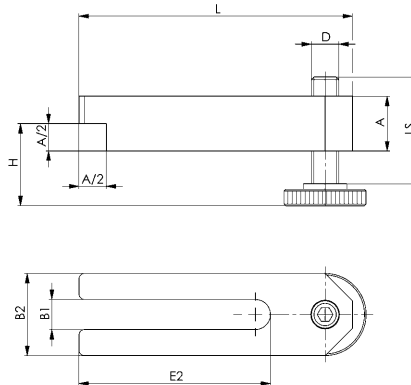


Order no.	for clamping screw	H*	sim. DIN 6315B B1 x L	D x LS	A	B2	E2	Weight [g]
71167	M10	8-47	11x100	M10x39	20	30	70	330
71175	M12	10-59	14x125	M12x49	25	40	90	700
71191	M16	13-67	18x160	M16x55	30	50	110	1300
71258	M20	16-85	22x200	M20x69	40	60	135	2600

\*depending on depth of slot to DIN 650 and position of fixture nut.

To clamp thin parts, turn the clamp over.

Clamps without T-bolts are same item for sizes 12 and 14, 16 and 18, 20 and 22, each.



#### Recommendations



No. 6342, page 95

CAD



## No. 6315V

### Stepped clamp with adjusting support screw, complete

with DIN 787, DIN 6340, DIN 6330B.  
Painted tempered steel.

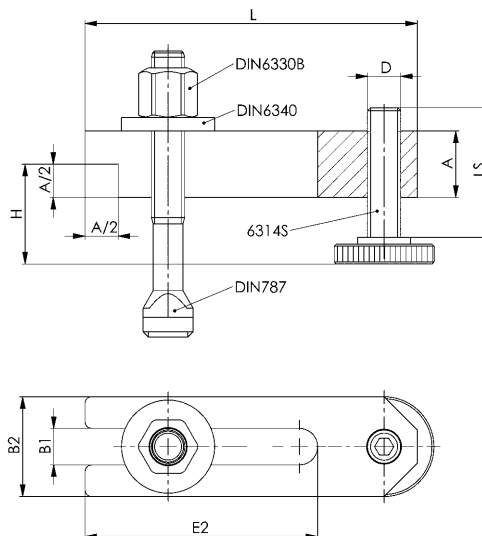


Order no.	Slot	with clamping bolt	H*	sim. DIN 6315B B1 x L	D x LS	A	B2	E2	Weight [g]
73189	10	M10x10x 80	8-37	11x100	M10x39	20	30	70	403
73197	12	M12x12x100	10-48	14x125	M12x49	25	40	90	920
73205	14	M12x14x100	10-45	14x125	M12x49	25	40	90	940
73247	16	M16x16x125	13-58	18x160	M16x55	30	50	110	1860
73254	18	M16x18x125	13-56	18x160	M16x55	30	50	110	1880
73262	20	M20x20x160	16-77	22x200	M20x69	40	60	135	3610
73288	22	M20x22x160	16-75	22x200	M20x69	40	60	135	3650

\*depending on depth of slot to DIN 650 and position of fixture nut.

To clamp thin parts, turn the clamp over.

Clamps without T-bolts are same item for sizes 12 and 14, 16 and 18, 20 and 22, each.



Subject to technical alterations.

CAD



## No. 6313K

### Clamp, short, with U-piece

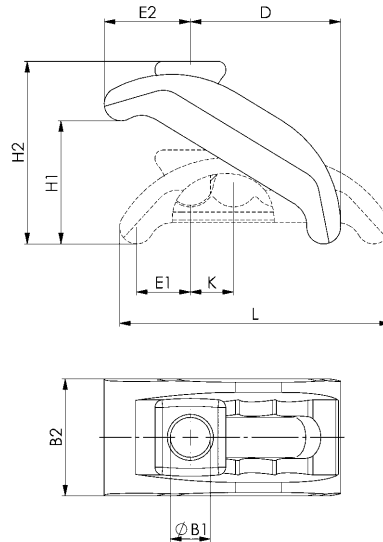
(without clamping bolt)  
continuously adjustable, tempered and galvanized.



Order no.	Size	for clamping screw	H1	B1	B2 x L	D	E1	E2	H2	K	Weight [g]
73932	13	M12	0-35	13	38x88	48	23	28	30-55	14	260
73940	18	M16	0-55	18	56x130	74	29	38	42-84	18	809
73957	22	M20	0-65	22	66x140	80	32	46	50-100	20	1253
73965	26	M24	0-75	26	76x174	100	39	52	54-111	24	1718
73973	32	M30	0-80	32	90x200	110	44	61	62-125	28	2785

#### Note:

Suitable fastening elements: DIN 787 clamping bolts, DIN 6340 washers and DIN 6330B hexagon nuts.



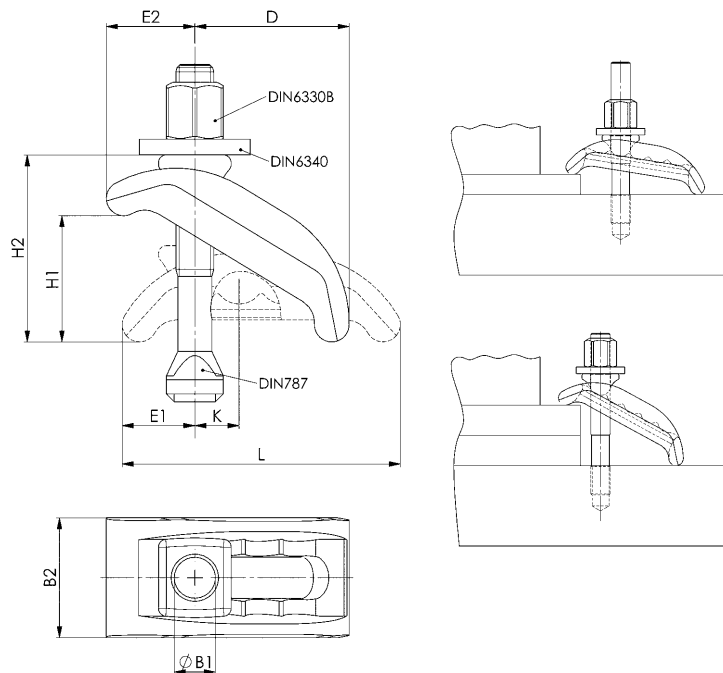
## No. 6313K

### Clamp, short, with U-piece, complete

with DIN 787, DIN 6340, DIN 6330B.  
continuously adjustable, tempered and galvanized.



Order no.	Slot	with clamping bolt	H1	B1	B2 x L	D	E1	E2	H2	K	Weight [g]
77149	12	M12x12x100	0-35	13	38x88	52	23	27	30-55	14	395
77156	14	M12x14x100	0-35	13	38x88	52	23	27	30-55	14	415
77180	16	M16x16x160	0-55	18	56x130	79	29	37	42-84	18	1130
77198	18	M16x18x160	0-55	18	56x130	79	29	37	42-84	18	1550
77206	20	M20x20x200	0-65	22	66x144	84	32	42	50-100	20	1880

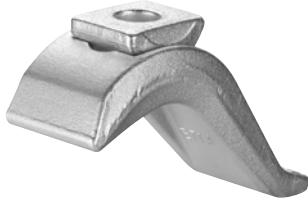


Subject to technical alterations.

## No. 6321

### Clamp, continuously adjustable

with U-piece. Steel, forged and tempered, galvanised.



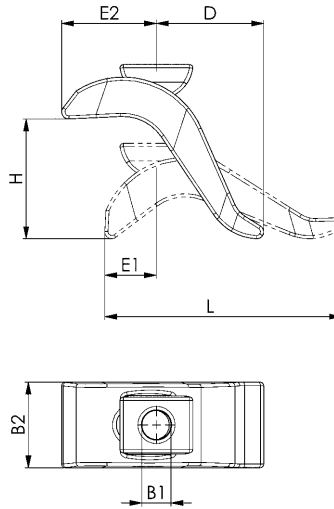
Order no.	Size	for clamping screw	H	B1	B2 x L	D	E1	E2	Weight [g]
71522	17	M12, M14, M16	0-75	17	50x140	60	30	55	900
71530	21	M20	0-85	21	60x175	80	40	70	1600

### Application:

Stepless clamp for fast coverage of several ranges of work height without additional supports. Low space requirement on machine table. Heavy-duty design and specially suitable for clamping of press- and punching tools.

### Note:

Suitable fastening elements: DIN 787 clamping bolts, DIN 6340 washers and DIN 6330B hexagon nuts.



CAD



## No. 6321

### Clamp, continuously adjustable, complete

with DIN 787, DIN 6340, DIN 6330B and U-piece. Steel, forged and tempered, galvanised.



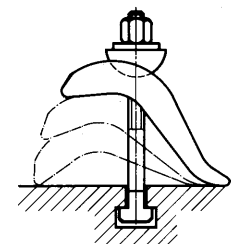
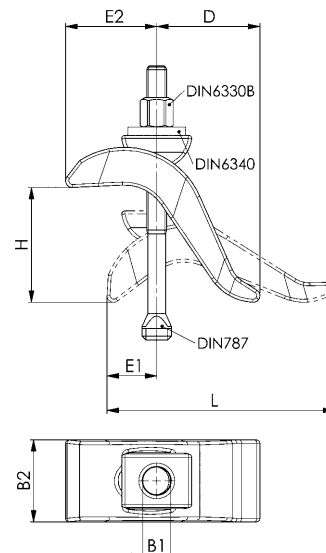
Order no.	Slot	with clamping bolt	H	B1	B2 x L	D	E1	E2	Weight [g]
74906	12	M12x12x125	0-50	17	50x140	60	30	55	1070
74914	14	M12x14x125	0-50	17	50x140	60	30	55	1080
74922	16	M16x16x160	0-75	17	50x140	60	30	55	1270
74930	18	M16x18x160	0-75	17	50x140	60	30	55	1280
74971	20	M20x20x200	0-85	21	60x175	80	40	70	2300
74963	22	M20x22x200	0-85	21	60x175	80	40	70	2370

### Application:

Stepless clamp for fast coverage of several ranges of work height without additional supports. Low space requirement on machine table. Heavy-duty design and specially suitable for clamping of press- and punching tools.

### Note:

With the clamping jaw size 17 a maximum clamping height of 75 mm can be achieved with screws for T-slots DIN 787, length 160 mm.



CAD



### Recommendations



No. 6312V,  
page 12



No. 6312VT,  
page 13

Subject to technical alterations.

## No. 6313L

### Goose-neck clamp long with saddle

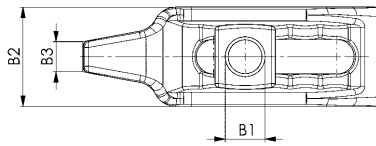
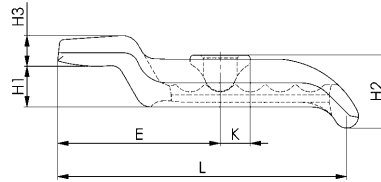
(without clamping bolt)  
continuously adjustable, tempered and galvanized.



Order no.	Size	for clamping screw	H1	B1	B2 x L	B3	E	H2	H3	K	Weight [g]
74005	22	M20	25-50	22	66x200	20	88	60	18	20	1600
74013	26	M24	30-70	26	76x232	23	97	70	22	24	2180
74021	32	M30	40-75	32	90x263	25	107	80	25	28	3530

#### Note:

Suitable fastening elements: DIN 787 clamping bolts, DIN 6340 washers and DIN 6330B hexagon nuts.



#### Recommendations



DIN 787,  
page 70



No. 63791,  
page 78



DIN 508,  
page 80



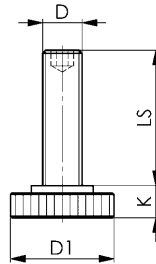
## No. 6314S

### Support screw

Hardened, strength class 8.8 Suitable for all lockable clamps.



Order no.	D x LS	D1	K	Weight [g]
73437	M10x39	30	8	52
73445	M12x49	36	10	96
74039	M12x94	36	10	145
73452	M16x55	42	13	180
74047	M16x90	42	13	230
73460	M20x69	50	16	320
74054	M20x109	50	16	400
73478	M24x87	60	20	590
74062	M24x137	60	20	820
374413	M30x180	80	24	1704



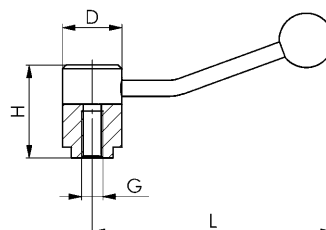
## No. 6621

### Detent clamp lever

Steel, blued. Suitable for adjustable clamps no. 6313K, 6314V, 6315V, 6316V and 6321.



Order no.	G	D	H	L	Weight [g]
74609	M12	33	48	135	360
74617	M16	40	64	158	620



Subject to technical alterations.



## No. 7000

### Step clamp

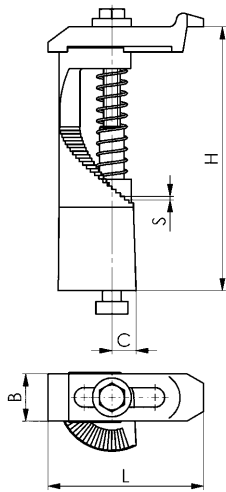
Special cast iron, screw and bushing 8.8.



Order no.	Size	Slot	B	C	H	L	S	Weight [g]
74708	12-0	12	34	14	0-45	140	0,75	700
74716	12-1	12	34	14	15-45	110	0,75	600
74724	12-2	12	34	15	30-75	112	1,25	800
74732	12-3	12	34	16	60-135	112	2,50	1200
74740	12-4	12	34	18	120-195	112	2,50	1700
74757	12-5	12	34	19	180-255	112	2,50	2200
74765	14-0	14	34	14	0-45	140	0,75	700
74773	14-1	14	34	14	15-45	112	0,75	600
74781	14-2	14	34	15	30-75	112	1,25	800
74799	14-3	14	34	16	60-135	112	2,50	1200
74807	14-4	14	34	18	120-195	112	2,50	1700
74815	14-5	14	34	19	180-255	112	2,50	2200
74823	16-0	16	50	20	0-70	160	1,25	1900
74831	16-1	16	50	20	25-70	125	1,25	1700
74849	16-2	16	50	21	50-120	125	2,50	2500
74856	16-3	16	50	21	100-220	125	3,75	3540
74864	16-4	16	50	24	200-320	125	3,75	4900
74989	18-0	18	50	20	0-70	160	1,25	1870
74997	18-1	18	50	20	25-70	125	1,25	1670
75002	18-2	18	50	21	50-120	125	2,50	2500
75010	18-3	18	50	21	100-220	125	3,75	3580
75028	18-4	18	50	24	200-320	125	3,75	4750

### Application:

Clamping unit for quick application. The spiral serration allows fast adjusting to any work height up to 320 mm. Low space requirement on machine table due to compact design.



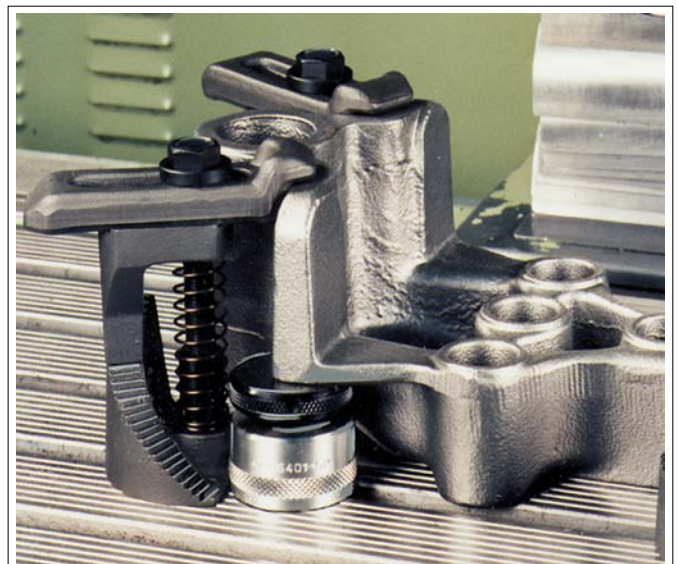
### Recommendations



No. 6312V,  
page 12



No. 6312VT,  
page 13



CAD



Subject to technical alterations.

## No. 6314AT

### Clamping unit to clamp outside of the tool table

Tempered steel. Infinitely adjustable.



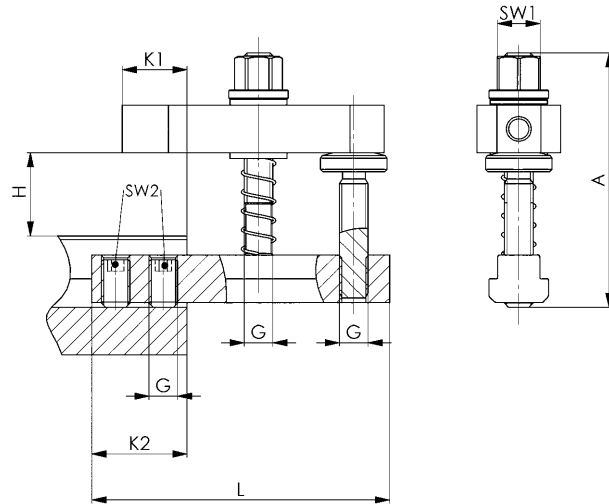
Order no.	Clamping force [kN]	Tightening torque [Nm]	Slot	G	H	Weight [g]
73999	15	70	18	M12	20-35	840
73981	25	170	22	M16	30-45	2126
79194	50	320	28	M20	40-53	5000

### Application:

Used for clamping outside of the tool table. For use when clamping large workpieces or tools that do not allow any space for clamping elements on the tool or machine table.

### Note:

For the installation dimensions of the clamp, see No. 7110GX\*\*-1. Do not use on presses!



### Dimensions:

Order no.	A	L	K1	K2	SW1	SW2
73999	105	125	27	40	18	6
73981	168	165	35	55	24	8
79194	206	255	33	85	30	10



Subject to technical alterations.

CAD

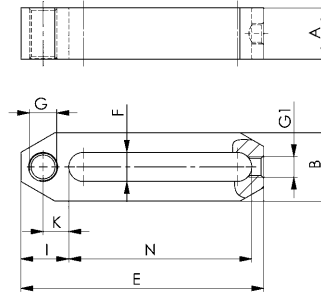


## No. 7110GX-\*\*-1

**Clamp, straight**  
tempered.



Order no.	Size	A x B	E	F	G	G1	I	K	N	Weight [g]
73528	12	20x35	110	12,5	M12	M10	21,5	11,5	82	340
73536	16	30x40	142	17,0	M16	M12	28,0	15,0	107	770
73544	20	40x50	200	21,0	M20	M16	38,0	21,0	150	1800

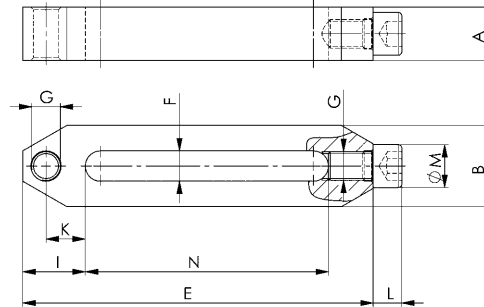


## No. 7110GLX-\*\*-1

**Clamp, straight (long)**  
with screw-in pin end tempered.



Order no.	Size	A x B	E	F	G	I	K	L	M	N	Weight [g]
73551	12	20x35,0	156	12,5	M12	30	20	12	18	106	600
73577	16	30x45,5	196	17,0	M16	35	22	16	24	136	1400
73585	20	40x60,0	298	21,0	M20	47	30	20	30	221	3900

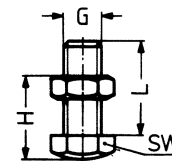


## No. 7110DX-\*\*-xM\*\*

**Set screw**  
ball-shaped, strength class 10.9.



Order no.	Size	G x L	H	SW	Weight [g]
73593	12xM12	M12x30	16-28	19	50
73601	16xM16	M16x40	20-38	24	100

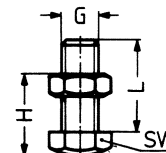


## No. 7110DMX-\*\*-xM\*\*

**Set screw**  
ball-shaped, brass, with steel nut.



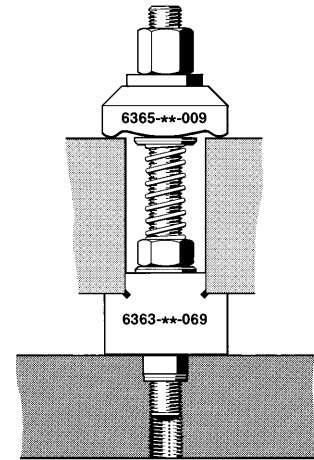
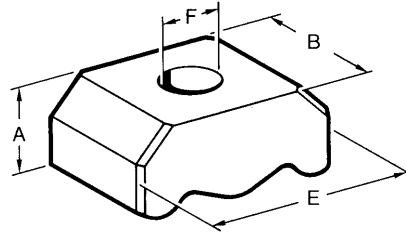
Order no.	Size	G x L	H	SW	Weight [g]
73635	12xM12	M12x30	16-28	19	50
73643	16xM16	M16x40	20-38	24	100



## No. 6365-\*\*-009

**Clamp, double**  
tempered.

Order no.	Size	A	B	E	F	Weight [g]
78626	12	20	30	48	14	192
78667	16	25	40	62	18	385



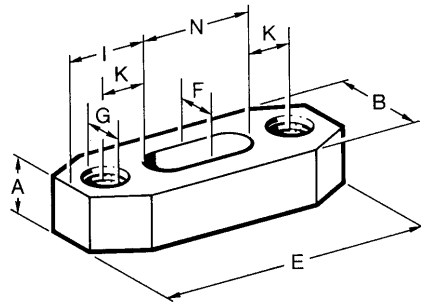
## No. 7110GD-\*\*-1

**Clamp, double (short)**  
tempered.

Order no.	Size	A x B	E	F	G	I	K	N	Weight [g]
78956	12	15x30	80	12,5	M12	23,5	13,5	33	200
78972	16	25x40	100	17	M16	29	16	42	525

### Note:

For pressure screws that fit, see accessories.



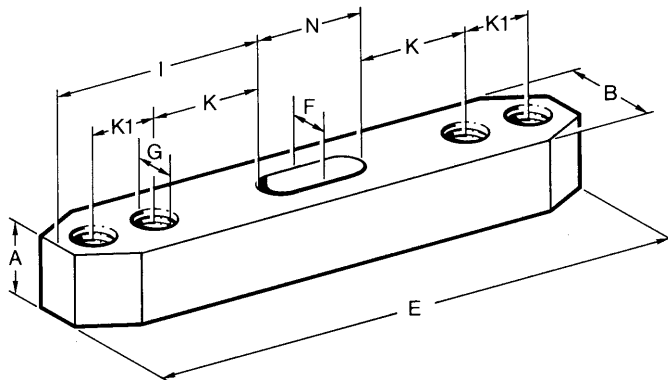
## No. 7110GD-\*\*-2

**Clamp, double (long)**  
tempered.

Order no.	Size	A x B	E	F	G	I	K	K1	N	Weight [g]
78964	12	20x30	160	12,5	M12	63,5	33,5	20	33	610
78980	16	30x40	200	17	M16	79	41	25	42	1480

### Note:

For pressure screws that fit, see accessories.



Subject to technical alterations.

## No. 7110DHX-\*\*xM\*\*

### Set screw

with flat-faced ball, adjustable, ribbed.



Order no.	Size	G x L	H	dia. K	SW1	SW2	Weight [g]
374447	8xM8	M8x25	11,6	5,5	13	13	25
73650	12xM12	M12x35	15,7	8,6	17	19	55
73668	16xM16	M16x40	20,7	10,5	24	24	115
73692	20xM20	M20x50	27,3	20,0	30	30	230

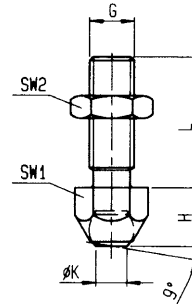
## No. 7110DIX-\*\*xM\*\*

### Set screw

with flat-faced ball, adjustable, plain.



Order no.	Size	G x L	H	dia. K	SW1	SW2	Weight [g]
374454	8xM8	M8x25	11,6	5,5	13	13	25
73684	12xM12	M12x35	15,7	8,6	17	19	55
73718	16xM16	M16x40	20,7	10,5	24	24	115
73726	20xM20	M20x50	27,3	20,0	30	30	230



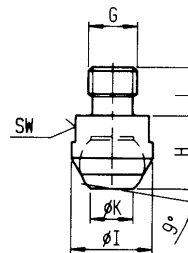
## No. 7110DKX-\*\*xM\*\*

### Set screw

with flat-faced ball.



Order no.	Size	G x L	H	dia. I	dia. K	SW	Weight [g]
374462	8xM8	M8x8	13	13	7,2	11	13
73734	12xM12	M12x12	18	20	10,5	17	43
73742	16xM16	M16x16	27	30	20,0	27	149
73759	20xM20	M20x20	35	50	34,5	41	520



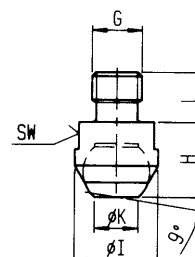
## No. 7110DFX-\*\*xM\*\*

### Set screw

with flat-faced ball, ribbed.



Order no.	Size	G x L	H	dia. I	dia. K	SW	Weight [g]
75432	8xM8	M8x8	13	13	7,2	11	13
73767	12xM12	M12x12	18	20	10,5	17	43
73775	16xM16	M16x16	27	30	20,0	27	149
73783	20xM20	M20x20	35	50	34,5	41	520





- + Fully automatic cleaning of the fixture and the complete inside space of the machine
- + Removes from employees the burden of disliked and unproductive tasks



- + Economical marking of workpieces directly in the machine tool
- + Reduces throughput times of parts in production



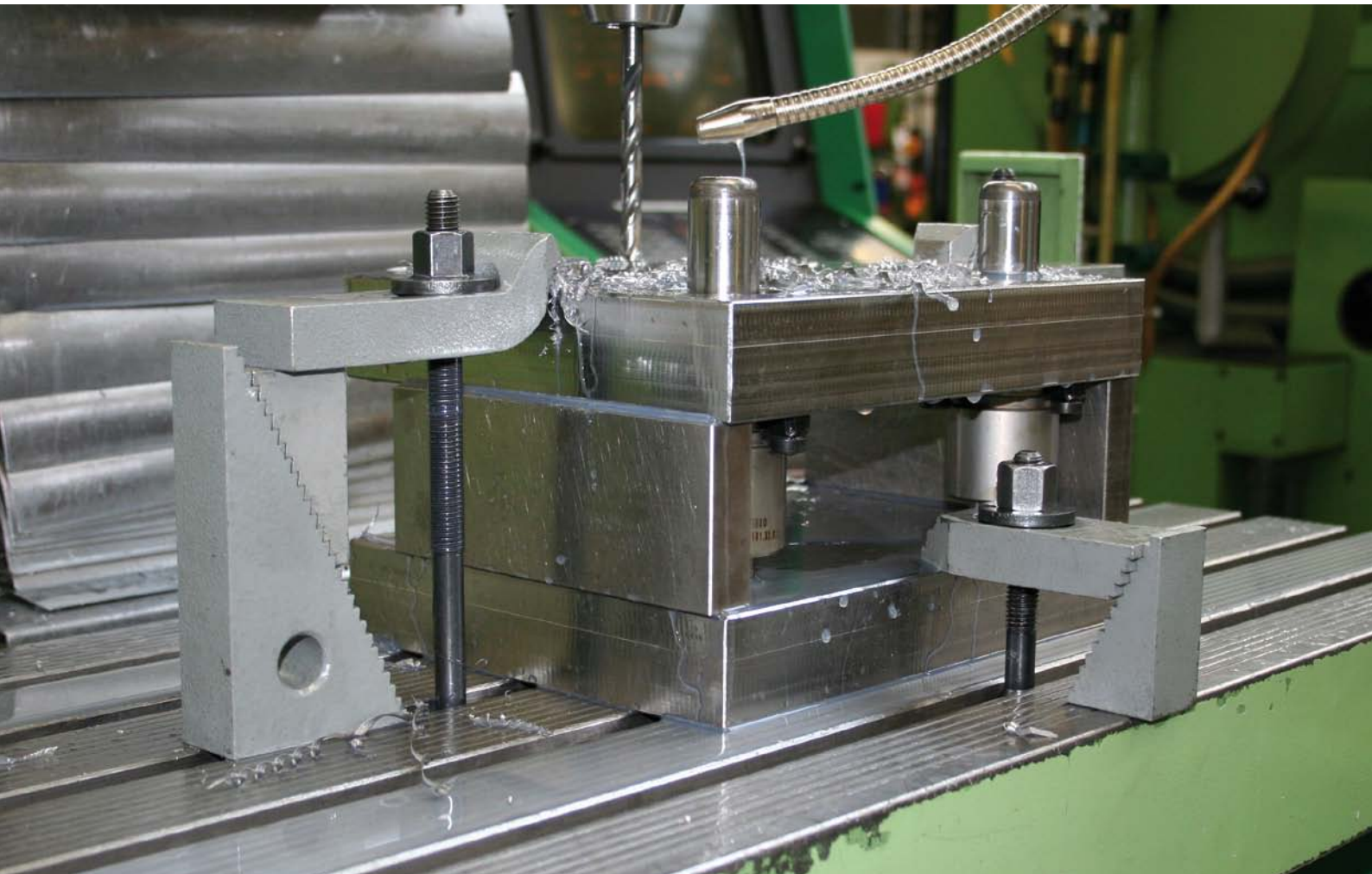
## THE MOST IMPORTANT FACTS ABOUT SUPPORT BLOCKS

- > **Material:** High quality tempering steel resp. castings.
- > **Machining:** All support blocks shown, have machined base- and contact faces. The serrated elements are precisely milled or broached. Leveled work support and safe force transmission are therefore provided.
- > **Execusion:** To DIN regulations.
- > **Finishing:** All support blocks are abrasionproof quality varnished.

The following pages contain suitable support blocks, finely graduated or infinitely adjustable, for any application. Support heights from 12.5 to 340 mm are achievable with all support blocks.

For clamping heights over 340 mm, we recommend our screw jacks on pages 53 to 55.

- > Conventional workpiece clamping for drilling and pinning a fixture.



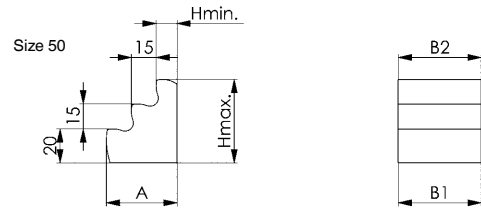
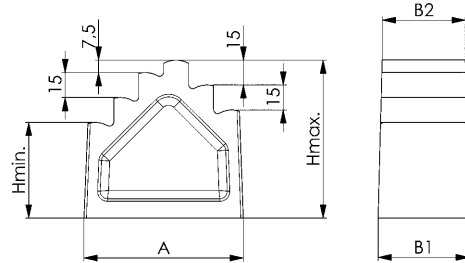
## DIN 6318

### Step blocks

with step increments of 7.5 mm each. Machine casting, varnished, base and step faces milled.



Order no.	Size	H min.	H max.	A	B1	B2	Weight [g]
71365	50	12,5	50	42,5	50	50	500
71373	95	57,5	95	95,0	55	50	1600
71381	140	102,5	140	100,0	60	50	2000
71399	185	147,5	185	105,0	65	50	2900
71407	230	192,5	230	110,0	70	50	3600
71415	275	237,5	275	115,0	75	50	4300
71423	320	282,5	320	120,0	80	50	5200



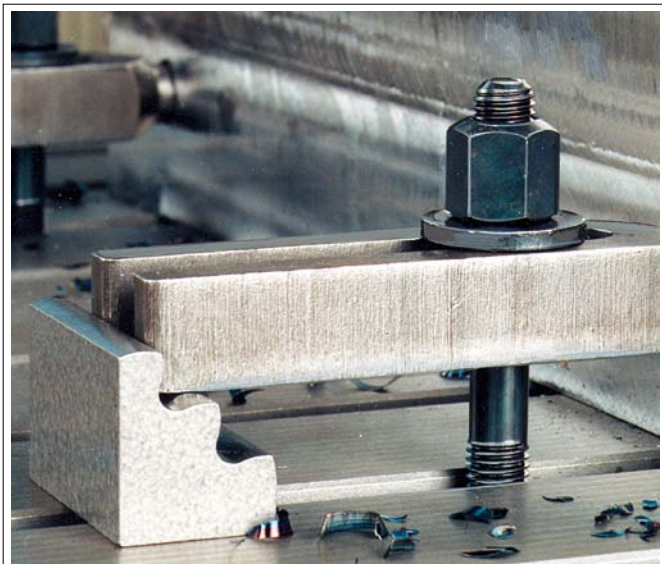
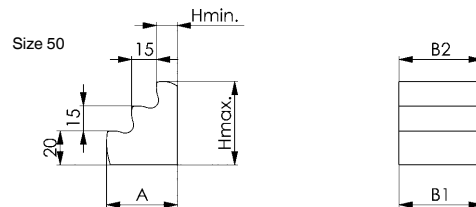
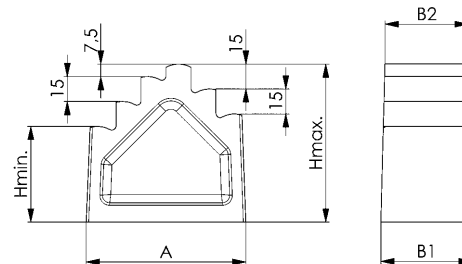
## No. 6318B

### Step blocks, wide

with step increments of 7.5 mm each. Machine casting, varnished, base and step faces milled.



Order no.	Size	H min.	H max.	A	B1	B2	Weight [g]
71480	50	12,5	50	42,5	80	80	800
71498	95	57,5	95	95,0	85	80	2300
71506	140	102,5	140	100,0	90	80	3450



Subject to technical alterations.



## No. 6500E

### Universal step blocks

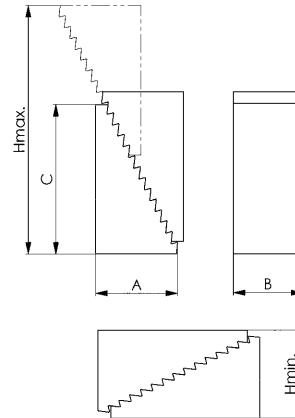
Step increments: vertical 4.65 mm, horizontal 2.3 mm.  
Tempering steel, varnished.



Order no.	Size	H min.	H max.	A	B	C	Weight [g]
73296	1	23	51	19,0	30	33	90
73304	2	39	107	35,5	30	66	300
73312	3	71	208	68,0	30	131	1050

### Application:

For use in pairs with all clamps and single use with clamp no. 6314Z.



### Recommendations



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page 21



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CAD



## No. 6500H

### Universal step block set

in solid wooden case with lid.  
Tempering steel, varnished.



Order no.	Contents	H min.	H max.	Case L x B x H	Weight [Kg]
73346	8x6500E-1, 8x6500E-2, 4x6500E-3	23	208	280x155x40	8,4

### Application:

For use in pairs with all clamps and single use with clamp no. 6314Z.



Subject to technical alterations.

## No. 6501

### Step block

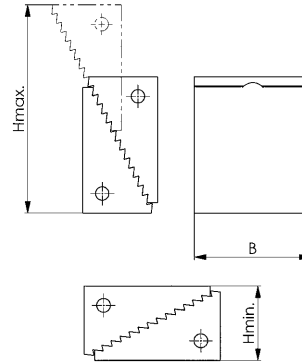
contact face 60 mm wide. With link spring.  
 Step increments: vertical 4.65 mm, horizontal 2.3 mm.  
 Tempering steel, varnished.



Order no.	Size	H min.	H max.	B	Weight [g]
73353	2	37	107	60	1000

#### Note:

The two parts of this AMF-support blocks are linked with a spring for easy handling.



## No. 6501M

### Support block with magnet

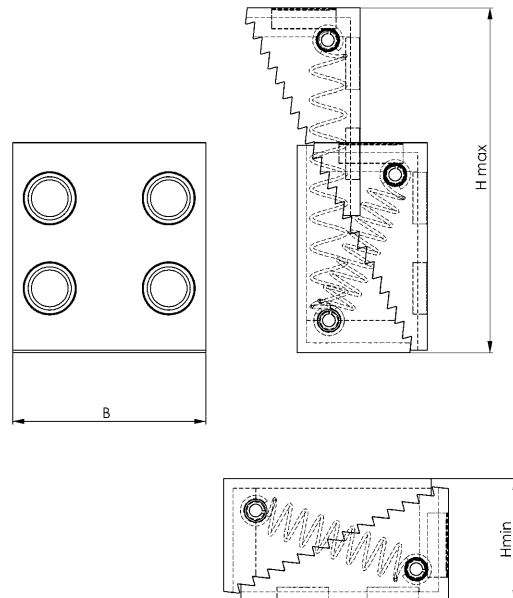
Mounting surface 60 mm wide, with connecting spring.  
 Step increments: vertical 4.65 mm, horizontal 2.3 mm.  
 Tempered steel, burnished.



Order no.	Size	H min.	H max.	B	Weight [g]
373969	2	37	107	60	980

#### Note:

The two parts of this AMF support block are connected by a spring for ease of handling.  
 Holding force 4 magnets = 380 N  
 Holding force 2 magnets = 280 N

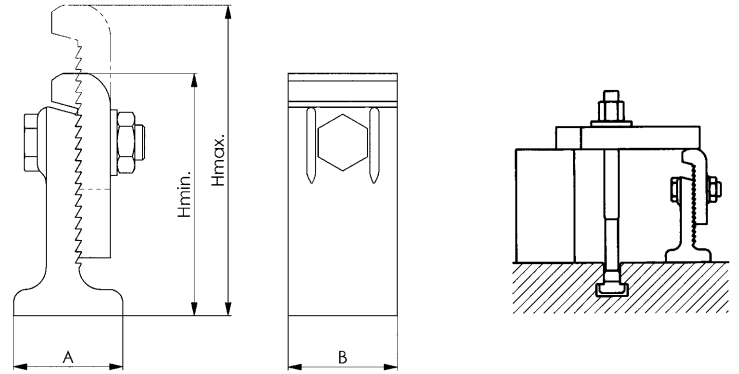


## No. 6510

### Serrated heel block

(serrated jacks). Step increments: 5.2 mm. Malleable casting, varnished. Base mill finished.

Order no.	Size	H min.	H max.	A	B	Clamping force [kN]	Weight [g]
73379	2	111	147	50	50	40	1225
73387	3	155	223	60	60	60	2607
73395	4	220	340	80	80	90	6028



## DIN 6326

### Support blocks for continuous adjustment, combination

with spiral gearing. Tempering steel, varnished.

Order no.	Combination	H min.	H max.	Lower part	H1	Upper part	H2	Weight [g]
71969	AK	25	45	A	42	K	24	1050
71977	AG	45	65	A	42	G	44	1350
71985	BK	65	85	B	82	K	24	2500
71993	BG	85	105	B	82	G	44	2800
72009	CK	105	125	C	122	K	24	4000
72017	CG	125	145	C	122	G	44	4300
72025	AKG	25	65	A	42	K / G	24 / 44	1550
72033	BKG	65	105	B	82	K / G	24 / 44	3000
72041	CKG	105	145	C	122	K / G	24 / 44	4500

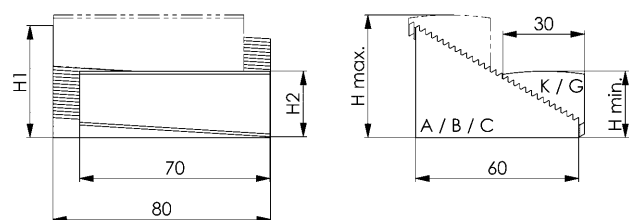
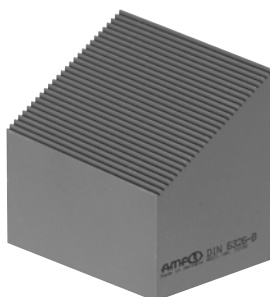


## DIN 6326

### Support blocks for continuous adjustment, single

with spiral gearing. Tempering steel, varnished.

Order no.	Single parts	H1	H2	Weight [g]
72090	A	42	-	850
72108	B	82	-	2300
72116	C	122	-	3800
72124	K	-	24	200
72132	G	-	44	500



Subject to technical alterations.



- + Outstanding price-performance ratio
- + Drastically reduced tooling time
- + Immediate improvement of productivity
- + Repeat accuracy < 5µm
- + Stainless steel
- + Form fit



Subject to technical alterations.

## THE MOST IMPORTANT FACTS ABOUT SETTING ELEMENTS

Developed by AMF and proven in service for decades, these screw and aligning jacks offer a broad range of applications. Due to their robust construction, these screw jacks function securely and precisely, with stepless adjustment even under heavy loads.

### APPLICATIONS AND COMBINATIONS:

- > Safe and reliable clamp supports for heights from 38 to 1250 mm.
- > Accurate and safe supporting and setting of any workpiece in various levels and heights.
- > Aluminium screw jacks for delicate machine tables, surface plates and plane tables.
- > Magnetic screw jacks for horizontal and vertical supporting and setting.



## No. 6415

### Height setting screw jack

with 2 locating pins DIN 6325 (12x50 and 12x80). Centring hole dia. 12 mm. Tempering steel, blued. Spindle: M30x1.5 metric fine thread with end stopbody. Bearing insert turns on pressed-in plain bearing bush.



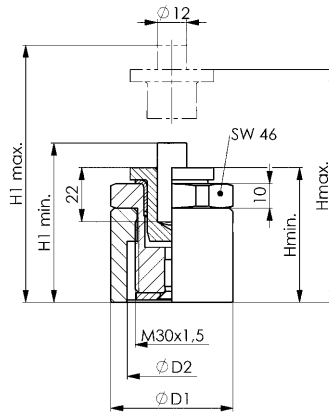
Order no.	Size	H min.	H max.	D1	D2	with location pin 12x50 H1min.-H1max.	with location pin 12x80 H1min.-H1max.	F max. [kN]	Weight [g]
86504	75	55	75	50	36	83-103	113-133	30	680
86512	115	75	115	50	36	103-143	133-173	30	880

### Application:

The height setting screw jack can be used without locating pins or with pads no. 6440 and no. 6441. With centering pad no. 6242 combinations with all AMF-screw jacks are possible. They allow sensitive adjusting up to height of 1370 mm. A bearing insert prevents the workpiece from being turned while the jack is adjusted.

### Note:

Suitable pads are no. 6440, 6441, 6442. Suitable base is no. 6442.



### Recommendations



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No. 6441,  
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No. 6442,  
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## No. 6416

### Height setting screw jack with magnetic base

with 2 locating pins DIN 6325 (12x50 and 12x80). Centring hole dia. 12 mm. Tempering steel, blued. Spindle: M30x1.5 metric fine thread with end stopbody. Bearing insert turns on pressed-in plain bearing bush.



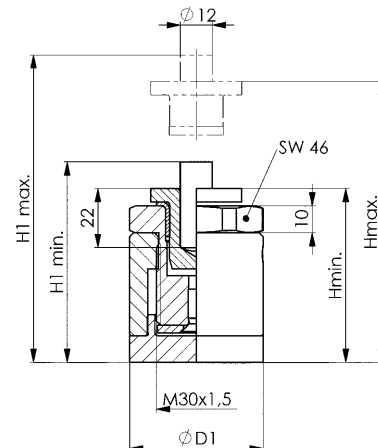
Order no.	Size	H min.	H max.	D1	with location pin 12x50 H1min.-H1max.	with location pin 12x80 H1min.-H1max.	F max. [kN]	Weight [g]
86520	85	65	85	50	93-113	123-143	30	800
86538	125	85	125	50	113-153	143-183	30	1000

### Application:

The height setting screw jack can be used without locating pins or with pads no. 6440 and no. 6441. With centering pad no. 6242 combinations with all AMF-screw jacks are possible. They allow sensitive adjusting up to height of 1370 mm. A bearing insert prevents the workpiece from being turned while the jack is adjusted.

### Note:

Suitable pads are no. 6440, 6441, 6442.



### Recommendations



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No. 6315GNG,  
page 22



Subject to technical alterations.

## No. 6420

### Height setting screw jack with pivotable ball

Steel tempered, burnished. Ball made of hardened steel.



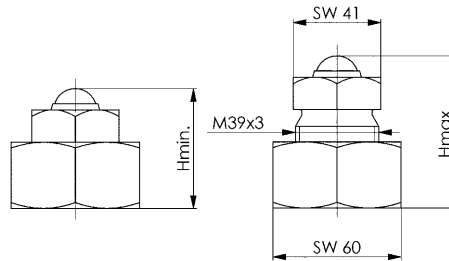
Order no.	Size	H min.	H max.	F max. [kN]	Weight [g]
72546	70	56	70	30	950

#### Application:

This element with its punctual support is particularly useful in the support and alignment of free-form surfaces e.g. of workpieces which are made of cast iron and forging-grade steels. The precision of alignment is approx. 0.1 mm.

#### Advantage:

- The pivotable ball minimizes the friction on the support and reduces the required operating forces.
- The use of a point-like support prevents the transmission of the torsional force created by the movement of the spindle. The position of the workpiece remains unchanged.
- The simple and rugged construction provides for a long lasting service life.



#### Recommendations



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page 46

## No. 6400

### Screw jack with flat support

Centring hole dia. 12 mm. Spindle: Trapezoidal thread, self-locking with end stopbody. Tempering steel, varnished.



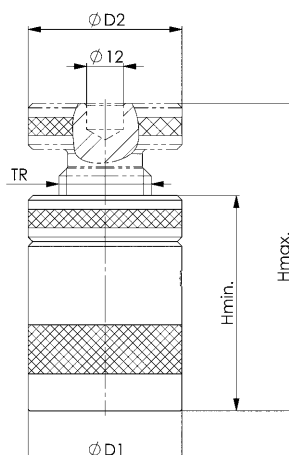
Order no.	Size	H min.	H max.	TR	D1	D2	F max. [kN]	Weight [g]
72397	50	38	50	20x 4	31	31	25	190
72389	52	42	52	30x 4	50	50	100	550
72405	70	50	70	30x 4	50	50	100	620
72413	100	70	100	30x 4	50	50	100	900
72421	140	100	140	40x 7	68	68	120	2760
72439	210	140	210	50x 8	80	70	170	4600
72447	300	190	300	65x10	100	80	350	9000
72496	200	140	200	65x10	100	80	350	6900
72504	280	190	280	80x10	140	110	600	19000

#### Advantage:

Higher support forces through material optimisation with sizes 50 - 140.

#### Note:

Size 50 without centring hole  $\varnothing$  12 mm. The sizes 52-100 are suitable for clamps with a slot width of approx. 14-22 mm. The screw jack no. 6430 represents a useful addition for large clamping heights. The sizes 140-300 are suitable for clamps with a slot width of approx. 20-40 mm. For these, the screw jacks no. 6435S represent a useful addition for large clamping heights. When using clamps DIN 6315B, 6315C and 6315GN from 26 mm slot width, we recommend, by way of precaution, fixing cap no. 6443. The sizes 200-280 are intended for supporting large workpieces. Suitable attachments for screw jack sizes 52-280 are nos. 6440, 6441, 6442, 6443 and 6445. The suitable support for sizes 52-100 is no. 6442.



#### Recommendations



No. 6440,  
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No. 6441,  
page 56

Subject to technical alterations.

## No. 6400M

### Screw jack with flat support and magnetic base

Centring hole dia. 12 mm. Spindle: Self-locking trapezoidal thread with final stop. Painted tempered steel.



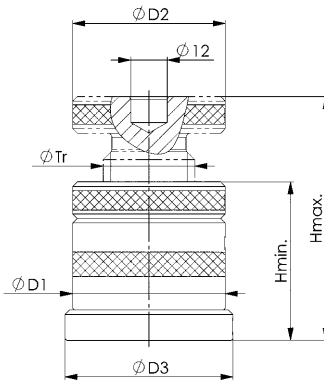
Order no.	Size	H min.	H max.	TR	D1	D2	D3	F max. [kN]	Weight [g]
73320	62	52	62	30x4	50	50	55	100	700
73361	80	60	80	30x4	50	50	55	100	770
73403	110	80	110	30x4	50	50	55	100	1050

#### Advantage:

Higher support forces through material optimisation with sizes 62 - 110.

#### Note:

AMF-magnetic screw jacks are designed for horizontal and vertical applications. The permanent magnet ensures a lasting and precise positioning of workpiece on vertical faces. The screw jacks are suitable for clamps with a slot width of approx. 14-22 mm. When using clamps DIN 6415B, 6315C and 6315GN from 26 mm slot width, we recommend, by way of precaution, fixing cap number no. 6443. Suitable caps for screw jack no. 6400M are nos. 6440, 6441, 6443 and 6445. The suitable support for the dismantled magnetic base is no. 6442.



#### Recommendations



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No. 6443, page 57



## No. 6400G

### Screw jack with flat support and thread

Thread for fastening. Centring hole M12. Spindle: Trapezoidal thread, self-locking with end stopbody. Tempering steel, varnished.



Order no.	Size	H min.	H max.	TR	D1	D2	F max. [kN]	Weight [g]
376194	52	42	52	30x4	50	50	100	550
376210	70	50	70	30x4	50	50	100	620
376236	100	70	100	30x4	50	50	100	948

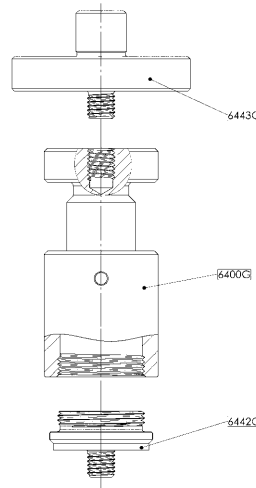
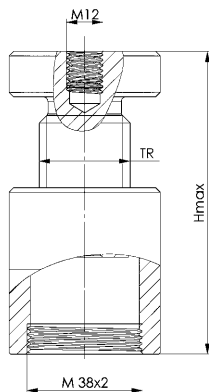
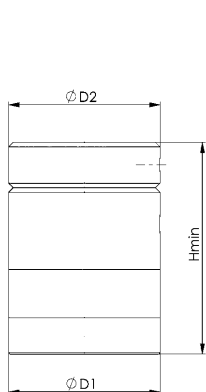
#### Application:

Especially suited for use on vertical turning and boring machines to achieve optimal clamping heights and absorb centrifugal forces.

#### Advantage:

Screw jack can be screwed onto the heavy-duty screw jack no. 6435SG to guarantee optimum security against the occurrence of centrifugal forces. Fixing cap no. 6443G or a screw for retaining a clamp can be incorporated into the screw jack top.

Higher support forces through material optimisation with sizes 52 - 100.



#### Recommendations



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Subject to technical alterations.



## No. 6401

### Aluminium screw jack

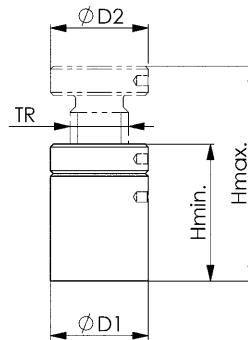
Centring hole dia. 12 mm. Spindle: Tempering steel, blued, Trapezoidal thread, self-locking with end stopbody. Base: Aluminium 400 N/mm<sup>2</sup> tensile strength.



Order no.	Size	H min.	H max.	TR	D1	D2	F max. [kN]	Weight [g]
75770	52	42	52	30x4	50	50	30	370
75788	70	50	70	30x4	50	50	30	430
75796	100	70	100	30x4	50	50	30	600

#### Note:

Safeguards machine tables against damage (swarf do not penetrate into table face but into alu-base). Useful for all machine tool tables, surface plates and plane tables with precision faces. For larger clamping heights use centering pad no. 6442 and screw jacks no. 6400. Suitable pads are no. 6440, 6441, 6442, 6443/14 and 6445. Suitable base is no. 6442. Do not adjust screw jack under load!



#### Recommendations



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## No. 6405

### Aluminium screw jack with magnetic base

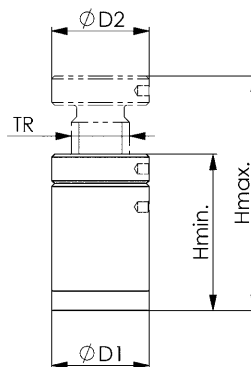
Centring hole dia. 12 mm. Spindle: Tempering steel, blued. Trapezoidal thread, self-locking with end stopbody. Base: Aluminium 400 N/mm<sup>2</sup> tensile strength.



Order no.	Size	H min.	H max.	TR	D1	D2	F max. [kN]	Weight [g]
75804	62	52	62	30x4	50	50	30	380
75812	80	60	80	30x4	50	50	30	550
75820	110	80	110	30x4	50	50	30	710

#### Note:

AMF-magnetic screw jacks are designed for horizontal and vertical applications. The permanent magnet ensures a lasting and precise positioning of workpiece on vertical faces. For larger clamping heights use centering pad no. 6442 and screw jacks no. 6400. Suitable pads are no. 6440, 6441, 6442, 6443/14 and 6445. Do not adjust screw jack under load!



## No. 6406

### Aluminium screw jack with swarf protection

Scraper ring protects screw jack spindle against chips. Centring hole dia. 12 mm. Spindle tempering steel, blued. Trapezoidal thread, self-locking with end stopbody.

Composed of:

- screw jack
- Alu-base (size 10) or magnetic base (size 20).

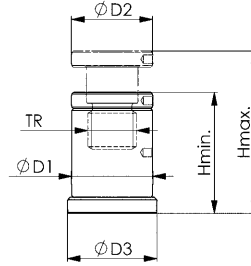
Order no.	Size	H min.	H max.	TR	D1	D2	D3	F max. [kN]	Weight [g]
72850	10	75	88	30x4	50	50	50	30*	630
72868	20	75	88	30x4	50	50	55	30*	720

\* ensured to max. 350 mm total height, danger of buckling for larger figures!

#### Note:

Suitable pads are no. 6440, 6441 and 6445.

Do not adjust screw jack under load!



#### Recommendations



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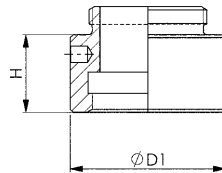
CAD



## No. 6406A

### Alu-intermediate ring

for additional height increase.



Order no.	Size	H	D1	Weight [g]
72876	12	12,5	50	38
72884	25	25,0	50	76
72926	50	50,0	50	165

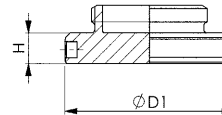
CAD



## No. 6406M

### Magnetic base

for screw jacks.



Order no.	H	D1	Weight [g]
72157	10	55	210

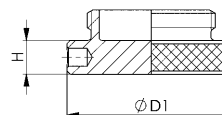
CAD



## No. 6406AF

### Aluminium base

For screw jacks



Order no.	H	D1	Weight [g]
557186	10	50	60

**NEW!**

Subject to technical alterations.

## No. 6406-125

### Aluminium screw jack with swarf protection

Scraper ring protects screw jack spindle against chips. Centring hole dia. 12 mm. Spindle tempering steel, blued. Trapezoidal thread, self-locking with end stopbody.

Composed of:

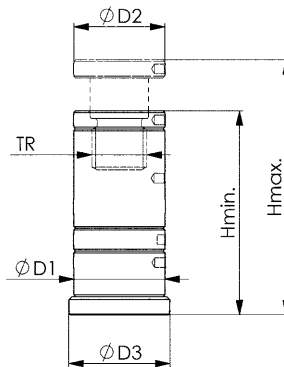
- screw jack
- intermediate ring 12.5 mm
- intermediate ring 25 mm and
- Alu- and magnetic base.

Order no.	Size	H min.	H max.	TR	D1	D2	D3	F max. [kN]	Weight [g]
72371	125	75	125	30x4	50	50	55	30*	920

\* ensured to max. 350 mm total height, danger of buckling for larger figures!

#### Note:

Suitable pads are no. 6440, 6441 and 6445.  
Do not adjust screw jack under load!



#### Recommendations



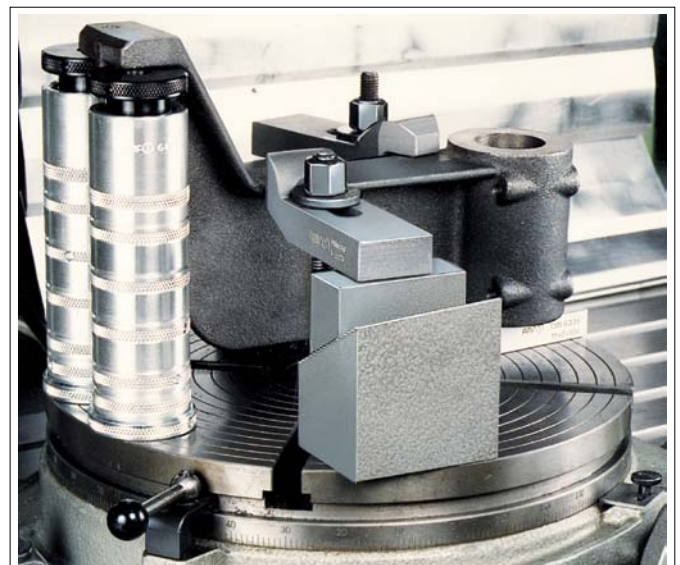
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Subject to technical alterations.



## No. 6460

### Wedge block „Herkules“ height wedge

Centering hole dia. 12 mm. Spherical graphite cast iron and steel tempered and burnished. Wedge faces precision machined. Complete with one ball-pad no. 6440.

Order no.	Size	H min.	H max.	B1	B2	L	SW	H/U* [mm]	F max. [kN]	Weight [g]
72777	63	50	63	40	40	63	13	0,86	40	1300
72785	125	100	125	115	60	125	24	1,16	100	8600
72793	190	170	190	145	80	175	36	2,02	250	23750

\*H/U= height adjustment per single turn.

#### Application:

The fine-machined wedge surfaces permits a smooth, precise adjustment to less than 1/10 mm. The double wedge effect produces a large stroke and precise vertical movement with no lateral shift. The height wedge proves its worth with heavy castings or forgings on large tool machines. The AMF „Herkules“ whipstock has an additional centering hole in the floor of the base area. This enables the whipstock to be mounted on „heavy screw jacks“. A DIN 6325 12x30 cylinder pin is required for this purpose.

#### Note:

Suitable pads are no. 6440, 6441 and 6442.



#### Recommendations



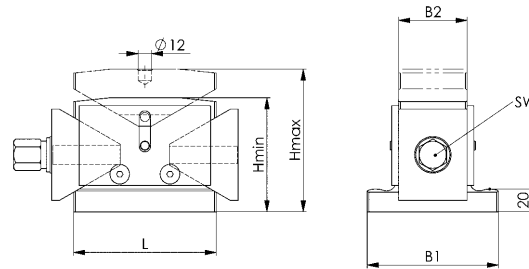
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No. 6444,  
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## No. 6465

### Precision wedge block

Centering hole  $\varnothing$  12 mm. Case-hardened steel and fine-machined wedge surfaces. A spherical attachment no. 6440 is included with every precision whipstock.

Order no.	Size	H min.	H max.	H/U* [mm]	F max. [kN]	SW [mm]	Weight [Kg]
375592	55	50	55	0,71	40	22	2,8
375618	85	77	85	0,71	250	36	11,5

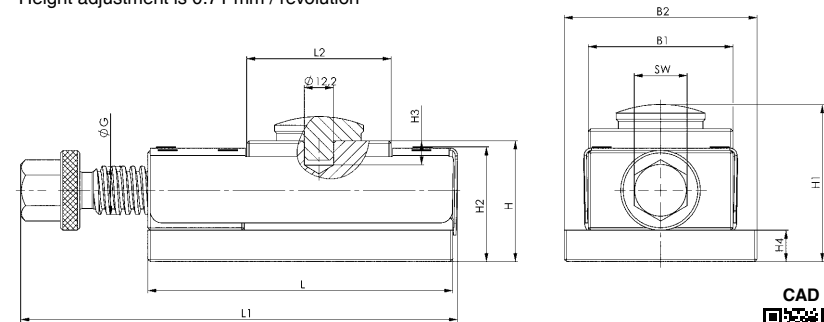
\*H/U= height adjustment per single turn.

#### Application:

- The fine-machined wedge surfaces permits a smooth, precise adjustment to less than 1/10 mm.
- Operation can be via an open-ended spanner - hence ensuring enhanced safety and ease of handling due to the large adjusting forces.
- The double wedge effect produces a precise vertical movement with no lateral slide.
- The flat design of the precision height wedge enables higher safety properties to be realised when aligning heavy and large components.
- The precision whipstock has an additional centering hole in the floor of the base surface. (suitable for a pin ISO 8734 - 12 mm diameter)

#### Note:

- Suitable caps for the precision whipstock are nos. 6440, 6441 and 6442
- Precision whipstock can be adjusted under load
- Height adjustment is 0.71 mm / revolution



#### Recommendations



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No. 6443,  
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#### Dimensions:

Order no.	B1	B2	G	H1	H2	H3	H4	L	L1	L2
375592	60	80	20	60-65	47,5	10	13	128	150-179	60
375618	100	140	30	87-95	74,0	20	15	210	242-287	81

Subject to technical alterations.

## No. 6430S

### Atlas screw jack with counter nut

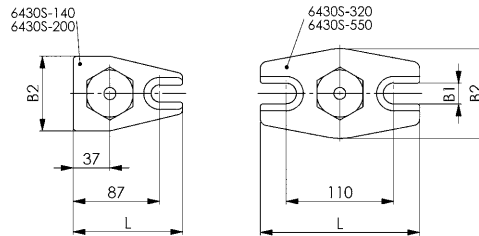
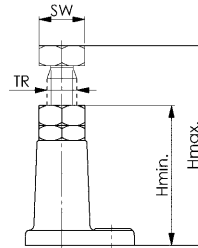
Centring hole dia. 12 mm. Spindle complete: tempering steel with trapezoidal thread. Spindle head blued. Housing: cast iron, varnished.



Order no.	Size	H min.	H max.	TR	B1	B2	L	SW	F max. [kN]	Weight [Kg]
72553	140	100	140	30x6	18	75	110	46	60	1,8
72561	200	140	200	30x6	18	75	110	46	60	2,2
72579	320	200	320	30x6	22	90	160	46	40	3,8
72587	550	320	550	30x6	22	90	160	46	25	4,9

#### Note:

When using clamps DIN 6315B, 6315C and no. 6315GN with slot-sizes above 26 mm we recommend the use of locating pad no. 6443 for safety. Suitable pads are no. 6440, 6441, 6442, 6443 and 6445. Do not adjust screw jack under load!



#### Recommendations



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## No. 6435S

### Heavy screw jack

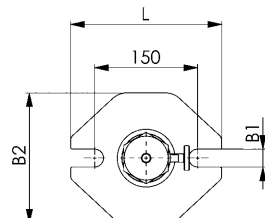
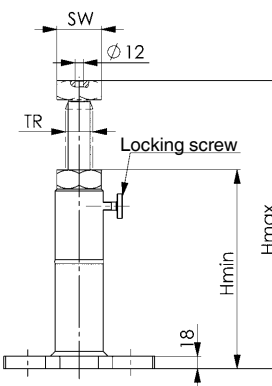
with brass locking screw. Centring hole dia. 12 mm. Spindle complete: tempering steel with trapezoidal thread. Spindle head blued. Housing: tempering steel, varnished.



Order no.	Size	H min.	H max.	TR	B1	B2	L	SW	F max. [kN]	Weight [Kg]
72637	300	200	300	40x7	26	190	220	65	80	8,0
72645	460	290	470	40x7	26	190	220	65	60	12,0
72652	750	430	750	40x7	26	190	220	65	50	12,6
72660	1250	710	1250	40x7	26	190	220	65	40	16,5

#### Note:

When using clamps DIN 6315B, 6315C and no. 6315GN with slot-sizes above 26 mm we recommend the use of locating pad no. 6443 for safety. Suitable pads are no. 6440, 6441, 6442, 6443 and 6445. Do not adjust screw jack under load!



#### Recommendations



No. 6440, page 56



No. 6441, page 56



No. 6445, page 57



Subject to technical alterations.

## No. 6438S

### Screw jack, quick-action

stepless adjustment with brass locking screw. Centring hole dia. 12 mm. Spindle complete: tempering steel, with trapezoidal thread. Spindle head blued. Housing: tempering steel, varnished.

Order no.	Size	H min.	H max.	TR	B1	B2	D	L	SW	F max. [kN]	Weight [Kg]
75705	450	320	450	40x7	26	190	90	220	65	50	11,5
75713	710	450	710	40x7	26	190	90	220	65	40	13,7
75721	1250	710	1250	40x7	26	190	90	220	65	30	18,3

### Application:

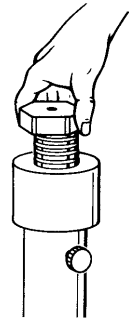
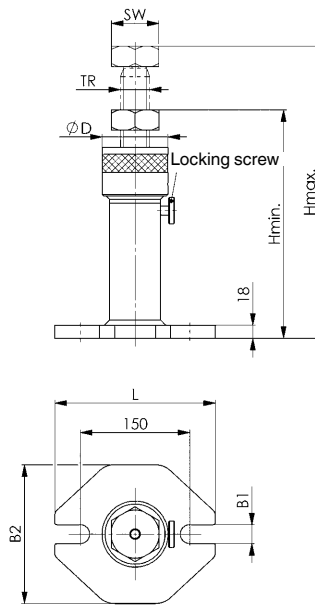
This screw jack allows for very fast pre-setting following with stepless adjusting for the whole height range. Suitable pads are no. 6440, 6441, 6442, 6443 and 6445.

### Note:

Important note for height adjustment:

- Hold spindle, max. 6 kg
- release locking screw
- turn spindle
- adjust to required height

Do not adjust screw jack under load!



### Recommendations



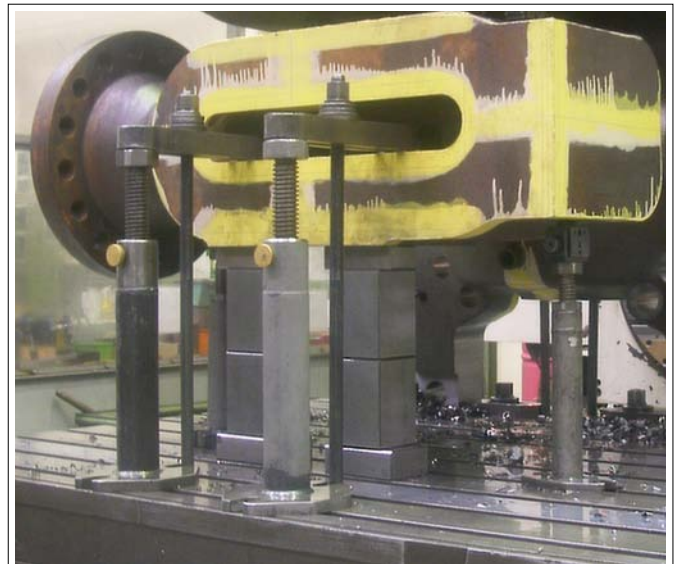
No. 6440,  
page 56



No. 6441,  
page 56



No. 6442,  
page 56



Subject to technical alterations.

## No. 6435SG

### Heavy screw jack

with brass locking screw. Centring hole M12 mm. Spindle compl.: tempering steel with trapezoidal thread. Spindle head blued. Housing: tempering steel, varnished.

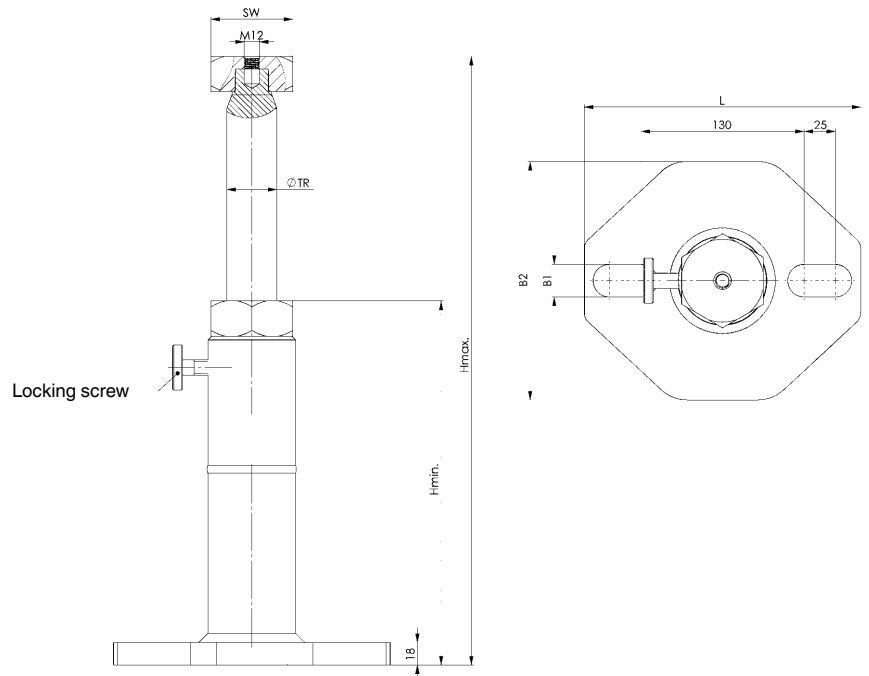
Order no.	Size	H min.	H max.	TR	B1	B2	L	SW	F max. [kN]	Weight [Kg]
376251	300	200	300	40x7	26	190	220	65	80	8,0
376277	460	290	470	40x7	26	190	220	65	60	12,0
376293	750	430	750	40x7	26	190	220	65	50	12,6
376319	1250	710	1250	40x7	26	190	220	65	40	16,5

### Advantage:

- Base plate with closed elongated holes for use on vertical turning and boring machines
- Thread in the head's mounting surface for fixing the clamping elements used with centrifugal forces

### Note:

When using clamps no. 6315GNG with slot-sizes above 26 mm we recommend the use of locating pad no. 6443G for safety. Suitable pads are no. 6442G and 6443G. Do not adjust screw jack under load!



### Recommendations



No. 6442G,  
page 58



No. 6443G,  
page 58



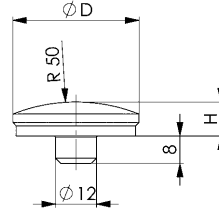
CAD

## No. 6440

### Ball-pad

Steel tempered, burnished.

Order no.	H	D	Weight [g]
72710	10	37	90



CAD

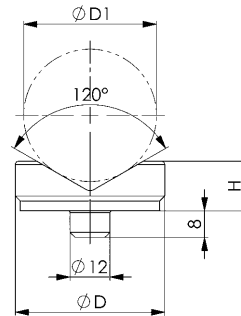


## No. 6441

### Vee-pad

Steel tempered, burnished.

Order no.	Size	H	D	D1 min.	D1 max.	Weight [g]
72728	45	15	45	10	50	120
72769	65	30	65	22	100	545



CAD

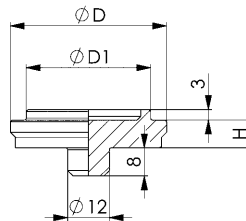


## No. 6442

### Centering-pad

Steel tempered, burnished.

Order no.	H	D	D1	Weight [g]
72736	8	45	35,8	120



CAD



Subject to technical alterations.

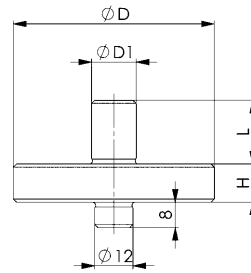


## No. 6443

### Locating-pad

for forked clamps. Steel tempered, burnished.

Order no.	Size	H	D	D1	L	Weight [g]
72751	14	12	63	14	15	310
72744	25	15	78	25	25	650

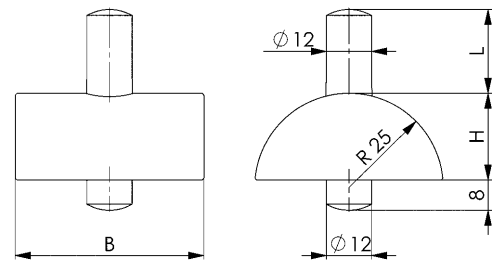


## No. 6444

### Locating-pad

with cylindrical face. Steel tempered and burnished.

Order no.	H	B	L	Weight [g]
72454	23	50	19	370



## No. 6445

### Support with pivotable ball

Steel tempered, burnished. Ball made of hardened steel.

Order no.	H	D	F max. [kN]	Weight [g]
72819	25	45	30	240

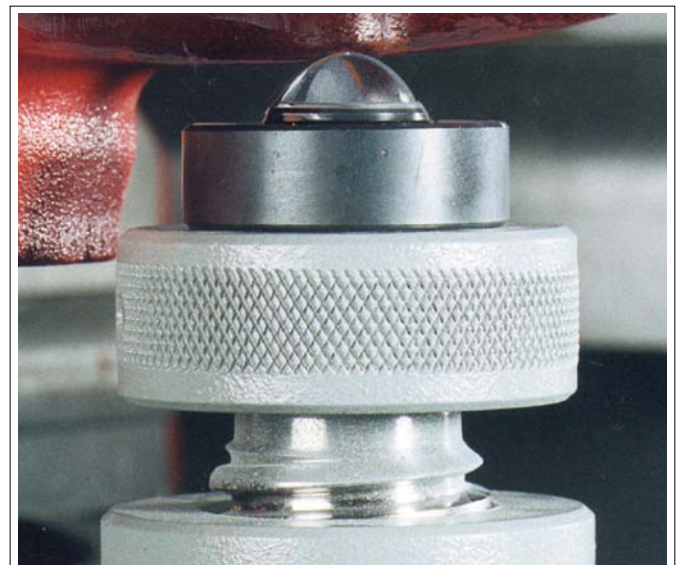
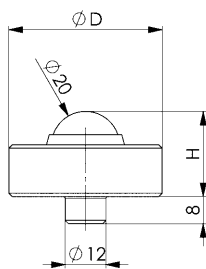


### Application:

This rugged element was designed for the supporting and alignment of workpieces made of cast iron and forging-grade steels. Designed for use with AMF-screw jacks.

### Advantage:

- The pivotable ball minimizes the friction on the support and reduces the required operating forces.
- The use of a point-like support prevents the transmission of the torsional force created by the movement of the spindle. The position of the workpiece remains unchanged.
- The simple and rugged construction provides for a long lasting service life.



Subject to technical alterations.

## No. 6442G

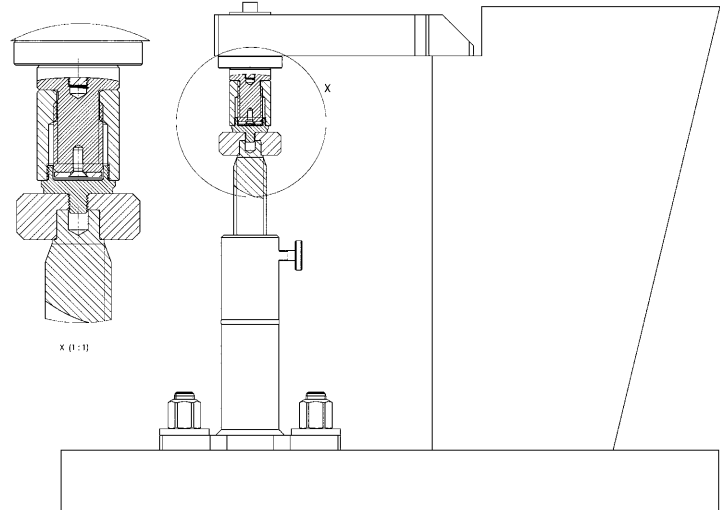
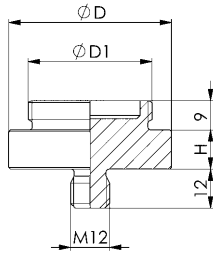
### Centring plate with thread

Steel tempered, burnished.

Order no.	H	D	D1	Weight [g]
376335	12	50	M38x2	240

#### Advantage:

Centring plate can be screwed onto screw jacks. Safety with vertical turning and boring machines! The screw jacks no. 6400G can be screwed onto the centring plate.



## No. 6443G

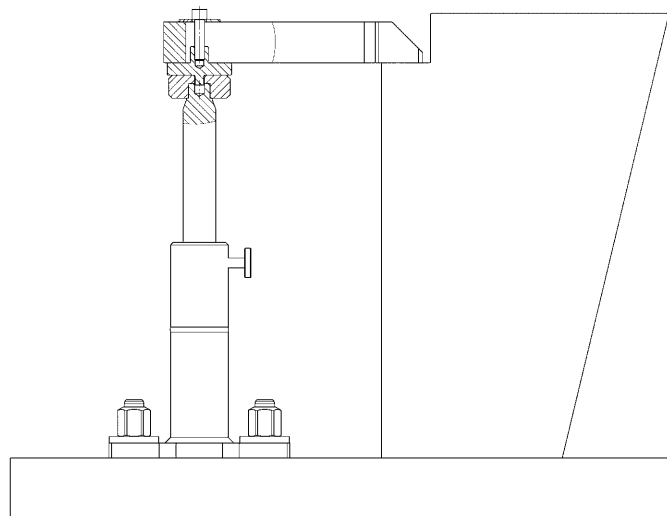
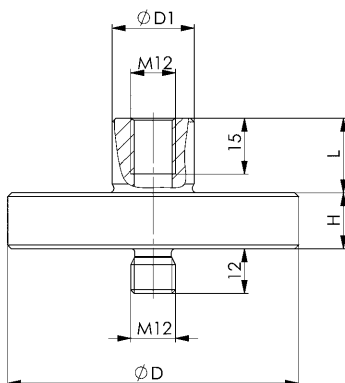
### Fixing cap with thread

for forked clamps. Steel tempered, burnished.

Order no.	Size	H	D	D1	L	Weight [g]
376350	25	15	78	22	20	601

#### Advantage:

Centring plate can be screwed onto screw jacks. Internal thread for additional fastening of clamps onto screw jacks. Safety with vertical turning and boring machines.



Subject to technical alterations.

## No. 6417

### Mandrel

blued, with brass thrust piece.



Order no.	Size	Slot	H ±0,1	H1 min.	H1 max.	H2 min.	H2 max.	dia. D1	dia. D2	dia. D3	G1	G2	SW	Weight [g]
74179	80	14	80	116	148	8	40	40	50	32	M12	M16	27	1270

#### Application:

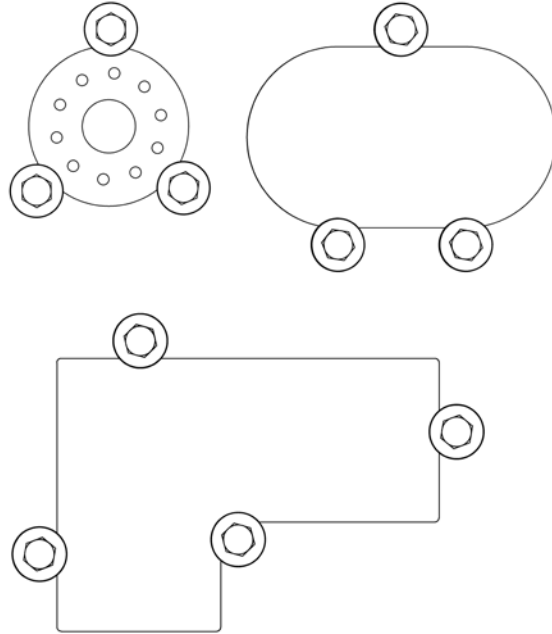
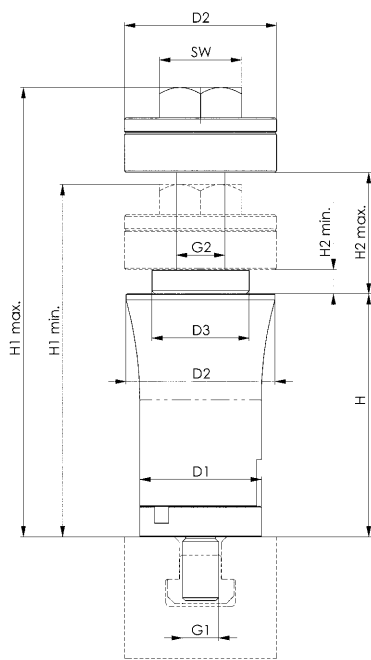
- The mandrels are fastened to the machine table by means of T-nuts.
- The mandrel is fixed on the slotted table by operating the SW 27 mm pre-tensioning nut.
- Clamping is by means of the SW 27 mm screw of tempered steel.
- Damage to the workpiece is prevented by a brass clamping ring.

#### Advantage:

- Reduced tooling time and tool elements cuts tooling costs
- Optimal use of the machine table
- Tension on flat workpieces increased to make holes, threads and grooves

#### Note:

- Suitable for workpiece thicknesses from 8 to 40 mm
- Support height 80 mm
- Also available is an extension screw for workpiece thicknesses from 40 - 72 mm and Spacer elements of 25 mm and 50 mm to increase the support height



#### Recommendations



No. 6417Z,  
page 60



No. 6417SP,  
page 60



Subject to technical alterations.

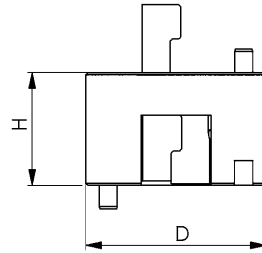
**No. 6417Z**
**Spacer element**

blued.

Order no.	Size	dia. D	H	Weight [g]
74195	25	40	25	214
74211	50	40	50	459

**Application:**

Used to increase the support height.

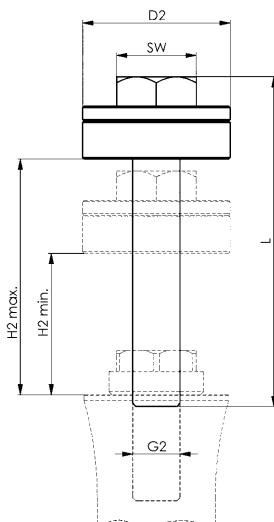

**No. 6417SP**
**Spindle, long**

blued.

Order no.	Size	L	dia. D2	G2	SW	H2 min.	H2 max.	Weight [g]
74237	M16	104	50	M16	27	40	72	423

**Application:**

Used to increase the clamping height.



Subject to technical alterations.

## No. 6418

### Support element, mechanical

incl. DIN 508-M12x14 nut for T-grooves, M12x30-10.9 threaded stud. Body: Case-hardened steel, manganese phosphatised and ground. Body: Aluminium.



Order no.	Size	Support force F max. [kN]	H	Stroke [mm]	SW1	SW2	G	Weight [g]
75416	M12	8	78-83	5	21	6	M12	939

#### Application:

- Fasten support element (2x M6 connecting thread) on fixture.
  - Note operator side!
  - Alternatively: Remove M12 x 10 threaded stud and replace with M12 x 30 threaded stud and mount the support element with key (size 21), e.g. for T-groove mounting
  - (No defined operator side ensured).
- Turning the clamping cam (hexagon socket size 6) on the outside surface of the red protective sleeve positions the supporting bolt against the workpiece with light spring force.
- Turning further as far as it will go (lock) - a total of 180° - locks the clamping mechanism of the supporting bolt without length change.
  - The support element is positioned on the workpiece and locked.
- Turning in the opposite direction (unlock) releases the clamping. Continuing to turn back as far as it will go - a total of 180° - moves the supporting bolt to the end position.

#### Advantage:

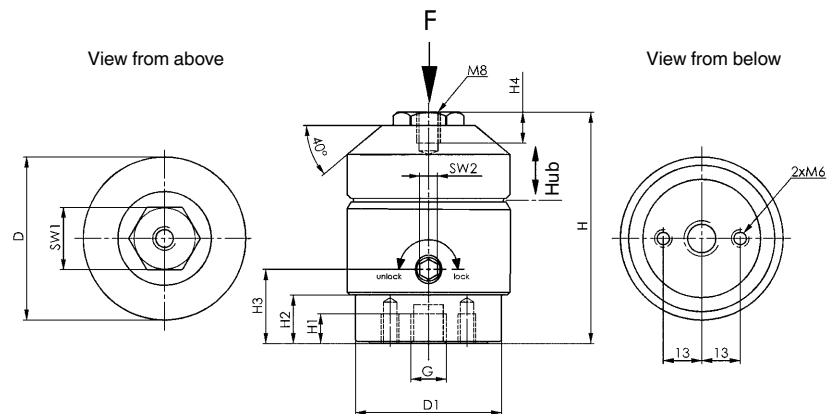
- Used as an extra support to prevent sagging and vibration of the workpiece.
- Mounted directly under a clamping point, it prevents distortion of the workpiece.
- Compensation of large workpiece tolerances (castings).

#### Note:

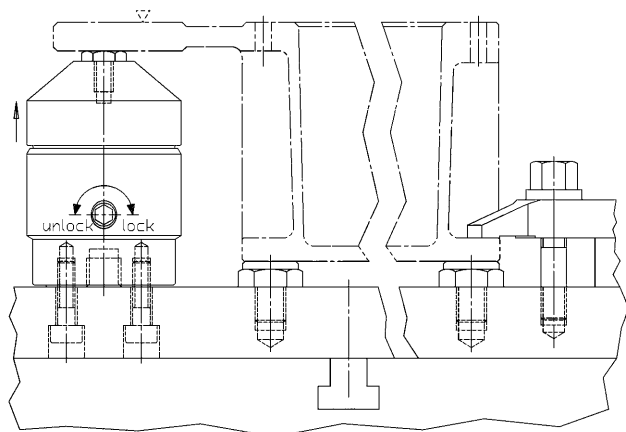
- M8 thread on supporting bolt can be mounted with pressure screws (Nos. 7110DHX, 7110DIX, 7110DKX, 7110DFX).
- Customer-specific extensions can also be mounted.
- For reliable function the M12 threaded hole must always be closed.

#### Dimensions:

Order no.	Size	D	D1	H1	H2	H3	H4
75416	M12	55	49,4	10	16	25	10,5



#### Application example:



CAD

Subject to technical alterations.

## No. 6419

### Floating clamp

incl mounting for T-grooves.



Order no.	Size	Slot	G	Md min. - max. [Nm]	F [kN]	Setting travel H	Clamping stroke H2*	Weight [g]
75754	12	14	M12	15-30	2-8	102-112	0-12	1880
75622	16	18	M16	50-115	8-25	163-175	10-25	6250

\* Clamping stroke = clamping range with upper and lower standard clamping jaw.

### Application:

1. Fasten floating clamp on fixture or machine table.
2. Adjust height stop and swivel range with red adjustment sleeve and lock with threaded stud. When setting the upwards height limitation, allow for generous play (workpiece manufacturing tolerance).
3. Press floating clamp downwards.
4. Swivel clamping jaws in as far as they will go.
  - The floating clamp is positioned with light spring force on bottom of workpiece.
5. Tighten floating clamp with hexagon nut.
  - During the clamping process the workpiece is clamped and at the same time supported.
6. Unclamping is carried out in the reverse sequence.

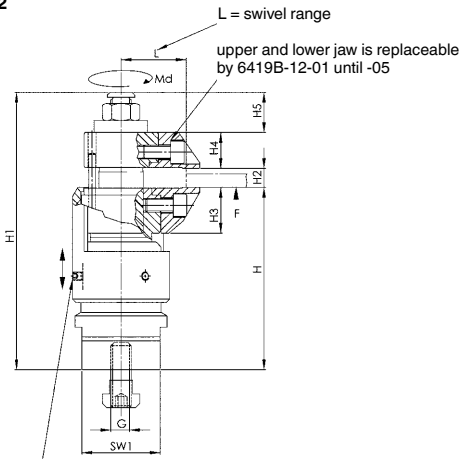
### Advantage:

- Especially suitable for large, hard-to-machine components (size 16).
- No deformation when clamping weak components.
- Vibration suppression during machining.
- Clamping of ribs, creases and tabs for stiffening on clamped components.
- Deformation-free clamping of blanks.

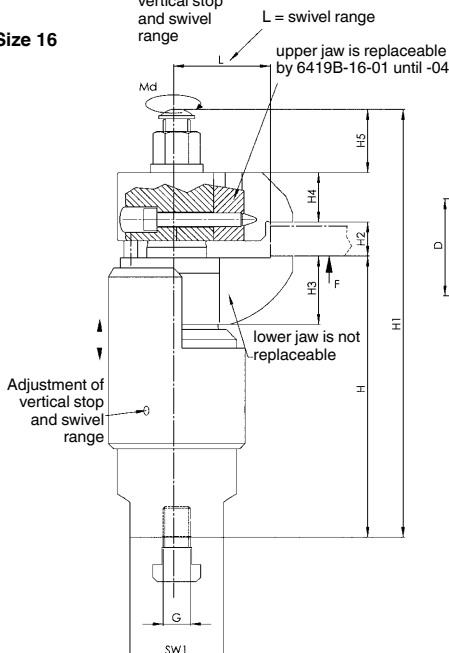
### Note:

- The floating clamp is used to clamp and support overdetermined clamping points on components.
- For customer-specific clamping situations the supplied clamping jaws can be replaced with the following clamping jaws (Nos. 6419B-12 and 6418B-16) (max. tightening torque = 43 Nm)

#### Size 12



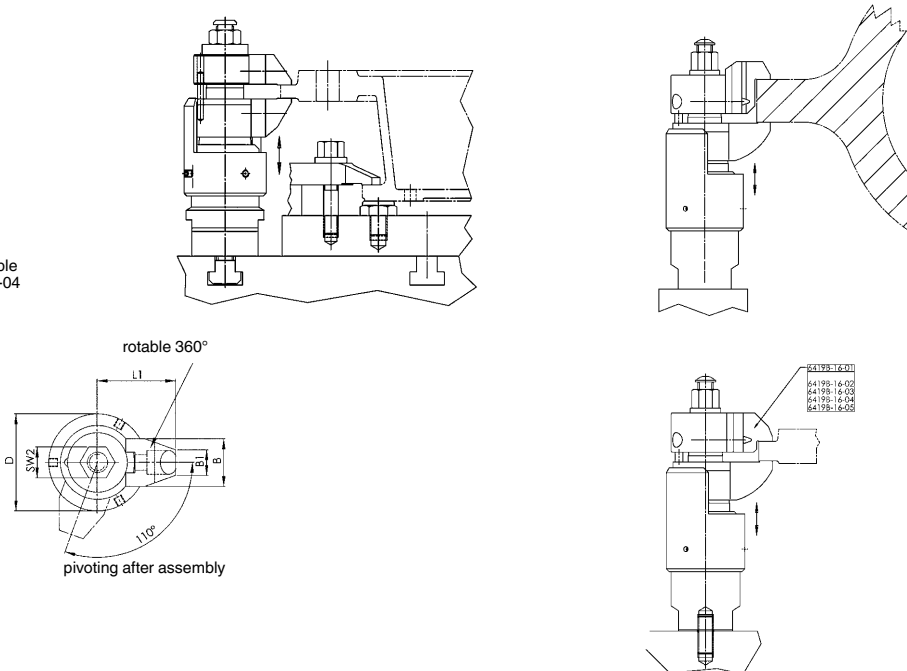
#### Size 16



### Dimensions:

Order no.	Size	SW1	SW2	B	B1	D	H1	H3	H4	H5	L	L1
75754	12	46	18	28	15	57	163	26,8	21	32	39	46
75622	16	55	24	54	20	80	261	40,0	29	45	54	68

### Application examples:



CAD



Subject to technical alterations.

## No. 6419B-12-01

### Clamping jaw

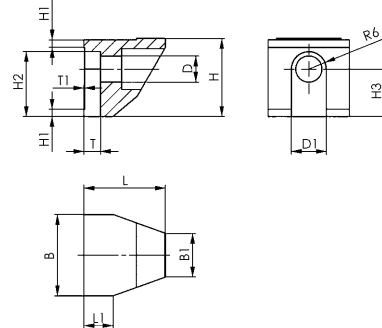
Case-hardened steel, nitrided and burnished.  
Lower standard clamping jaw.



Order no.	Size	B	B1	D	D1 +0,02	H -0,1	H1	H2 -0,1	H3 ±0,1	L	L1	T +0,2	T1	Weight [g]
71233	12	28	15	9	12	26,8	2,5	22,3	16,3	28	10	5,5	0,2	83

#### Note:

Fastening with ISO 4762-M8 cylinder bolts.



## No. 6419B-12-02

### Clamping jaw

Case-hardened steel, nitrided and burnished.  
Upper standard clamping jaw.

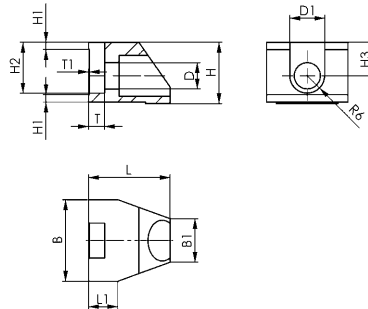


Order no.	Size	B	B1	D	D1 +0,02	H -0,1	H1	H2 -0,1	H3 ±0,1	L	L1	T +0,2	T1	Weight [g]
71605	12	28	15	9	12	21	2,5	17,5	11,5	29,5	11,5	5,5	0,2	71

Clamping range = workpiece thickness 0-12 mm.

#### Note:

Fastening with ISO 4762-M8 cylinder bolts.



## No. 6419B-12-03

### Clamping jaw

Case-hardened steel, nitrided and burnished.  
Upper exchangeable clamping jaw.

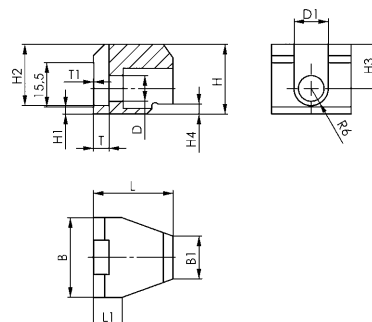


Order no.	Size	B	B1	D	D1 +0,02	H -0,1	H1	H2 -0,1	H3 ±0,1	H4	L	L1	T +0,2	T1	Weight [g]
74229	12	28	15	9	12	24,5	2,5	21,5	15,5	3,5	29,5	11,5	5,5	0,2	94

Clamping range = workpiece thickness 4-16 mm.

#### Note:

Fastening with ISO 4762-M8 cylinder bolts.



## No. 6419B-12-04

### Clamping jaw

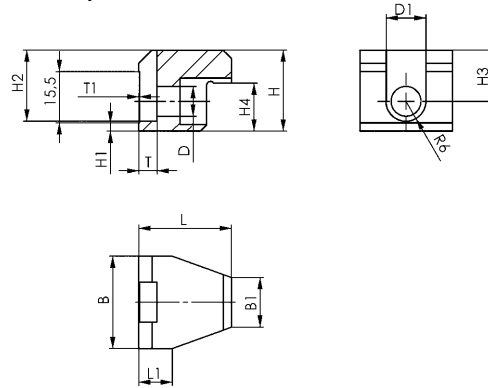
Case-hardened steel, nitrided and burnished.  
Upper exchangeable clamping jaw.

Order no.	Size	B	B1	D	D1 +0,02	H -0,1	H1	H2 -0,1	H3 ±0,1	H4	L	L1	T +0,2	T1	Weight [g]
74245	12	28	15	9	12	24,5	2,5	21,5	15,5	14,5	29,5	11,5	5,5	0,2	90

Clamping range = workpiece thickness 15-27 mm.

#### Note:

Fastening with ISO 4762-M8 cylinder bolts.



## No. 6419B-12-05

### Clamping jaw

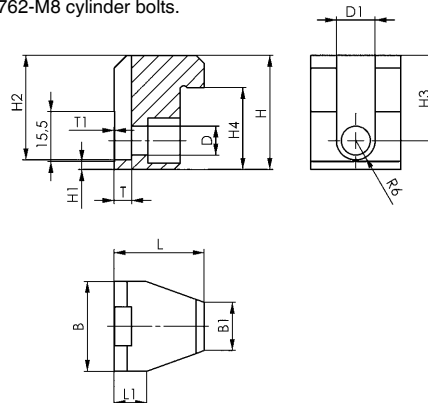
Case-hardened steel, nitrided and burnished.  
Upper exchangeable clamping jaw.

Order no.	Size	B	B1	D	D1 +0,02	H -0,1	H1	H2 -0,1	H3 ±0,1	H4	L	L1	T +0,2	T1	Weight [g]
75051	12	28	15	9	12	35,5	2,5	32,5	26,5	25,5	29,5	11,5	5,5	0,2	132

Clamping range = workpiece thickness 26-38 mm.

#### Note:

Fastening with ISO 4762-M8 cylinder bolts.



## No. 6419B-16-01

### Clamping jaw

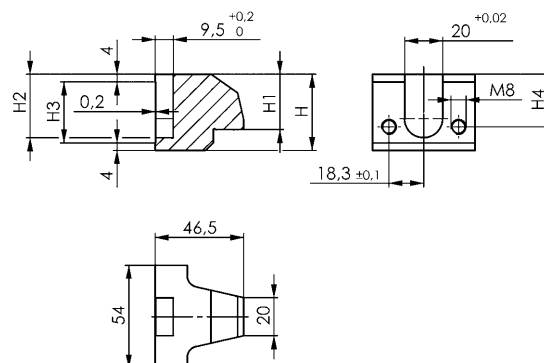
Case-hardened steel, nitrided and manganese phosphatised.  
Upper standard clamping jaw.

Order no.	Size	H	H1	H2	H3	H4	Weight [g]
75382	16	40	29	33,3	32	27,6	400

Clamping range = workpiece thickness 10-25 mm.

#### Note:

Fastening with ISO 4762-M8x50 cylinder bolts.



Subject to technical alterations.



## No. 6419B-16-02

### Clamping jaw

Case-hardened steel, nitrided and manganese phosphatised.  
Upper exchangeable clamping jaw.

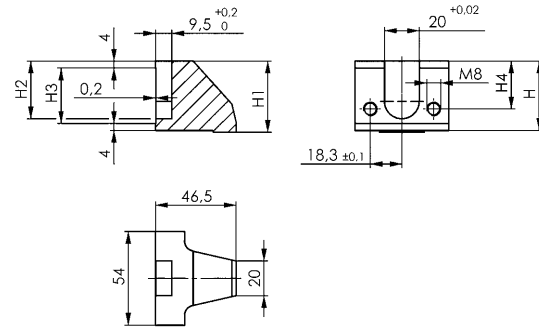


Order no.	Size	H	H1	H2	H3	H4	Weight [g]
75424	16	40	41	33,3	32	27,6	380

Clamping range = workpiece thickness 0-14 mm.

#### Note:

Fastening with ISO 4762-M8x50 cylinder bolts.



## No. 6419B-16-03

### Clamping jaw

Case-hardened steel, nitrided and manganese phosphatised.  
Upper exchangeable clamping jaw.

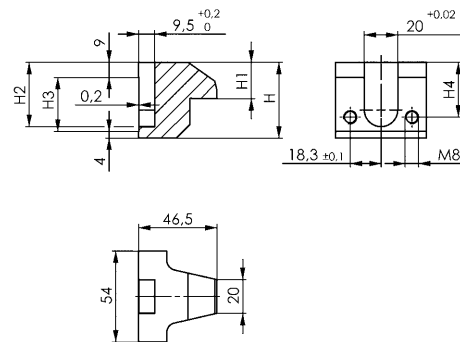


Order no.	Size	H	H1	H2	H3	H4	Weight [g]
75440	16	45	21,6	38,3	32	32,6	440

Clamping range = workpiece thickness 23-38 mm.

#### Note:

Fastening with ISO 4762-M8x50 cylinder bolts.



## No. 6419B-16-04

### Clamping jaw

Case-hardened steel, nitrided and manganese phosphatised.  
Upper exchangeable clamping jaw.

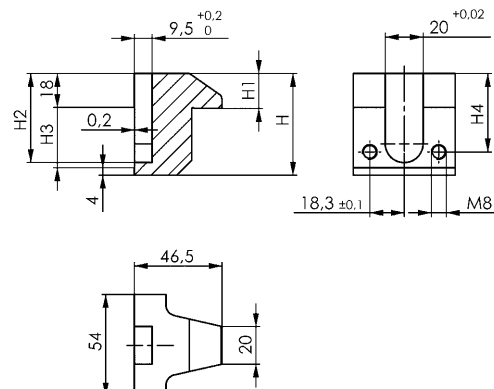


Order no.	Size	H	H1	H2	H3	H4	Weight [g]
75630	16	54	18,6	47,3	32	41,6	510

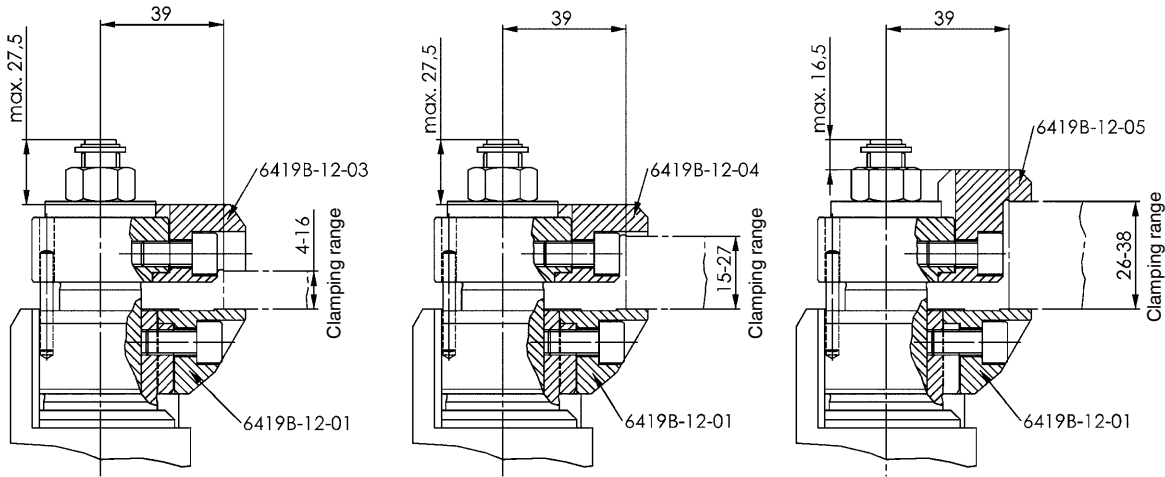
Clamping range = workpiece thickness 35-50 mm.

#### Note:

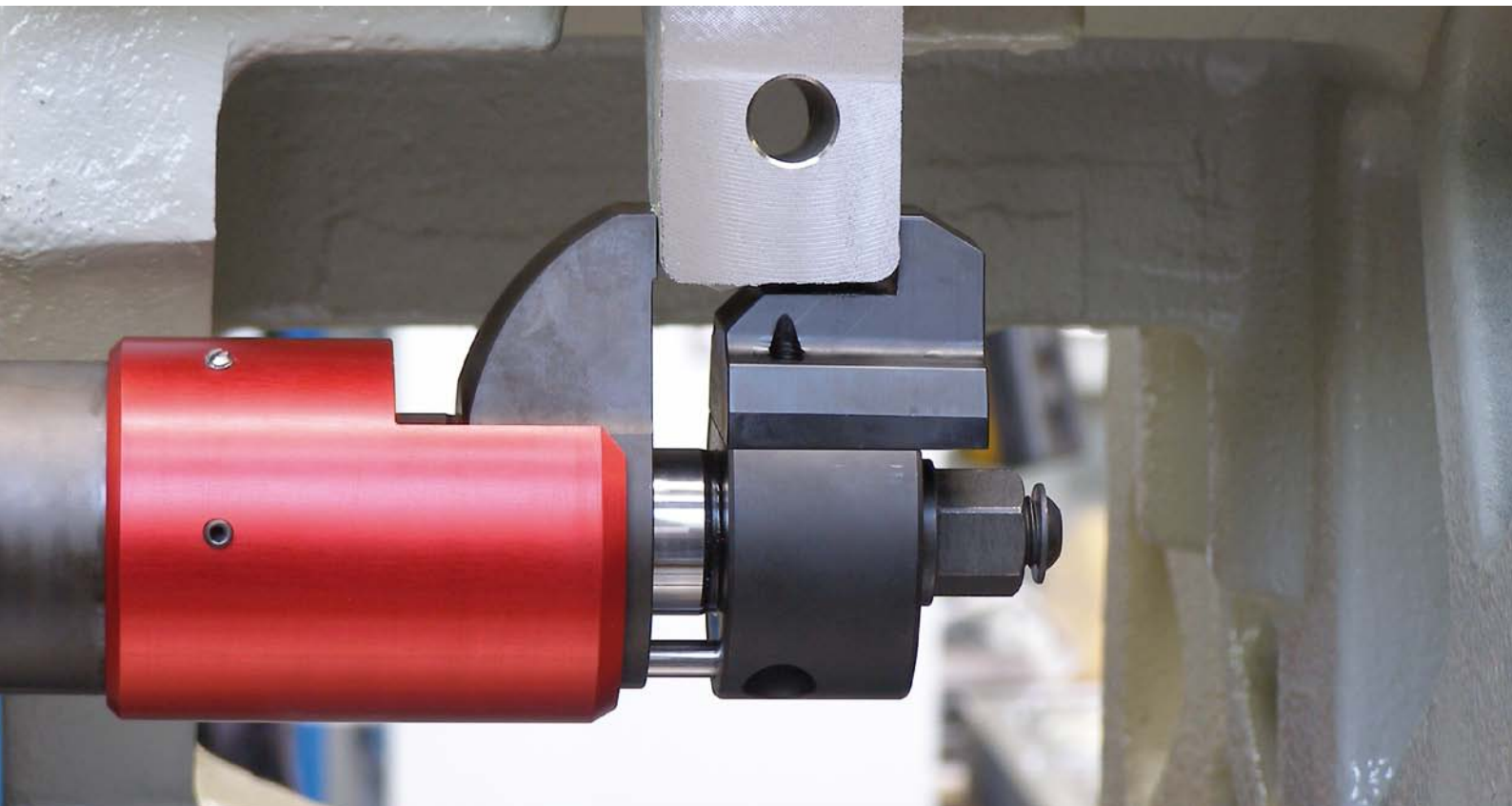
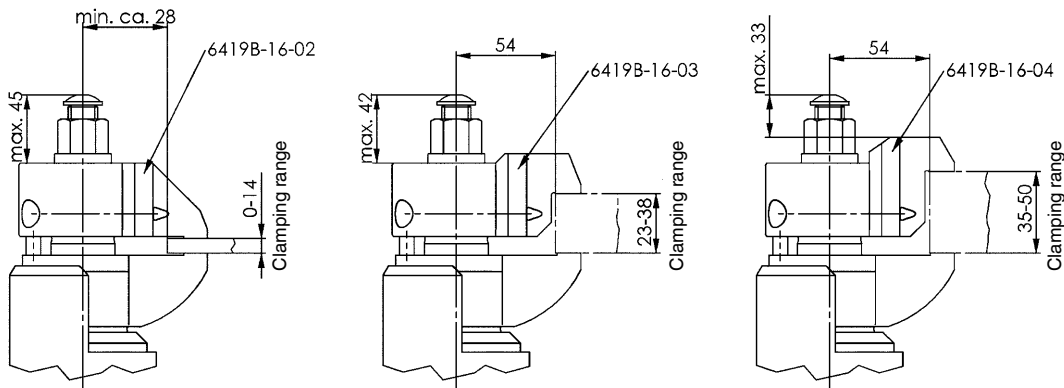
Fastening with ISO 4762-M8x50 cylinder bolts.



## Application examples clamping jaw No. 6419B-12



## Application examples clamping jaw No. 6419B-16



## CLAMPING BOLTS, NUTS AND WASHERS - QUALITY OF AMF

- > **Material:** Tempering steel to DIN regulations within tensile strength classes 8.8, 10.9 and 12.9.
- > **Machining:** All bolts and studs have rolled threads and guarantee high clamping forces and long life.
- > **Tempering:** Tensile strength classes according to DIN regulations.

Bolts, T-nuts and nuts are manufactured to DIN 267 and ISO 898. By galvanizing tempered and hardened components there is a certain risk of the material getting brittle. In the event of components being subsequently galvanized we refuse all possible claims regarding breakages and damages.

There are strong reasons for demanding operators to only use AMF-clamping bolts of highest quality:

- > Strict checks guarantee a consistent quality level.
- > High quality clamping bolts and nuts last longer, reduce tool management and idle periods resulting in more economy in the long run.

### Please notice!

The torque which can be achieved by hand can be higher than required by DIN standard for screws sizes up to 12 mm dia. Result: Only under worst conditions will the screw first of all twist and eventually break when overstressed. A small but decisive contribution to safety at the workplace.





**AMF-T-SLOT BOLTS DIN787** are manufactured within tensile strength classes 8.8, 10.9 and 12.9.

**AMF-STUDS DIN6379** are manufactured within tensile strength class 8.8, 10.9 and 12.9.

**AMF-HEXAGON NUTS DIN6330B, DIN6331 AND NO. 6334** are manufactured within tensile strength class 10.

The individual characteristics in tensile strength classes 8.8 and 12.9 are defined as follows:

- 8. = minimum tensile strength = 800 N/mm<sup>2</sup>
- .8 = minimum yield point (80% of min. tensile strength) = 640 N/mm<sup>2</sup>
- 10. = minimum tensile strength = 1000 N/mm<sup>2</sup>
- .9 = minimum yield point (90% of min. tensile strength) = 900 N/mm<sup>2</sup>
- 12. = minimum tensile strength = 1200 N/mm<sup>2</sup>
- .9 = minimum yield point (90% of min. tensile strength) = 1080 N/mm<sup>2</sup>

#### **STRENGTH OF HEXAGON NUTS:**

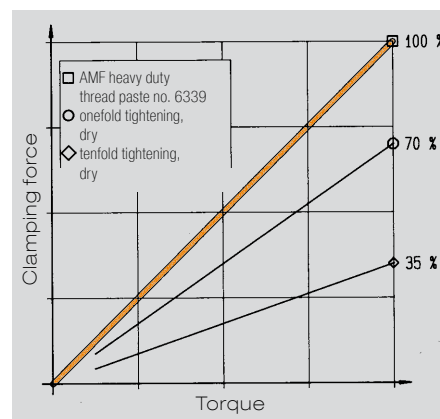
The individual characteristic in tensile strength class 10. defined is:

- 10. = minimum test strength = 1000 N/mm<sup>2</sup>

This test strength is equal to the minimum tensile strength of a screw which can be charged to its minimum breaking load, when matched with the respective nut.

A normal screw / nut combination for load transmission would be a nut of tensile strength class "8" for 8.8 screws. For manufacturing of this nut, a minor quality material than for 8.8 screws necessary could be used, since lower tensions occur in the nut, compared with screw. But since nuts require a high wear resistance in addition to sufficient strength, we manufacture them of the same material as our 8.8-screws. This results with tensile strength class "10" for nuts.

Clamping forces depending on lubrication.



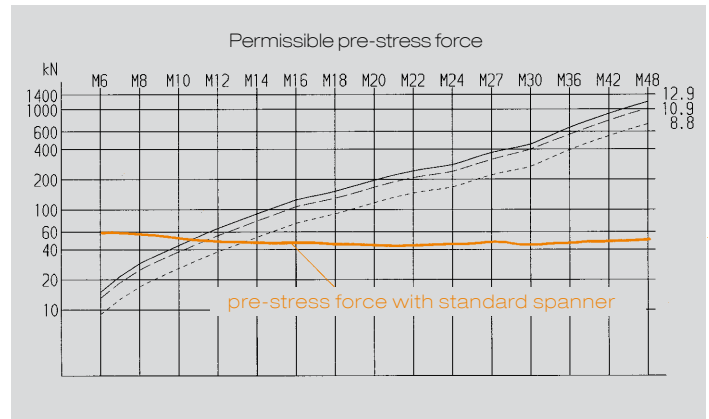
Test results revealed clearly:

**Frequent use of non-greased bolt/nut connections in fixtures will reduce clamping forces considerably at still constant torques, with additional wear involved!**

We therefore recommend the AMF-Heavy-duty thread paste no. 6339 (see page 42). It has a synergetic acting combination of highly active white solid lubrications and is resistant to heat and wash-off. It provides optimal sliding characteristics for increased clamping force and improved thread life.

	Tensile strength classes			
	8.8	10.9	12.9	10
DIN 787	X	X	X	-
DIN 6379	X	X	-	-
DIN 6330B DIN 6331 No. 6334	-	-	-	X
Nominal tensile strength [N/mm <sup>2</sup> ]	800	1000	1200	1000*
Minimum yield point [N/mm <sup>2</sup> ]	640	900	1080	-

CHART OF PERMISSIBLE AND POSSIBLE PRE-STRESS FORCES:



\* Strength figures of the right bolts

### EXPLANATION OF TABLE CHARACTERISTICS:

- > **PERMISSIBLE BOLT LOAD** is the maximum tension load, the screw can be stressed with taking into account all active forces. The yield point is only utilized to 80% for safety.
- > **PERMISSIBLE PRE-STRESS FORCE** is the load, the screw can be pre-stressed at most, when tightening the matching nut. Figures of table are valid for a friction of  $\mu = 0,14$  in thrust faces and thread, corresponding to the friction of greased medium faces.
- > **REQUIRED LENGTH FOR LEVER OF SPANNER:** These length figures were calculated with the mean value of hand forces achieved in test series by different workmen.

### STRENGTH FIGURES AND TORQUES FOR BOLTS AND NUTS:

Thread	Tensile	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M36	M42	M48	
Pitch of thread mm			1	1.25	1.50	1.75	2	2	2.50	2.50	2.50	3	3	3.50	4	4.50	5
<b>Nuts:</b>																	
Hardness DIN6330/6331/6334	HRC	10	26 - 36												20 - 30		
Test force (AS x Sp) DIN EN ISO 898-2	kN	10	20.9	38.1	60.3	88.5	120.8	164.9	203.5	259.7	321.2	374.2	486.5	594.7	866	-	-
<b>Nuts for T-Slots DIN508/DIN508L:</b>																	
Size		M6x8	M8x10	M10x12	M12x14	-	M16x18	-	M20x22	-	M24x28	-	M30x36	M36x42	M42x48	M48x54	
Hardness	HRC	22 - 30															
Test force	kN	16	29	46	67	-	128	-	196	-	282	-	448	653	653	653	
<b>Bolts:</b>																	
Hardness	HRC	8.8	22 - 32					23 - 34									
		10.9	32 - 39														
		12.9	39 - 44														

Tightening data:		( ) Not in the AMF-range.															
Minimum breaking force (AS x R <sub>m</sub> )	kN	8.8	(16)	(29)	(46)	(67)	92	125	159	203	252	293	381	466	678	930	1222
		10.9	21	38	60	88	(120)	(163)	(200)	(255)	(315)	(367)	(477)	(583)	(850)	(1165)	(1531)
		12.9	(24)	(45)	71	103	(140)	192	(234)	299	(370)	431	(560)	(684)	(997)	(1367)	(1797)
Permissible bolt load max. 80% of yield point	kN	8.8	10	19	30	43	59	80	101	129	160	186	242	296	431	591	777
		10.9	14	27	43	63	86	118	144	184	228	265	345	421	614	843	1107
		12.9	17	32	51	74	101	138	169	215	266	310	404	493	719	986	1296
Test force (AS x Sp) to DIN EN ISO 898, part 1	kN	8.8	(12)	(21)	(34)	(49)	67	91	115	147	182	212	275	337	490	672	882
		10.9	17	30	48	70	(96)	(130)	(159)	(203)	(252)	(293)	(381)	(466)	(678)	(930)	(1222)
		12.9	(20)	(35)	56	82	(112)	152	(186)	238	(294)	342	(445)	(544)	(792)	(1087)	(1428)
Permissible pre-stress force max. 90% of yield point and friction $\mu = 0,14$	kN	8.8	9	17	26	38	53	73	91	117	146	168	221	269	394	542	714
		10.9	13	25	38	55	77	107	130	167	208	240	315	384	561	773	1018
		12.9	15	29	44	65	91	125	152	196	243	281	369	449	657	904	1191
Required torque for permissible pre-stress force and friction $\mu = 0,14$	Nm	8.8	10	25	46	82	130	206	284	407	542	698	1021	1355	2372	3802	5730
		10.9	14	36	67	120	191	302	405	580	772	994	1455	1930	3378	5415	8162
		12.9	17	43	79	141	223	354	474	679	903	1163	1703	2258	3953	6337	9571
Required length for lever to achieve permissible pre-stress force	mm	8.8	30	65	125	215	330	490	650	870	1100	1350	-	-	-	-	-
		10.9	42	90	175	300	450	700	920	1200	1560	-	-	-	-	-	-
		12.9	51	110	210	360	550	830	1100	1470	1860	-	-	-	-	-	-
Possible torque to obtain with standard spanner, resulting pre-stress force*	Nm	-	60	80	90	100	110	125	140	150	170	185	225	240	300	330	410
	kN	-	54	53	48	43	43	43	43	42	42	43	45	43	45	46	50
*With this pre-stress force there is danger of	8.8																
	10.9	breakage			permanent deformation			loosening of clamping unit at start of motive force									
	12.9																

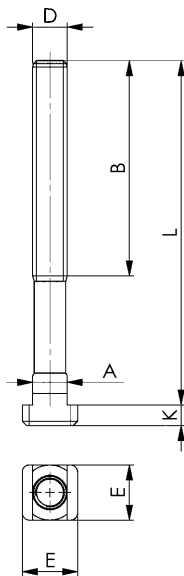
As = nominal cross section in mm<sup>2</sup> / Sp = min. clamping force in N/mm<sup>2</sup> / R<sub>m</sub> = min. load factor in N/mm<sup>2</sup> /  $\mu$  = friction

Subject to technical alterations.

## DIN 787

### Bolts for T-slots

Forged, T-slot guid-faces milled, rolled thread, AMF-symbol and strength class punched into head. M 6-M12 tempered to strength class 10.9, M14-M42 tempered to strength class 8.8



#### Recommendations



DIN 6331,  
page 84



DIN 6340,  
page 89

Order no.	D x Slot x L	A	B	E	K	Packaging Unit	Weight [g]
84004	M6x6x25	5,7	15	10	4	25	9
84012	M6x6x40	5,7	28	10	4	25	12
84020	M6x6x63	5,7	40	10	4	25	18
84038	M8x8x32	7,7	22	13	6	25	20
80374	M8x8x50	7,7	35	13	6	25	25
80382	M8x8x80	7,7	50	13	6	25	30
84046	M10x10x40	9,7	30	15	6	25	30
80390	M10x10x63	9,7	45	15	6	25	50
81323	M10x10x80	9,7	50	15	6	25	60
80408	M10x10x100	9,7	60	15	6	25	70
80416	(M12x12x50)	11,7	33	18	7	25	60
85605	M12x12x63	11,7	40	18	7	25	65
80424	M12x12x80	11,7	55	18	7	25	75
81406	M12x12x100	11,7	65	18	7	25	90
80432	M12x12x125	11,7	75	18	7	25	110
81497	M12x12x160	11,7	100	18	7	-	135
80440	M12x12x200	11,7	120	18	7	-	160
80457	(M12x14x50)	13,7	33	22	8	25	70
85613	M12x14x63	13,7	45	22	8	25	80
80465	M12x14x80	13,7	55	22	8	25	100
81851	M12x14x100	13,7	65	22	8	25	110
80473	M12x14x125	13,7	75	22	8	25	120
82966	M12x14x160	13,7	100	22	8	-	150
80481	M12x14x200	13,7	120	22	8	-	180
80499	M14x16x63	15,7	45	25	9	25	115
84426	M14x16x80	15,7	55	25	9	25	130
80507	M14x16x100	15,7	65	25	9	25	150
84434	M14x16x125	15,7	75	25	9	25	180
80515	M14x16x160	15,7	100	25	9	25	220
80523	M14x16x250	15,7	150	25	9	-	300
80531	(M16x16x63)	15,7	45	25	9	25	140
85621	(M16x16x80)	15,7	55	25	9	10	160
80549	(M16x16x100)	15,7	65	25	9	10	180
84384	(M16x16x125)	15,7	85	25	9	10	225
80556	(M16x16x160)	15,7	100	25	9	10	270
85647	(M16x16x200)	15,7	125	25	9	-	315
80564	(M16x16x250)	15,7	150	25	9	-	380
80572	M16x18x63	17,7	45	28	10	25	160
85639	M16x18x80	17,7	55	28	10	10	185
80580	M16x18x100	17,7	65	28	10	10	203
84400	M16x18x125	17,7	85	28	10	10	245
80598	M16x18x160	17,7	100	28	10	10	280
85654	M16x18x200	17,7	125	28	10	-	330
80606	M16x18x250	17,7	150	28	10	-	430
84103	(M20x20x80)	19,7	55	32	12	-	290
84053	(M20x20x100)	19,7	65	32	12	-	340
84111	(M20x20x125)	19,7	85	32	12	-	390
85662	(M20x20x160)	19,7	110	32	12	-	470
84129	(M20x20x200)	19,7	125	32	12	-	550
84079	(M20x20x250)	19,7	150	32	12	-	670
84137	(M20x20x315)	19,7	190	32	12	-	800
80614	M20x22x80	21,7	55	35	14	-	330
85829	M20x22x100	21,7	65	35	14	-	370
80622	M20x22x125	21,7	85	35	14	-	428
85670	M20x22x160	21,7	110	35	14	-	500
80630	M20x22x200	21,7	125	35	14	-	570
85845	M20x22x250	21,7	150	35	14	-	680
80648	M20x22x315	21,7	190	35	14	-	820
80770	(M24x24x100)	23,7	70	40	16	-	540
85688	(M24x24x125)	23,7	85	40	16	-	600
80788	(M24x24x160)	23,7	110	40	16	-	770
85704	(M24x24x200)	23,7	125	40	16	-	900
80796	(M24x24x250)	23,7	150	40	16	-	960
84061	(M24x24x315)	23,7	190	40	16	-	1270
80804	(M24x24x400)	23,7	240	40	16	-	1410
80655	M24x28x100	27,7	70	44	18	-	650
85696	M24x28x125	27,7	85	44	18	-	720
80663	M24x28x160	27,7	110	44	18	-	800
85712	M24x28x200	27,7	125	44	18	-	950

Subject to technical alterations.

## DIN 787

### Bolts for T-slots

Forged, T-slot guid-faces milled, rolled thread, AMF-symbol and strength class punched into head. M 6-M12 tempered to strength class 10.9, M14-M42 tempered to strength class 8.8

Order no.	D x Slot x L	A	B	E	K	Packaging Unit	Weight [g]
80671	M24x28x250	27,7	150	44	18	-	1120
84087	M24x28x315	27,7	190	44	18	-	1350
80689	M24x28x400	27,7	240	44	18	-	1490
87643	(M27x32x160)	31,6	100	50	20	-	1168
87783	(M27x32x200)	31,6	135	50	20	-	1345
87809	(M27x32x315)	31,6	200	50	20	-	1828
80697	M30x36x125	35,6	80	54	22	-	1250
85720	M30x36x160	35,6	110	54	22	-	1440
80705	M30x36x200	35,6	135	54	22	-	1630
85738	M30x36x250	35,6	150	54	22	-	1920
80713	M30x36x315	35,6	200	54	22	-	2100
80721	M30x36x500	35,6	300	54	22	-	3300
80739	M36x42x160	41,6	100	65	26	-	2200
80747	M36x42x250	41,6	175	65	26	-	2820
80754	M36x42x400	41,6	250	65	26	-	3930
80762	M36x42x600	41,6	340	65	26	-	5480
84145	M42x48x160	47,6	100	75	30	-	3400
84152	M42x48x250	47,6	175	75	30	-	4300
84160	M42x48x400	47,6	250	75	30	-	5800

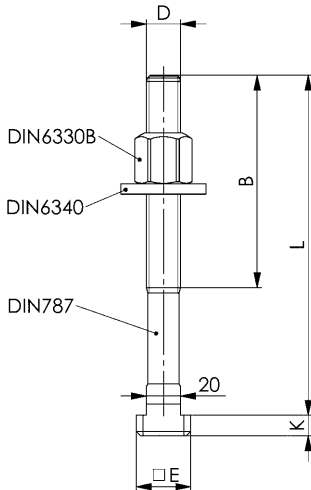
( ) DIN extended.



## DIN 787

### Bolts for T-slots, complete

with hexagon nut DIN 6330B and washer DIN 6340.  
 Forged, milled T-groove, rolled thread, stamped with AMF logo  
 and strength class. M6 to M12 hardened to strength class 10.9,  
 M14 to M42 hardened to strength class 8.8.



Order no.	D x Slot x L	A	B	E	K	Weight [g]
84202	M6x6x25	5,7	15	10	4	19
84210	M6x6x40	5,7	28	10	4	22
84228	M6x6x63	5,7	40	10	4	28
84236	M8x8x32	7,7	22	13	6	40
80812	M8x8x50	7,7	35	13	6	45
80820	M8x8x80	7,7	50	13	6	55
84244	M10x10x40	9,7	30	15	6	65
80838	M10x10x63	9,7	45	15	6	80
81356	M10x10x80	9,7	50	15	6	90
80846	M10x10x100	9,7	60	15	6	110
80853	M12x12x50	11,7	35	18	7	120
85746	M12x12x63	11,7	40	18	7	128
80861	M12x12x80	11,7	55	18	7	130
81448	M12x12x100	11,7	65	18	7	145
80879	M12x12x125	11,7	75	18	7	170
81505	M12x12x160	11,7	100	18	7	195
80887	M12x12x200	11,7	120	18	7	220
80895	M12x14x50	13,7	35	22	8	130
85753	M12x14x63	13,7	45	22	8	145
80903	M12x14x80	13,7	55	22	8	155
82974	M12x14x100	13,7	65	22	8	155
80911	M12x14x125	13,7	75	22	8	180
84376	M12x14x160	13,7	100	22	8	210
80929	M12x14x200	13,7	120	22	8	240
80937	M14x16x63	15,7	45	25	9	200
84442	M14x16x80	15,7	55	25	9	220
80945	M14x16x100	15,7	65	25	9	230
84459	M14x16x125	15,7	75	25	9	280
80952	M14x16x160	15,7	100	25	9	310
80960	M14x16x250	15,7	120	25	9	390
80978	(M16x16x63)	15,7	45	25	9	250
85761	(M16x16x80)	15,7	55	25	9	275
80986	(M16x16x100)	15,7	65	25	9	290
84392	(M16x16x125)	15,7	85	25	9	300
80994	(M16x16x160)	15,7	100	25	9	380
85779	(M16x16x200)	15,7	125	25	9	435
81000	(M16x16x250)	15,7	150	25	9	530
81018	M16x18x63	17,7	45	28	10	260
85787	M16x18x80	17,7	55	28	10	305
81026	M16x18x100	17,7	65	28	10	315
84418	M16x18x125	17,7	85	28	10	360
81034	M16x18x160	17,7	100	28	10	400
85795	M16x18x200	17,7	125	28	10	448
81042	M16x18x250	17,7	150	28	10	560
84301	(M20x20x80)	19,7	55	32	12	520
81547	(M20x20x100)	19,7	65	32	12	570
84319	(M20x20x125)	19,7	85	32	12	560
85803	(M20x20x160)	19,7	110	32	12	680
84327	(M20x20x200)	19,7	125	32	12	700
81562	(M20x20x250)	19,7	150	32	12	800
84335	(M20x20x315)	19,7	190	32	12	940
81059	M20x22x80	21,7	55	35	14	530
85837	M20x22x100	21,7	65	35	14	610
81067	M20x22x125	21,7	85	35	14	670
85811	M20x22x160	21,7	110	35	14	710
81075	M20x22x200	21,7	125	35	14	750
85852	M20x22x250	21,7	150	35	14	850
81083	M20x22x315	21,7	190	35	14	980
81216	(M24x24x100)	23,7	70	40	16	910
85860	(M24x24x125)	23,7	85	40	16	970
81224	(M24x24x160)	23,7	110	40	16	1040
85878	(M24x24x200)	23,7	125	40	16	1265
81232	(M24x24x250)	23,7	150	40	16	1410
81588	(M24x24x315)	23,7	190	40	16	1640
81240	(M24x24x400)	23,7	240	40	16	1780
81091	M24x28x100	27,7	70	44	18	980
85886	M24x28x125	27,7	85	44	18	1010
81109	M24x28x160	27,7	110	44	18	1150
85894	M24x28x200	27,7	125	44	18	1240

Subject to technical alterations.



## DIN 787

### Bolts for T-slots, complete

with hexagon nut DIN 6330B and washer DIN 6340.  
 Forged, milled T-groove, rolled thread, stamped with AMF logo  
 and strength class. M6 to M12 hardened to strength class 10.9,  
 M14 to M42 hardened to strength class 8.8.

Order no.	D x Slot x L	A	B	E	K	Weight [g]
81117	M24x28x250	27,7	150	44	18	1500
81604	M24x28x315	27,7	190	44	18	1730
81125	M24x28x400	27,7	240	44	18	1860
81133	M30x36x125	35,6	80	54	22	1860
85902	M30x36x160	35,6	110	54	22	1950
81141	M30x36x200	35,6	135	54	22	2230
85910	M30x36x250	35,6	150	54	22	2555
81158	M30x36x315	35,6	200	54	22	2950
81166	M30x36x500	35,6	300	54	22	3950
81174	M36x42x160	41,6	100	65	26	3220
81182	M36x42x250	41,6	175	65	26	3840
81190	M36x42x400	41,6	250	65	26	4950
81208	M36x42x600	41,6	340	65	26	6500
84178	M42x48x160	47,6	100	75	30	6000
84186	M42x48x250	47,6	175	75	30	6900
84194	M42x48x400	47,6	250	75	30	8400

( ) DIN extended.

### Note:

AMF quality starts with controlled raw material!  
 Our fully-automated forging plant produces clamping screws. Once cleared, the thread is rolled.



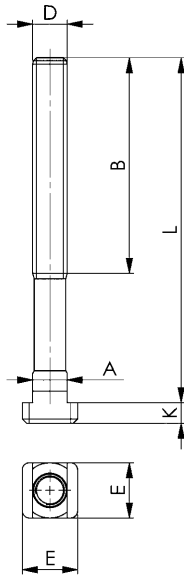
Subject to technical alterations.



## DIN 787

### Bolts for T-slots (12.9)

Forged, T-slot guid-faces broached, rolled. Thread, tempered to strength class 12.9. Strength class punched into head.



Order no.	D x Slot x L	A	B	E	K	Packaging Unit	Weight [g]
83956	M10x10x40	9,7	30	15	6	25	30
83972	M10x10x50	9,7	35	15	6	25	40
83998	M10x10x80	9,7	50	15	6	25	60
83923	M10x10x100	9,7	60	15	6	25	70
86140	M12x12x50	11,7	35	18	7	25	60
86231	M12x12x63	11,7	40	18	7	25	65
86157	M12x12x80	11,7	55	18	7	25	75
86256	M12x12x100	11,7	65	18	7	25	90
86165	M12x12x125	11,7	75	18	7	25	110
87304	M12x12x160	11,7	100	18	7	-	135
86173	M12x12x200	11,7	120	18	7	-	160
86181	M12x14x50	13,7	35	22	8	25	70
86611	M12x14x63	13,7	45	22	8	25	80
86199	M12x14x80	13,7	55	22	8	25	100
86678	M12x14x100	13,7	65	22	8	25	110
86207	M12x14x125	13,7	75	22	8	25	120
87320	M12x14x160	13,7	100	22	8	-	150
86215	M12x14x200	13,7	120	22	8	-	180
86264	(M16x16x63)	15,7	45	25	9	25	140
87346	(M16x16x80)	15,7	55	25	9	10	160
86272	(M16x16x100)	15,7	65	25	9	10	180
87361	(M16x16x125)	15,7	85	25	9	10	225
86280	(M16x16x160)	15,7	100	25	9	10	270
87387	(M16x16x200)	15,7	125	25	9	-	315
86298	(M16x16x250)	15,7	150	25	9	-	380
86306	M16x18x63	17,7	45	28	10	25	160
86629	M16x18x80	17,7	55	28	10	10	185
86314	M16x18x100	17,7	65	28	10	10	203
86645	M16x18x125	17,7	85	28	10	10	230
86322	M16x18x160	17,7	100	28	10	10	280
87403	M16x18x200	17,7	125	28	10	-	330
86330	M16x18x250	17,7	150	28	10	-	430
86421	(M20x20x80)	19,7	55	32	12	-	290
86439	(M20x20x125)	19,7	85	32	12	-	390
87429	(M20x20x160)	19,7	110	32	12	-	470
86447	(M20x20x200)	19,7	125	32	12	-	550
87437	(M20x20x250)	19,7	150	32	12	-	670
86454	(M20x20x315)	19,7	190	32	12	-	800
86348	M20x22x80	21,7	55	35	14	-	330
86355	M20x22x125	21,7	85	35	14	-	428
87445	M20x22x160	21,7	110	35	14	-	500
86363	M20x22x200	21,7	125	35	14	-	570
87510	M20x22x250	21,7	150	35	14	-	680
86371	M20x22x315	21,7	190	35	14	-	820
86462	(M24x24x100)	23,7	70	40	16	-	540
86470	(M24x24x160)	23,7	110	40	16	-	770
87577	(M24x24x200)	23,7	125	40	16	-	900
86488	(M24x24x250)	23,7	150	40	16	-	960
86496	(M24x24x400)	23,7	240	40	16	-	1410
86389	M24x28x100	27,7	70	44	18	-	650
86397	M24x28x160	27,7	110	44	18	-	800
87585	M24x28x200	27,7	125	44	18	-	950
86405	M24x28x250	27,7	150	44	18	-	1120
86413	M24x28x400	27,7	240	44	18	-	1490
81281	M30x36x160	35,6	110	54	22	-	1950
81364	M30x36x200	35,6	135	54	22	-	2230
81463	M30x36x250	35,6	150	54	22	-	2555
82131	M30x36x315	35,6	200	54	22	-	2950

Matching nuts DIN 6330B and washers DIN 6340.  
( ) DIN extended.

#### Recommendations



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Subject to technical alterations.

## No. 797

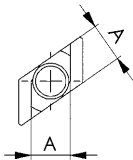
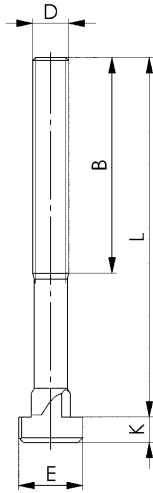
### Rhombus-head screw for T-slots

forged, T-slots milled, rolled thread, heat-treated to strength grade 8.8. Lower load capacities compared with comparable sizes of DIN 787 due to reduced bearing surface in the T-slots.



Order no.	D x Slot x L	A	B	E	K	Weight [g]
87296	M12x14x 50	13,7	35	22	8	70
87312	M12x14x 80	13,7	55	22	8	100
87338	M12x14x125	13,7	75	22	8	120
87353	M16x18x 63	17,7	45	28	10	160
87379	M16x18x100	17,7	65	28	10	220
87395	M16x18x160	17,7	100	28	10	280
86793	M20x22x 80	21,7	55	35	14	330
86801	M20x22x125	21,7	85	35	14	430
86819	M20x22x200	21,7	120	35	14	570
86827	M24x28x100	27,7	70	44	18	650
86959	M24x28x125	27,7	85	44	18	770
87114	M24x28x250	27,7	150	44	18	1120

Matching nuts DIN 6330B and washers DIN 6340.



#### Recommendations



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#### Application:

Additional clamping point with fixture already clamped.

Also possible to set-up a clamping point retrospectively, despite machine T-groove already being occupied. Rhombus screw no. can be inserted into the T-groove from above. This is also possible with the combination between rhombus groove no. 510 and stud bolt DIN 6379.



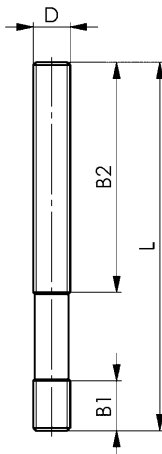
Subject to technical alterations.



## DIN 6379

### Studs

Rolled thread. M 6-M12 tempered to strength class 10.9,  
M14-M42 tempered to strength class 8.8.



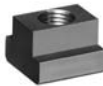
#### Recommendations



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Order no.	D x L	B1	B2	Packaging Unit	Weight [g]
84772	(M 6x 32)	9	16	50	8
86546	(M 6x 40)	9	20	50	9
84780	M 6x 50	9	30	50	11
85522	(M 6x 63)	9	40	50	14
84798	M 6x 80	9	50	50	18
81257	M 8x 40	11	20	100	10
84806	M 8x 63	11	40	50	20
81273	(M 8x 80)	11	50	50	25
84814	M 8x100	11	63	50	30
84756	(M 8x125)	11	75	50	36
84822	(M 8x160)	11	100	50	45
81299	M10x 50	13	25	50	25
84830	M10x 80	13	50	50	40
86041	(M10x100)	13	75	50	50
81315	M10x125	13	75	25	62
85928	(M10x160)	13	100	50	80
84848	(M10x200)	13	122	-	100
84855	M12x 50	15	25	25	37
81331	(M12x 63)	15	32	25	45
84863	M12x 80	15	50	50	55
81349	(M12x100)	15	63	50	70
84871	M12x125	15	75	25	90
85480	(M12x160)	15	100	25	113
84889	(M12x200)	15	122	-	140
81372	(M14x 63)	17	32	25	80
84467	(M14x80)	17	50	25	85
81380	(M14x100)	17	63	25	90
84475	(M14x125)	17	75	25	120
81398	(M14x160)	17	100	25	150
86553	(M14x200)	17	122	-	195
84897	(M14x250)	17	160	-	240
84905	M16x 63	19	32	25	85
81414	(M16x 80)	19	50	25	105
84913	M16x100	19	63	25	130
81422	(M16x125)	19	75	25	160
84921	M16x160	19	100	25	218
85498	(M16x200)	19	122	-	280
84939	M16x250	19	160	-	325
85548	(M16x315)	19	180	-	425
85472	(M16x500)	19	315	-	650
84947	(M18x 80)	23	50	25	130
84954	(M18x125)	23	75	25	200
86561	(M18x160)	23	100	-	255
81471	(M18x200)	23	122	-	320
81489	(M18x250)	23	150	-	400
84962	(M18x315)	23	180	-	500
84970	M20x 80	27	32	-	185
84988	M20x125	27	70	-	255
85506	(M20x160)	27	100	-	330
81513	M20x200	27	122	-	410
81521	(M20x250)	27	160	-	510
84996	M20x315	27	200	-	640
85977	(M20x400)	27	250	-	815
85001	(M20x500)	27	315	-	1020
85019	(M22x100)	31	45	-	270
81539	(M22x160)	31	100	-	430
86579	(M22x200)	31	122	-	500
81554	(M22x250)	31	160	-	670
86595	(M22x315)	31	180	-	790
85027	(M22x400)	31	250	-	1070
85035	M24x100	35	45	-	290
85563	(M24x125)	35	70	-	380
81570	M24x160	35	100	-	470
85514	(M24x200)	35	122	-	580
81596	M24x250	35	160	-	730
86009	(M24x315)	35	200	-	920
85043	M24x400	35	250	-	1160
86025	(M24x500)	35	315	-	1460
85050	(M24x630)	35	315	-	1860

Subject to technical alterations.

## DIN 6379

### Studs

Rolled thread. M 6-M12 tempered to strength class 10.9,  
M14-M42 tempered to strength class 8.8.

Order no.	D x L	B1	B2	Packaging Unit	Weight [g]
81695	(M27x125)	39	56	-	485
81703	(M27x200)	39	122	-	770
81711	(M27x315)	39	200	-	1110
86587	(M27x400)	39	250	-	1535
81729	(M27x500)	39	315	-	1930
85068	M30x125	43	56	-	590
81612	(M30x200)	43	122	-	950
81620	M30x315	43	200	-	1490
81638	M30x500	43	315	-	2360
81646	(M30x700)	43	400	-	3300
81661	(M30x1000)	43	400	-	4700
85076	M36x160	51	80	-	1100
81653	(M36x200)	51	122	-	1340
85084	M36x250	51	160	-	1710
85555	(M36x315)	51	200	-	2150
85092	M36x400	51	250	-	2700
81679	(M36x500)	51	315	-	3450
81687	(M36x700)	51	400	-	4750
85589	(M42x315)	59	200	-	2950
85597	(M42x400)	59	250	-	3750
85530	(M42x500)	59	315	-	4690

( ) DIN extended.

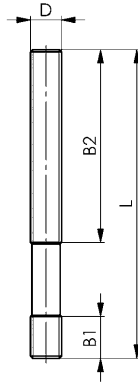


Subject to technical alterations.



**DIN 6379**
**Studs (12.9)**

rolled thread. Tempered to strength class 12.9.



Order no.	D x L	B1	B2	Packaging Unit	Weight [g]
82123	(M12x 80)	15	50	50	55
89193	(M12x100)	15	63	25	70
89250	(M12x125)	15	75	25	90
89276	(M12x160)	15	100	25	113
82180	(M16x 80)	19	50	25	105
82263	(M16x100)	19	63	25	130
85571	(M16x125)	19	75	25	160
87734	(M16x160)	19	100	25	218
87759	(M16x200)	19	122	-	280
87791	(M16x250)	19	160	-	325
87668	(M20x125)	27	70	-	255
87684	(M20x160)	27	100	-	330
87700	(M20x200)	27	122	-	410
87742	(M20x250)	27	160	-	510
87833	(M20x315)	27	200	-	640
87692	(M20x500)	27	315	-	1020
88286	(M24x160)	35	100	-	470
88930	(M24x200)	35	122	50	580
89094	(M24x250)	35	160	-	730
89136	(M24x315)	35	200	-	920
89151	(M24x400)	35	250	-	1160
89177	(M24x500)	35	315	-	1460

( ) DIN extended.

**Recommendations**


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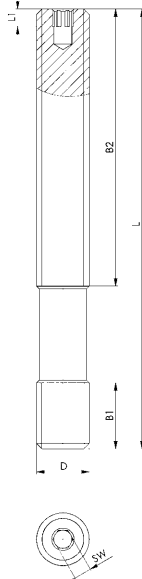
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**No. 6379I**
**Threaded pins (12.9) with hexagon socket**

rolled thread. Tempered to strength class 12.9.



Order no.	D x L	B1	B2	L1	SW	Weight [g]
381954	M12x100 *	15	63	4	4	82
381913	M12x125 *	15	75	4	4	90
381970	M12x160 *	15	100	4	4	130
381996	M16x125	19	75	4	4	161
381939	M16x160	19	100	4	4	207
382010	M16x200	19	122	4	4	259
382028	M20x160	27	100	5	5	321
382036	M20x200	27	122	5	5	410
382044	M20x250	27	160	5	5	577
382051	M24x200	35	122	5	5	670
382069	M24x250	35	160	5	5	835

\* Tensile strength class 10.9.

**Application:**

The threaded pin also has a hexagon socket. Through this, fast release or clamping is possible. Use in all areas of cutting and non-cutting processing.

**Advantage:**

- Variable and fast adjustment possibility at a distance from the workpiece
- Especially suitable for use on injection moulding machines and presses

**Note:**

The nuts DIN 6330B, strength class 10 and washers DIN 6340 must be used in combination with this threaded pin.

**Recommendations**


ISO 2936C



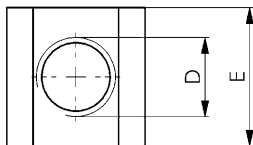
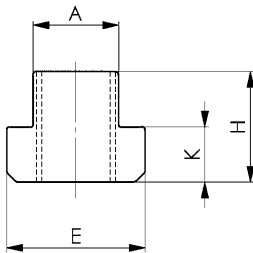
Subject to technical alterations.



## DIN 508

### Nuts for T-slots (T-nuts)

tempered, strength class 10. The nuts for the T groove can only experience a full load when the screw connection exists over the entire length of the thread.



Order no.	D x Slot	A	E	H	K	Packaging Unit	Weight [g]
80002	M 5x 6	5,7	10	8	4	50	4
80010	M 6x 8	7,7	13	10	6	100	9
80028	M 8x10	9,7	15	12	6	100	12
140301	M 8x12*	11,7	18	14	7	50	22
140327	M 8x14*	13,7	22	16	8	50	41
153460	M 8x16*	15,7	25	18	9	25	50
153478	M 8x18*	17,7	28	20	10	25	91
80036	M10x12	11,7	18	14	7	50	22
80234	M10x14*	13,7	22	16	8	50	37
80366	M10x16*	15,7	25	18	9	25	60
81265	M10x18*	17,7	28	20	10	25	87
80044	M12x14	13,7	22	16	8	50	35
80168	M12x16*	15,7	25	18	9	25	50
158907	M12x18*	17,7	28	20	10	25	82
80051	M14x16*	15,7	25	18	9	25	50
80176	M14x18*	17,7	28	20	10	25	70
80069	M16x18	17,7	28	20	10	50	70
80184	M16x20*	19,7	32	24	12	25	110
155630	M16x22*	21,7	35	28	14	25	176
159418	M16x24*	23,7	40	32	16	10	260
159426	M16x28*	27,7	44	36	18	-	383
80077	M18x20*	19,7	32	24	12	25	110
80242	M18x22*	21,7	35	28	14	10	163
80085	M20x22	21,7	35	28	14	25	155
80192	M20x24*	23,7	40	32	16	10	235
158899	M20x28*	27,7	44	36	18	-	355
80093	M22x24*	23,7	40	32	16	10	220
80358	M22x28*	27,7	44	36	18	10	340
80101	M24x28	27,7	44	36	18	-	322
80200	M24x30*	29,7	48	38	19	-	440
80218	M24x36*	35,6	54	44	22	-	700
80119	M27x32*	31,6	50	40	20	-	460
80127	M30x36	35,6	54	44	22	-	590
80226	M30x42*	41,6	65	52	26	-	1150
80135	M36x42	41,6	65	52	26	-	1010
80143	M42x48	47,6	75	60	30	-	1600
80150	M48x54	53,6	85	70	34	-	2300

\* AMF works standard.

### On request:

Special makes on request.

### Recommendations



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CAD



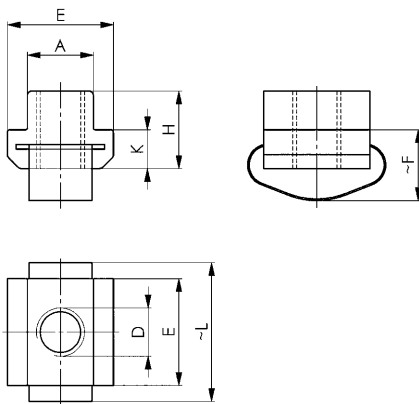
Subject to technical alterations.



## No. 508F

### T-nuts with spring

(T groove key), with spring. Hardened, strength class 10. Spring: Stainless steel.



Order no.	D x Slot	A	E	F	H	K	L	Weight [g]
89730	M8x12	11,7	18	12,5	14	7	31	24
89755	M8x14	13,7	22	13,5	16	8	33	42
89789	M8x16	15,7	25	15,5	18	9	42	63
89748	M10x12	11,7	18	12,5	14	7	31	21
89763	M10x14	13,7	22	13,5	16	8	33	38
89797	M10x16	15,7	25	15,5	18	9	42	60
89813	M10x18	17,7	28	17,5	20	10	43	87
89771	M12x14	13,7	22	13,5	16	8	33	34
89839	M16x18	17,7	28	17,5	20	10	43	70
89904	M20x22	21,7	35	21,5	28	14	56	153

### Advantage:

- Stable position of fixture without workpiece, particularly on vertical faces.
- easy insertion of studs etc. (no groping for threadholes)
- slot clearing effect.

### Recommendations



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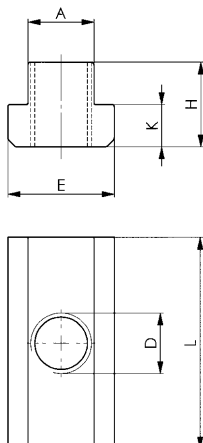
CAD



## No. 508L

### Nuts for T-slots, extended

Hardened, strength class 10



Order no.	D x Slot	A	E	H	K	L	Packaging Unit	Weight [g]
84640	M5x6	5,7	10	8	4	20	50	8
84657	M6x8	7,7	13	10	6	26	50	14
84665	M8x10	9,7	15	12	6	30	50	30
84673	M10x12	11,7	18	14	7	36	50	49
84681	M12x14	13,7	22	16	8	44	25	82
84699	M14x16	15,7	25	18	9	50	50	120
84707	M16x18	17,7	28	20	10	56	20	170
84715	M18x20	19,7	32	24	12	64	10	260
84723	M20x22	21,7	35	28	14	70	-	360
84749	M24x28	27,7	44	36	18	88	-	730
84764	M30x36	35,6	54	44	22	108	-	1390

This extended form safeguards the T-slots of precision machine tables.

### Recommendations



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CAD

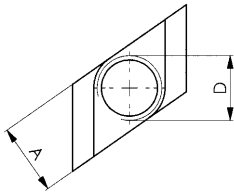
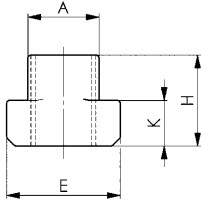


Subject to technical alterations.

## No. 510

### Nuts for T-slots „Rhombus“

Tempered, for tensile strength classes see adjoining table. Lower load capacities compared with comparable sizes of DIN 508 due to reduced bearing surface in the T-slots.



Order no.	D x Slot	Strength class	A	E	H	K	Packaging Unit	Weight [g]
85993	M 6x8	8	7,6	13	10	5,8	50	7
87411	M 8x10	8	9,7	15	12	6	50	11
80259	M10x12	8	11,7	18	14	7	50	14
158220	M10x14	8	13,7	22	16	8	50	27
158238	M10x18	8	17,7	28	20	10	25	64
80267	M12x14	8	13,7	22	16	8	50	22
80275	M14x16	6	15,7	25	18	9	25	33
80283	M16x18	6	17,7	28	20	10	25	46
80341	M16x20	8	19,7	32	24	12	25	79
158246	M16x22	8	21,7	35	28	14	25	119
158253	M16x28	8	27,7	44	36	18	-	278
80291	M18x20	6	19,7	32	24	12	25	70
80309	M20x22	6	21,7	35	28	14	25	98
88153	M20x24	6	23,7	40	32	16	-	170
84731	M20x28	8	27,7	44	36	18	-	248
80317	M24x28	6	27,7	44	36	18	-	215
80325	M30x36	6	35,6	54	44	22	-	430
80333	M36x42	6	41,6	65	52	26	-	690

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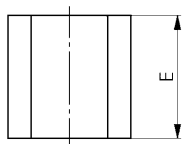
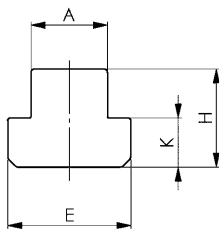
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## No. 508R

### Blanks for T-nuts

Tempering steel 0.35-0.45 % C.



Order no.	Slot	A	E	H	K	Packaging Unit	Weight [g]
84509	6	5,7	10	8	4	25	4
84517	8	7,7	13	10	6	25	10
84525	10	9,7	15	12	6	50	16
84533	12	11,7	18	14	7	50	27
84541	14	13,7	22	16	8	50	50
84558	16	15,7	25	18	9	25	70
84566	18	17,7	28	20	10	25	95
84574	20	19,7	32	24	12	25	150
84582	22	21,7	35	28	14	25	210
84590	24	23,7	40	32	16	10	300
84608	28	27,7	44	36	18	-	430
84483	32	31,7	50	40	20	-	630
84632	36	35,6	54	44	22	-	800
84491	42	41,6	65	52	26	-	1400
84616	48	47,6	75	60	30	-	2100
84624	54	53,6	85	70	34	-	3150

#### Note:

Heat treatment for achieving strength class 10 according to 22-32HRC. Harden: 880°C for 45 minutes, quench in oil at 75°C. Temper: 550°C for 2 hours. This blank can be used to economically produce „Nuts for T-slots“ with customised thread.

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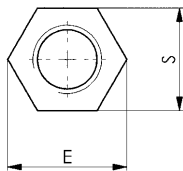
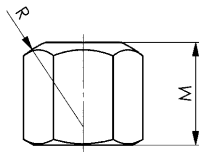


Subject to technical alterations.

## DIN 6330B

### Hexagon nut

1.5 d high, tempered, strength class 10. Can be used for conical sockets DIN 6319D or G. With the flat end, can be used for washers DIN 6340.



Order no.	Size	E	M	R	S	Packaging Unit	Weight [g]
82362	M6	11,05	9	9	10	100	5
82370	M8	14,40	12	12	13	100	9
82354	M10	17,80	15	15	16	50	14
82388	M10	18,90	15	15	*17	50	20
82347	M12	20,03	18	17	18	50	20
82396	M12	21,10	18	17	*19	50	28
82321	(M14)	23,40	21	20	21	50	34
82404	(M14)	24,50	21	20	*22	50	45
82412	M16	26,80	24	22	24	50	58
82420	(M18)	30,10	27	24	27	25	83
82438	M20	33,50	30	27	30	25	110
82339	(M22)	37,70	33	30	34	10	185
82446	(M22)	35,70	33	30	*32	10	130
82453	M24	40,00	36	32	36	10	195
82461	(M27)	45,60	40	36	41	-	280
82479	M30	51,30	45	41	46	-	405
82487	M36	61,30	54	50	55	-	715
82495	M42	72,60	63	58	65	-	1170
82503	M48	83,90	72	67	75	-	1800

\* Old DIN standard.  
( ) DIN expanded.

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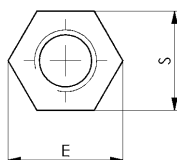
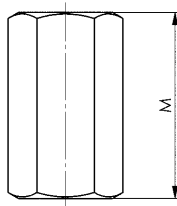
CAD



## No. 6334

### Extension nut

height 3,0 dia. Tempered, tensile strength class 10.



Order no.	Size	E	M	S	Packaging Unit	Weight [g]
82651	M6	11,05	18	10	100	8
82669	M8	14,40	24	13	50	19
82271	M10	17,80	30	16	25	30
82677	M10	18,90	30	*17	25	42
82289	M12	20,03	36	18	25	48
82685	M12	21,10	36	*19	25	64
82297	M14	23,40	42	21	25	73
82693	M14	24,50	42	*22	25	95
82701	M16	26,80	48	24	25	120
82719	M18	30,10	54	27	20	170
82727	M20	33,50	60	30	10	240
82305	M22	37,70	66	34	10	390
82735	M22	35,70	66	*32	10	280
82743	M24	40,00	72	36	-	400
82750	M27	45,60	81	41	-	600
82768	M30	51,30	90	46	-	850
82776	M36	61,30	108	55	-	1470
82784	M42	72,60	126	65	-	2340
82792	M48	83,90	144	75	-	3600

\* old DIN standard.

#### Application:

The extension nut no. 6334 is used to connect T-slot bolts DIN 787 with studs DIN 6379. Through-drive of thread is not possible. For function and safety both screws should match half the length of nut on either side. Minimum depth is 1 x dia of thread.

CAD

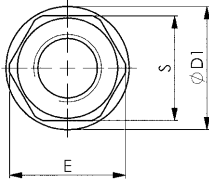
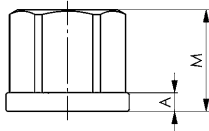


Subject to technical alterations.

## DIN 6331

### Collar nut

height 1,5 dia. Turned and milled. Tempered, tensile strength class 10.



Order no.	Size	A	D1	E	M	S	Packaging Unit	Weight [g]
82529	M6	3,0	14	11,05	9	10	50	6
82537	M8	3,5	18	14,40	12	13	50	12
82222	M10	4,0	22	17,80	15	16	50	21
82545	M10	4,0	22	18,90	15	*17	50	25
82230	M12	4,0	25	20,03	18	18	25	30
82552	M12	4,0	25	21,10	18	*19	25	36
82248	(M14)	4,5	28	23,40	21	21	25	43
82560	(M14)	4,5	28	24,50	21	*22	25	51
82578	M16	5,0	31	26,80	24	24	25	70
82586	(M18)	5,0	34	30,10	27	27	25	95
82594	M20	6,0	37	33,50	30	30	25	130
82255	(M22)	6,0	40	37,70	33	34	10	200
82602	(M22)	6,0	40	35,70	33	*32	10	160
82610	M24	6,0	45	40,00	36	36	10	230
82628	M27	8,0	50	45,60	40	41	-	320
82636	M30	8,0	58	51,30	45	46	-	470
82644	M36	10,0	68	61,30	54	55	-	800
82511	M42	12,0	80	72,60	63	65	-	1340
82800	M48	14,0	92	83,90	72	75	-	2040

\* Old DIN standard.  
( ) DIN expanded.

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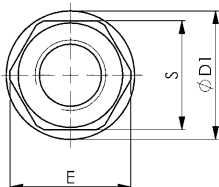
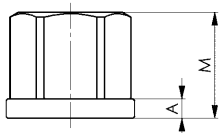
CAD



## DIN 6331

### Collar nut

height 1,5 dia. Forged. Tempered, tensile strength class 10.



Order no.	Size	A	D1	E	M	S	Packaging Unit	Weight [g]
82198	M6	3,0	14	11,05	9	10	50	6
82115	M8	3,5	18	14,40	12	13	50	12
82214	M10	4,0	22	17,80	15	16	50	21
82107	M12	4,0	25	20,03	18	18	25	30
82149	M16	5,0	31	26,80	24	24	25	70
82206	(M18)	5,0	34	30,10	27	27	25	95
82156	M20	6,0	37	33,50	30	30	25	130
82164	M24	6,0	45	40,00	36	36	10	230
82313	M27	8,0	50	45,60	40	41	-	320
82172	M30	8,0	58	51,30	45	46	-	470

( ) DIN extended.

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CAD

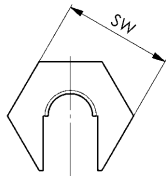
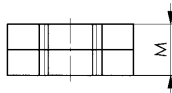


Subject to technical alterations.

## No. 6332S

### Quick-action clamping nut without collar

hardened and zinc-plated, strength class 6.



Order no.	Size	SW	M	Weight [g]
88146	M 6	16	9,0	10
88534	M 8	19	10,5	15
88559	M10	22	12,5	23
88567	M12	27	15,0	44
88575	M16	34	16,0	68
88583	M20	41	22,0	85

### Application:

Slide quick-action clamping nut directly over screw thread up to clamping point and then lock it. If the quick-action clamping nut base is firmly in contact at the clamping point, then the head can be locked with the base by means of a 1/4 to 1/2 turn.

### Advantage:

- effortless bridging of long screw thread and clamping spindles
- easy assembly/disassembly in tight and invisible spaces
- no searching for the thread
- no seizing on the thread due to outside influences
- no impaired performance through contamination such as paint residues or even rust.



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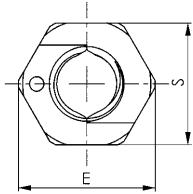
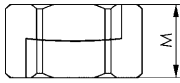
CAD



No. 6333S

## AMF-TWINNUT nut - without collar

with hard detent.  
Bright, strength class 10.



Order no.	Size	E	M	S	Weight [g]
381772	M6	11	6	10	3
381780	M8	14	8	13	6
381798	M10	19	10	17	14
381806	M12	21	12	19	20
381814	M16	27	16	24	39
381822	M20	33	20	30	75
381830	M24	40	24	36	131

### Application:

Separable bolt nuts for quick-mounting applications. It can be simply pushed over long or damaged studding. Nut halves are undetachable through the separation block, even in the swivelled out condition.

### Advantage:

- Time saved with long and damaged studding
- Overcomes studding that is corroded, damaged at the thread and even bent up to approx. 20°
- Compact design., extremely easy to handle
- Fast installation and disassembly using standard tools
- Retention as solid nuts of the same size with strength class 10.

### Note:

After they are pushed together, a 1/4 to 1/2 turn suffices for locking.

### On request:

Other materials and special sizes on request.

### Recommendations



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### Easy mounting of the TWINNUT collar nut:



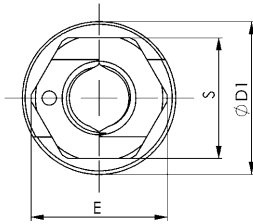
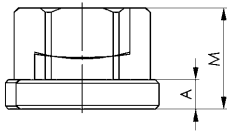
### Easy removal of the TWINNUT collar nut:



## No. 6333SB

### AMF-TWINNUT nut - with collar

with hard detent.  
Bright, strength class 10.



Order no.	Size	A	D1	E	M	S	Weight [g]
381848	M6	3,0	14	11	9	10	5
381855	M8	3,5	18	14	12	13	12
381863	M10	4,0	22	19	14	17	24
381871	M12	4,0	25	21	16	19	33
381889	M16	5,0	31	27	21	24	62
381897	M20	6,0	37	33	26	30	114
381905	M24	6,0	45	40	30	36	188

#### Application:

Separable bolt nuts for quick-mounting applications. It can be simply pushed over long or damaged studding. Nut halves are undetachable through the separation block, even in the swivelled out condition.

#### Advantage:

- Time saved with long and damaged studding
- Overcomes studding that is corroded, damaged at the thread and even bent up to approx. 20°
- Compact design., extremely easy to handle
- Fast installation and disassembly using standard tools
- Retention as solid nuts of the same size with strength class 10.

#### Note:

After they are pushed together, a 1/4 to 1/2 turn suffices for locking.

#### On request:

Other materials and special sizes on request.

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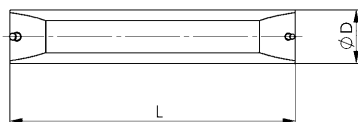
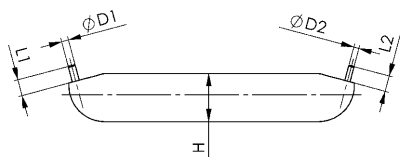
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## No. 6333

### Mounting key

Aluminium.



Order no.	D	D1	D2	H	L	L1	Weight [g]
381921	15	2	1,5	13,3	80	5	36

#### Application:

For easy opening of the AMF-TWINNUT nuts.

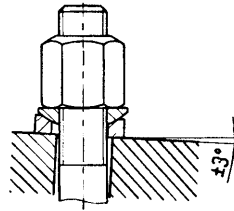
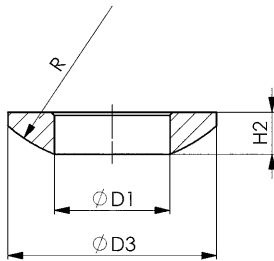
#### Note:

Usable for all nut sizes.

## DIN 6319C

### Spherical seat washer

Case hardened.



Order no.	Size	D1	D3	H2	R	Packaging Unit	Weight [g]
81828	M6	6,4	12	2,3	9	100	1,0
81737	M8	8,4	17	3,2	12	100	2,5
81745	M10	10,5	21	4,0	15	100	5,0
81752	M12	13	24	4,6	17	100	7,0
81760	M14	15	28	5,0	22	50	10
81778	M16	17	30	5,3	22	100	12
81786	M20	21	36	6,3	27	50	23
81794	M24	25	44	8,2	32	25	42
81802	M30	31	56	11,2	41	-	87
81810	M36	37	68	14,0	50	-	184
81836	M42	43	78	17,0	58	-	297
81844	M48	50	92	21,0	67	-	525



#### Recommendations

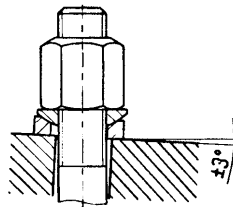
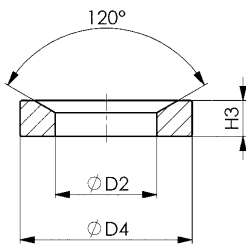


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## DIN 6319D

### Dished washer

Case hardened. Designed for screw solidity in compliance with 8.8. Limited for use on flat closed ring areas (not allowed for elongated holes, we recommend DIN 6319G for these).



Order no.	Size	max.* [kN]	D2	D4	H3	Packaging Unit	Weight [g]
81950	M6	9	7,1	12	2,8	100	1,5
81869	M8	17	9,6	17	3,5	100	4,0
81877	M10	26	12,0	21	4,2	100	6,5
81885	M12	38	14,2	24	5,0	100	10
81893	M14	53	16,5	28	5,6	50	18
81901	M16	73	19,0	30	6,2	50	19
81919	M20	117	23,2	36	7,5	25	32
81927	M24	168	28,0	44	9,5	25	63
81935	M30	269	35,0	56	12	-	133
81943	M36	394	42,0	68	15	-	236
81968	M42	542	49,0	78	18	-	365
81976	M48	714	56,0	92	22	-	641

\* max. transmittable static screw force.



#### Recommendations



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## No. 6319D

### Dished washer

made of C45. Designed for screw solidity in compliance with 12.9. Limited for use on flat closed ring areas (not allowed for elongated holes, we recommend DIN 6319G for these).

Order no.	Size	max.* [kN]	D2	D4	H3	Packaging Unit	Weight [g]
87171	M12	65	14,2	24	5,0	100	10
87197	M16	125	19,0	30	6,2	50	19
87239	M20	196	23,2	36	7,5	25	32
87254	M24	281	28,0	44	9,5	25	63

\* max. transmittable static screw force.



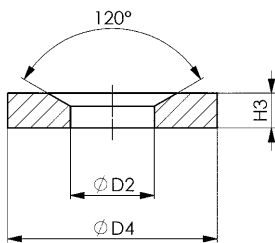
Subject to technical alterations.



## DIN 6319G

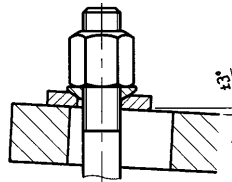
### Dished washer

tempered. Due to large dia and thickness more suitable to match slotted clamps.



Order no.	Size	D2	D4	H3	Packaging Unit	Weight [g]
82073	M6	7,1	17	4	25	5,5
81984	M8	9,6	24	5	100	13
81992	M10	12,0	30	5	100	19
82008	M12	14,2	36	6	100	32
82016	M14	16,5	40	6	50	48
82024	M16	19,0	44	7	50	56
82032	M20	23,2	50	8	25	94
82040	M24	28,0	60	10	10	169
82057	M30	35,0	68	10*	-	218
82065	M(36)	42,0	80	12	-	350
82081	M(42)	49,0	100	15	-	640
82099	M(48)	56,0	110	17	-	830

( ) DIN extended  
\* different from DIN.



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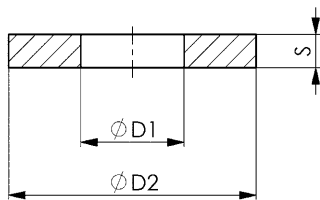
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## DIN 6340

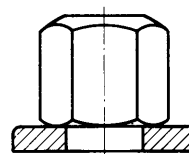
### Washer

tempered (350 + 80 HV30)



Order no.	Size	Size inch	D1	D2	S	Packaging Unit	Weight [g]
82818	M6	1/4	6,4	17	3	100	5
82826	M8	5/16	8,4	23	4	100	10
82834	M10	3/8	10,5	28	4	100	16
82842	M12	1/2	13	35	5	100	35
82859	(M14)	-	15	40	5	50	40
82867	M16	5/8	17	45	6	50	60
82875	(M18)	-	19	45	6	50	60
82883	M20	3/4	21	50	6	50	73
82891	(M22)	7/8	23	50	8	25	92
82909	M24	7/8	25	60	8	20	170
82917	(M27)	1 1/16	28	68	10	-	210
82925	M30	1 1/8, 1 3/16	31	68	10	-	230
82933	(M36)	1 1/4, 1 3/8	38	80	10	-	350
82941	(M42)	1 1/2	44	100	15	-	670
82958	(M48)	1 3/4	50	110	17	-	920

( ) DIN extended.



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Subject to technical alterations.

## No. 6530

### Boxed set of assorted clamping elements

With deep clamping jaw no. 6490 and screw compound no. 6339. The clamping tool assortment boxes are designed for machine tools with T-slot tables and contain all the elements required for the fast clamping of tools, fixtures and workpieces. They are produced from tempered steel according to DIN or factory standards. Screw parts strength class 8 and/or 10. In a sturdy and high-quality wooden box with removable folding lid.



Order no.	Slot	No. 6500E Pcs.xSize	No. 6314Z Pcs.xSize	DIN 787 Pcs.xLength	DIN 6379 Pcs.xLength	DIN 6330B	DIN 6319G	No. 6334	No. 6490* Pcs.xSize	No. 6485 Pcs.xSize	No. 3113A Pcs.xSize	No. 6339	L x W x H	Weight [Kg]
83584	M10x10	4x1, 4x2, 2x3	4x 11x80	2x40, 4x63, 4x100	4x80	6x	6x	4x	4x12	-	1x 16x16	1x	355x270x47	9,2
83592	M12x12	4x2, 4x3	4x 14x100	2x50, 4x80, 4x125	4x100	6x	6x	4x	4x12	-	1x 18x18	1x	460x330x50	14,3
83600	M12x14	4x2, 4x3	4x 14x100	2x50, 4x80, 4x125	4x100	6x	6x	4x	4x14	1x 14-20	1x 18x18	1x	460x330x50	14,6
83691	M14x16	4x2, 4x3	2x 14x100, 4x 14x160	2x63, 4x100, 4x160	4x125	6x	6x	4x	4x16	1x 14-20	1x 22x22	1x	510x415x50	18,5
83618	M16x16	4x2, 4x3	4x 18x125	2x63, 4x100, 4x160	4x125	6x	6x	4x	4x16	1x 14-20	1x 24x24	1x	510x415x50	21,5
83626	M16x18	4x2, 4x3	4x 18x125	2x63, 4x100, 4x160	4x125	6x	6x	4x	4x18	1x 14-20	1x 24x24	1x	510x415x50	21,5

\* The low height clamping jaws no. 6490 are complete sets with T-nuts DIN 508, screws ISO 4762 and two hexagon keys ISO 2936. Single items available.

## No. 6531

### Boxed set of assorted clamping elements

With sprung clamp holder no. 6342 and screw compound no. 6339.

The clamping tool assortment boxes are designed for machine tools with T-slot tables and contain all the elements required for the fast clamping of tools, fixtures and workpieces. They are produced from tempered steel according to DIN or factory standards. Screw parts strength class 8 and/or 10. In a sturdy and high-quality wooden box with removable folding lid.



Order no.	Slot	No. 6500E Pcs.xSize	No. 6314Z Pcs.xSize	DIN 787 Pcs.xLength	DIN 6379 Pcs.xLength	DIN 508	DIN 6330B	DIN 6319G	No. 6485 Pcs.xSize	No. 3113A Pcs.xSize	DIN 6342 Pcs.xSize	No. 6334	No. 6339	L x W x H	Weight [Kg]
83808	M10x10	4x1, 4x2, 2x3	4x 11x80	4x63, 4x100	4x80	-	6x	6x	-	1x 16x16	4x1	4x	1x	350x225x47	6,5
83816	M12x12	4x2, 4x3	4x 14x100	4x80, 4x125	4x100	-	4x	6x	-	1x 18x18	4x2	4x	1x	359x333x57	11,0
83824	M12x14	4x2, 4x3	4x 14x100	4x80, 4x125	4x100	-	4x	6x	1x 14-20	1x 18x18	4x2	4x	1x	359x333x57	11,0
83832	M16x16	4x2, 4x3	4x 18x125	4x100, 4x160	4x125	-	4x	6x	1x 14-20	1x 24x24	4x3	4x	1x	390x415x55	16,5
83840	M16x18	4x2, 4x3	4x 18x125	4x100, 4x160	4x125	-	4x	6x	1x 14-20	1x 24x24	4x3	4x	1x	390x415x55	16,5
83634	M20x20	4x2, 4x3	4x 22x160	4x125, 4x200	4x125	-	6x	6x	1x 14-20	1x 30x30	4x4	4x	1x	480x528x60	24,5
83642	M20x22	4x2, 4x3	4x 22x160	4x125, 4x200	4x125	-	6x	6x	1x 22-32	1x 30x30	4x4	4x	1x	480x528x60	24,5
83659	M20x24	4x2, 4x3	4x 22x160	-	4x200, 8x125	8x	6x	6x	1x 22-32	1x 30x30	4x4	4x	1x	480x528x60	24,8

Single items available.

Subject to technical alterations.

## No. 6520

### T-bolt set

In a sturdy and high-quality wooden box with removable folding lid. All parts tempered, strength class 8 or 10.



Order no.	Slot	DIN 787 Pcs.xLength	DIN 6379 Pcs.xLength	DIN 508	DIN 6330B	No. 6334	DIN 6319C+G	DIN 6340	L x W x H	Weight [Kg]
82982	M10x10	2x40, 4x63, 4x100	4x50, 4x80, 4x200	1)	4x	4x	4x	4x	254x188x32	2,0
82990	M12x12	2x50, 4x80, 4x125	4x63, 4x100, 4x200	1)	4x	4x	4x	4x	278x234x36	3,2
83006	M12x14	2x50, 4x80	4x63, 4x100, 4x125, 4x200	4x	4x	4x	4x	4x	278x234x36	3,5
83014	M14x16	2x63, 4x100	4x63, 4x100, 4x160, 4x250	4x	4x	4x	4x	4x	317x239x44	5,4
83022	M16x16	2x63, 4x100, 4x160	4x80, 4x125, 4x250	1)	4x	4x	4x	4x	339x294x48	7,4
83030	M16x18	2x63, 4x100	4x80, 4x125, 4x160, 4x250	4x	4x	4x	4x	4x	339x294x48	7,4
83048	M18x20	2)	6x80, 8x125, 4x200, 4x315	10x	4x	4x	-	10x	359x342x56	11,0
83055	M20x22	2x80, 4x125	4x80, 4x125, 4x200, 4x315	4x	4x	4x	4x	4x	358x342x56	13,5
83063	M24x28	2x100, 4x160	4x100, 4x160, 4x250, 4x400	4x	4x	4x	4x	4x	444x409x72	23,6

1) = T-nuts DIN 508 not suitable for this size.

2) = M18x20, included instead DIN 787 are 4 studs DIN 6379x125 mm and 2x80 mm, with DIN 508 T-nuts and DIN 6340 washers each. Single items available.

## No. 6532

### Basic sortiment

All parts are produced from tempered steel according to DIN or factory standards, screw parts tempered to strength class 8 or 10. Ideal for tool making, manufacturing and training facilities.



Order no.	Size	Clamping force [kN]	max. clamping height using 2 clamps [mm]	max. clamping height using 4 clamps [mm]	No. 6314Z Pcs.xSize	No. 6500E Pcs.xSize	DIN 787 Pcs.xLength	DIN 6379 Pcs.xLength	DIN 6330B	DIN 6340	No. 6334	Weight [Kg]
83899	M12x14	20	165	70	2x14x100, 2x14x160	4x2, 4x3	2x50, 4x80, 4x125	2x100	6x	6x	2x	10,0
83915	M14x16	28	195	100	2x14x100, 2x14x160	4x2, 4x3	2x63, 4x100, 4x160	2x100, 2x160	6x	6x	2x	11,1
83907	M16x18	40	205	130	2x18x125, 2x18x200	4x2, 4x3	2x63, 4x80, 4x160	2x200, 4x125	6x	6x	4x	15,2

## No. 6470

### Trolley for clamping equipment

without clamping equipment and without holders.  
Rugged steel housing, storage compartments designed with rubber mats. 2 rollers + 2 castors with locking brake.



Order no.	Load [Kg]	Height [cm]	Width [cm]	Depth [cm]	Weight [Kg]
74252	400	126	123	80	100

#### Advantage:

- Mobile = quickly ready when needed at the workplace
- Tidy = convenient, space-saving and always readily available
- Individual equipment configurations possible through variable arrangement of holders

#### Note:

Holders for clamps (No. 6470H-2) and clamping bolts (No. 6470H-1) can be selected as required.

## No. 6470-Mxx

### Trolley for clamping equipment with basic set of clamping equipment

incl. clamping equipment tool cart no. 6470.

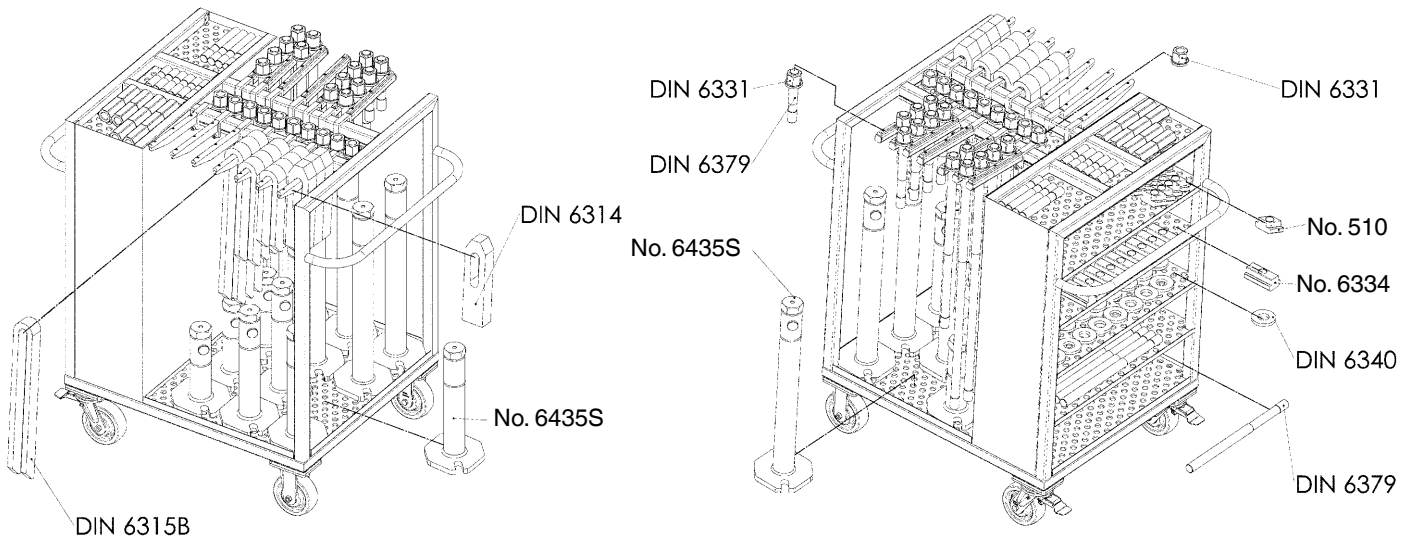


Order no.	Size	Holder no. 6470H-01 [St.]	Holder no. 6470H-02 [St.]	Weight [Kg]
72520	M16	5	4	257,0
73270	M20	5	4	277,0
74674	M24	5	4	304,0
74880	M30	7	4	512,5

#### Design:

Item	Order no. 72520 (Size M16)			Order no. 73270 (Size M20)			Order no. 74674 (Size M24)			Order no. 74880 (Size M30)		
	Order no.	Size	Pc.	Order no.	Size	Pc.	Order no.	Size	Pc.	Order no.	Size	Pc.
DIN 6379	81422	M16x125	6	84988	M20x125	6	85563	M24x125	6	85068	M30x125	6
	85498	M16x200	6	81513	M20x200	6	85514	M24x200	6	81612	M30x200	6
	85548	M16x315	6	84996	M20x315	6	86009	M24x315	6	81620	M30x315	6
	85472	M16x500	6	85001	M20x500	6	86025	M24x500	6	81638	M30x500	6
DIN 6331	82578	M16	30	82594	M20	30	82610	M24	30	81646	M30x700	6
	82867	M16	30	82883	M20	30	82909	M24	30	81661	M30x1000	6
	70060	18x160	4	70086	22x200	4	70102	26x250	4	82636	M30	30
	70524	18x160	4	70557	22x200	4	70581	26x250	4	82925	M30	30
DIN 6315B	70532	18x200	4	70573	22x315	4	70607	26x315	4	70128	33x315	4
	70540	18x250	4	70425	22x500	4	70433	26x500	4	70623	33x315	4
	82701	M16	10	82727	M20	10	82743	M24	10	70631	33x400	4
No. 6334	72413	100	4						70441	33x600	4	
	72439	210	4						82768	M30	10	
No. 6400	72637	300	4	72637	300	4	72637	300	4			
	72645	460	4	72645	460	4	72645	460	4	72645	460	4
No. 6435S										72652	750	4
										72660	1250	4
No. 508L	84707	M16x18	10	84723	M20x22	10	84749	M24x28	10	84764	M30x36	10
	80283	M16x18	10	88153	M20x24	10	80317	M24x28	10	80325	M30x36	10

Subject to technical alterations.



## No. 6470H-1 Holder for clamping bolts

Order no.	Length [mm]	Width [mm]	Height [mm]	Weight [g]
<b>74187</b>	338	20	86	866



## No. 6470H-2 Holder for clamps

Order no.	Length [mm]	Width [mm]	Height [mm]	Weight [g]
<b>74203</b>	340	20	86	870



## No. 6535

### Set of assorted plastic clamping elements

including 55 elements. Clamps, step blocks and nuts: high strength plastic PBT, red. Stud bolts: aluminium anodised.

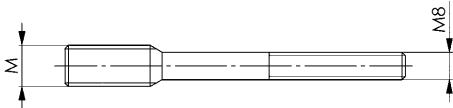
Order no.	Size	M	L x W x H	Weight [g]
83071	06	M6	440x370x50	1700
83105	08	M8	440x370x50	1740
83089	10	M10	440x370x50	1770
83097	12	M12	440x370x50	1800

#### Application:

Most suitable for 3D-coordinate measuring machines, engraving and E.D.M. machine application and any light duty clamping. The possible clamping force (up to 500 N), depending on the actual leverage, can be achieved by manual tightening of knurled nut, while its hexagon section allows release through use of open jaw wrench.

#### Advantage:

- The weight is only 1/4 compared with aluminium and 1/10 compared with steel elements.
- anticorrosive against hand sweat
- very easy to handle
- no damage to surface plate, supporting table or workpiece
- suitable for multi-combination.



#### Recommendations



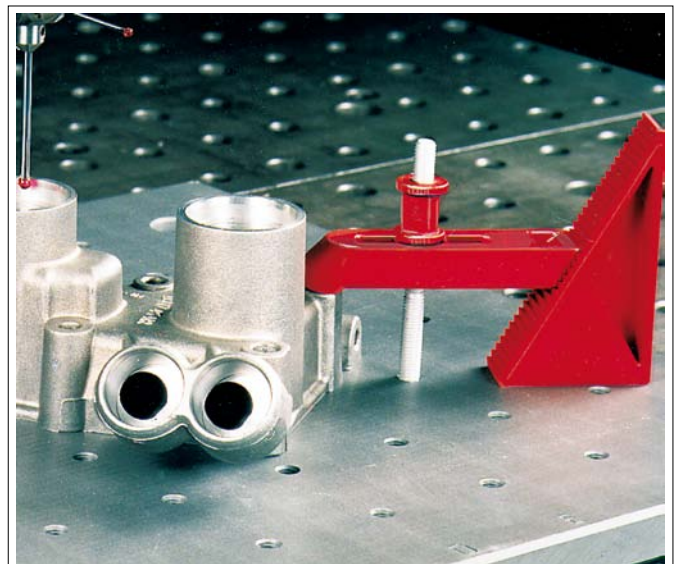
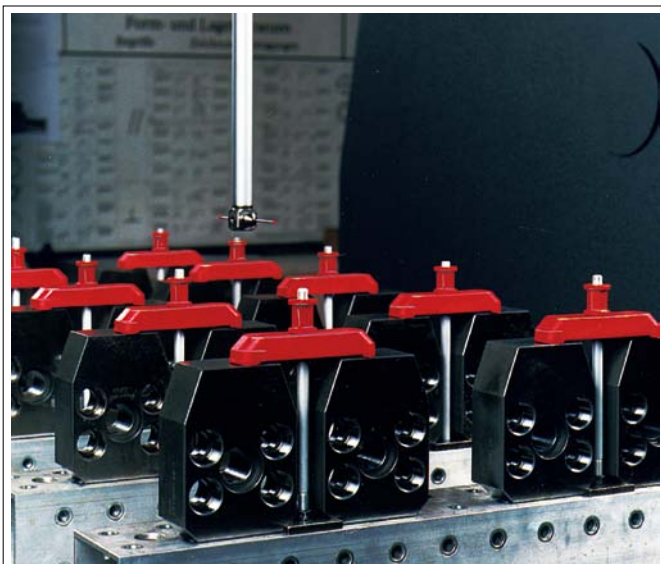
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page 90



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Subject to technical alterations.

## No. 6339

### Heavy duty thread paste



Order no.	Temperature range	Contents [ml]	Packaging Unit	Weight [g]
86686	-25 - + 125°C	75	12	75

#### Application:

For lubricating screw connections in clamping fixtures. Especially when aggressive coolants are used. Unlubricated (dry) screw connections are subjected to high friction forces (clamping force reduction) and rapid wear when tightened securely often. Thanks to its optimal lubricity, AMF screw compound increases the achievable clamping force and protects the material (longer service life).

#### Features:

The paste, based on mineral fat, has a synergetic acting combination of highly active white solid lubricants. It is resistant to heat and wash off. (Washouttest according DIN 51807, part 2; loss of lubricant after 1 h/37.8°C = 1.4%).

## No. 6342

### Spring type clamp support

with brass locking screw



Order no.	Size	D1	D2	L1	L2	Travel of spring S	for clamping screw	Weight [g]
75952	1	22	10,5	30	22	8	M8-M10	41
75960	2	26	14,5	32	22	10	M12-M14	55
75978	3	32	18,5	38	26	12	M16-M18	89
75986	4	38	22,5	40	28	12	M20-M22	133
75994	5	45	27,5	44	32	12	M24-M27	177

The spring type clamp support holds the clamp while the work piece is removed and loaded, ensuring fast and safe clamping sequence.

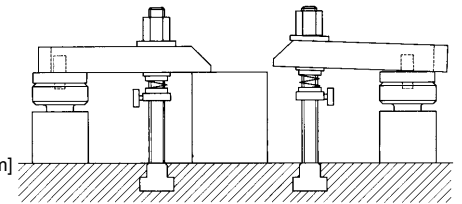
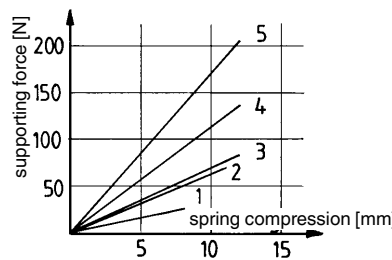
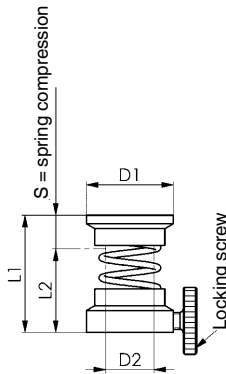
#### Recommendations



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## No. 6485

### T-slot scraper

Order no.	Size	Slot	Packaging Unit	Weight [g]
72892	14-20	14-20	100	105
72900	22-32	22-32	50	100
72918	36-54	35-54	-	360

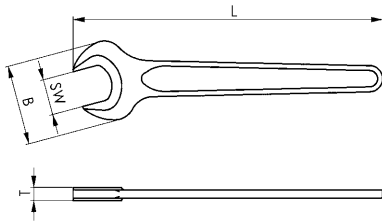


Subject to technical alterations.

## DIN 894

### Open-ended spanner, single-ended

Special steel forging, jaws machined, angle of jaws 15°, hardened and phosphated.



Order no.	SW	Thread metric	B	L	T	Packaging unit	Weight [g]
53579	8	5	19	94	4	10	13
53595	10	6	22	105	5	10	20
53611	12	-	26	125	5	10	28
53629	13	8	29	125	5	10	35
53645	17	10*	36	155	6	10	65
53520	18	12	39	155	7	10	70
53652	19	12*	40	170	7	10	83
53660	22	14*	46	195	8	10	105
53678	24	16	50	215	9	10	150
53686	27	18	56	240	10	10	200
53694	30	20	62	265	11	10	265
53702	32	22*	67	275	12	10	295
53710	36	24	74	300	13	10	425

\* Size to old DIN standard.

## No. 6486

### T-slot cover

Made of aluminium profile. Cutting to the desired length is easily done with a fine saw blade.



Order no.	Size	Slot	Length [mm]	Weight [g]
71449	12x1000	12	1000	88
71456	14x1000	14	1000	100
71464	16x1000	16	1000	120
71472	18x1000	18	1000	135
71928	20x1000	20	1000	150
71936	22x1000	22	1000	165
71787	24x1000	24	1000	170
71944	28x1000	28	1000	200
71951	36x1000	36	1000	220

### Advantage:

The thorough subsequent cleaning of the slot on the machine table is no longer required. Always cover free slots by using the original AMF-T-slot cover before starting with machining. The T-slot covers can easily be removed after machining.



Subject to technical alterations.

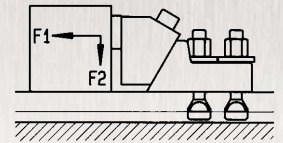
CAD





The wedge action of clamping jaws is the characteristic feature of these pull down clamps. It causes the "pull down effect", which presses the workpiece against both, stop and machine table. The clamping force is resolved to its horizontal and vertical components F1 and F2. The lateral catch of jaws allows complete machining from above of top faces even for low sized workpieces without problems.

The clamp forces mentioned in the tables are achieved by using the optimal size of bolts and utilizing the respective permissible torque. Force F1 presses the workpiece against the stop, pull down force F2 is achieved with a plain face of workpiece.

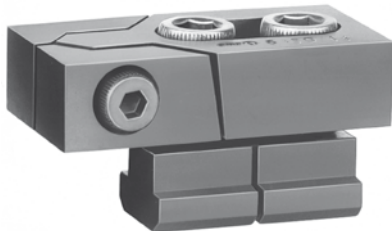


## No. 6490

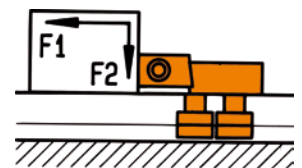
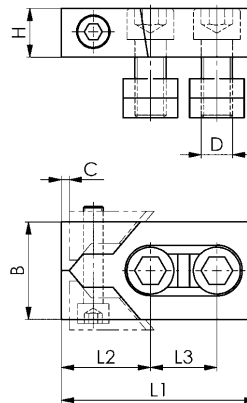
### Low height clamping jaws, model „Bulle“

tempered and burnished. Packing: 2 units in carton, complete with cap screw ISO 4762-10.9, T-nuts DIN 508 and hexagon key ISO 2936.

Available in pairs only!



Order no.	Slot	B	C	D	H	L1	L2	L3	F1 [kN]	F2 [kN]	Weight [g]
72959	12	40	3	M10	20	80	39	26	16	0,6	1150
72967	14	40	3	M12	20	80	39	26	22	0,9	1250
72975	16	40	3	M12	20	80	39	26	22	0,9	1330
72983	16	50	4	M14	25	100	46	34	32	1,2	2340
72991	18	50	4	M16	25	100	46	34	36	1,4	2540
73007	20	50	4	M16	25	100	46	34	36	1,4	2660
73015	22	78	5	M20	30	140	65	50	36	1,4	5980
73023	24	78	5	M20	30	140	65	50	36	1,4	6330
73031	28	78	5	M24	30	140	65	50	40	1,6	7060
73049	30	78	5	M24	30	140	65	50	40	1,6	7580



## No. 6491

### Slot stop

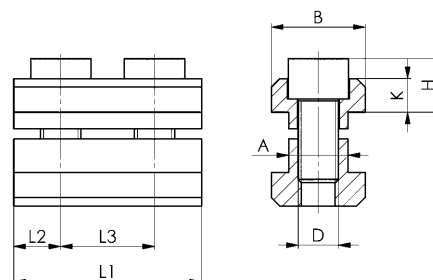
tempered and burnished.



Order no.	Slot	A	B	D	H	K	L1	L2	L3	Weight [g]
73817	12	11,7	18	M8	12	7	36	9,0	18	100
73825	14	13,7	22	M8	12	8	44	11,0	22	140
73833	16	15,7	25	M12	15	9	50	12,5	25	240
73841	18	17,7	28	M12	16	10	56	14,0	28	340
73858	20	19,7	32	M16	19	12	64	16,0	32	520
73866	22	21,7	35	M16	21	14	70	17,5	35	720
73874	24	23,7	40	M20	23	16	80	20,0	40	880
73882	28	27,7	44	M20	24	18	88	22,0	44	1460

### Application:

To be used for longitudinal or transversal function. The low overall height allows application with flat workpieces.



### Recommendations



No. 911LG-H100F



Subject to technical alterations.

## No. 6492

### Flat clamp, model „Mini-Bulle“

tempered and burnished. Packing: 2 units in carton, complete with fastening screws ISO 4762 (8.8) and hexagon key ISO 2936. Only delivered in pairs!



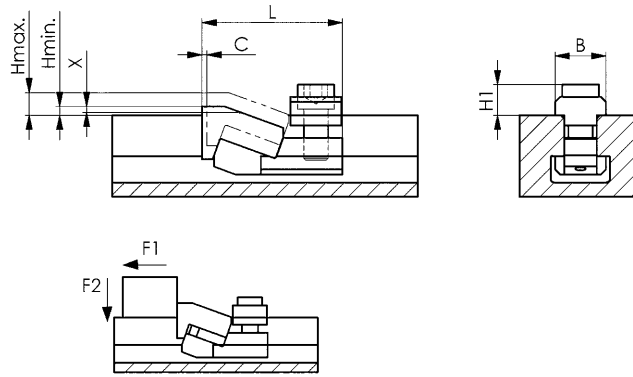
Order no.	Slot	H min.	H max.	B	C	H1	L	X	F1 [kN]	F2 [kN]	Weight [g]
73098	12	2,5	13,5	18	1,8	11	52	5	5,0	0,6	300
73106	14	1,5	13,5	22	1,8	11	55	5	5,5	0,7	380
73114	16	2,5	17,0	25	2,5	15	68	6	8,0	0,9	700
73122	18	1,5	16,0	28	2,5	15	71	6	9,0	1,0	830
73080	22	4,5	21,5	35	3,0	20	89	9	16	1,9	1740

Hmin./Hmax.: depending on groove depth to DIN 650.

The clamping piece can be ground by X mm. This allows lower clamping heights to be achieved.

### Application:

These tempered clamps are designed for extremely low workpieces. Wedge action of jaws presses the workpiece firmly and safely against the machine table. The horizontal forces are compensated by a screw related to slot size, which blocks the clamp without damage to table.



## No. 6492D

### Flat clamp, double, model „Mini-Bulle“

tempered and burnished. Packing: 2 units in carton, complete with fastening screws ISO 4762 (8.8) and hexagon key ISO 2936. Only delivered in pairs!



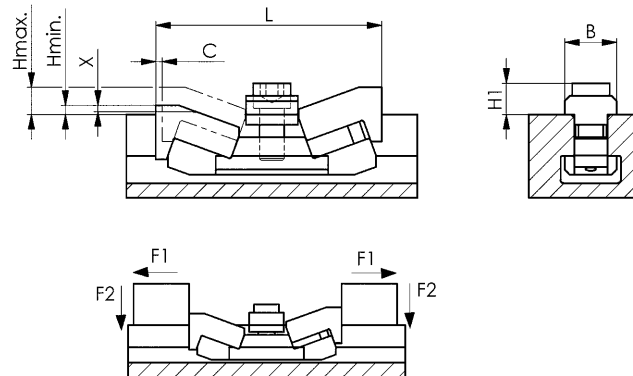
Order no.	Slot	H min.	H max.	B	C	H1	L	X	F1 [kN]	F2 [kN]	Weight [g]
73486	12	2,5	13,5	18	1,8	11	86	5	5,0	0,6	370
73494	14	1,5	13,5	22	1,5	11	88	5	5,5	0,7	485
73791	16	2,5	17,0	25	2,5	15	112	6	8,0	0,9	850
73809	18	1,5	16,0	28	2,0	15	114	6	9,0	1,0	1060
73924	22	4,5	21,5	35	2,7	20	145	8	16,0	1,9	2200

Hmin./Hmax.: depending on groove depth to DIN 650.

The clamping piece can be ground by X mm. This allows lower clamping heights to be achieved.

### Application:

Particularly short workpieces can be clamped with these tempered flat clamps. The wedge effect of the jaws tightly and reliably presses the workpiece against the machine tool table. The horizontal forces are absorbed by a screw corresponding to the groove size, and this firmly clamps the clamp without damaging the table.



### Recommendations



No. 911LG-H100F

Subject to technical alterations.

## No. 6365

### Pull-Down Clamp

Hardened steel

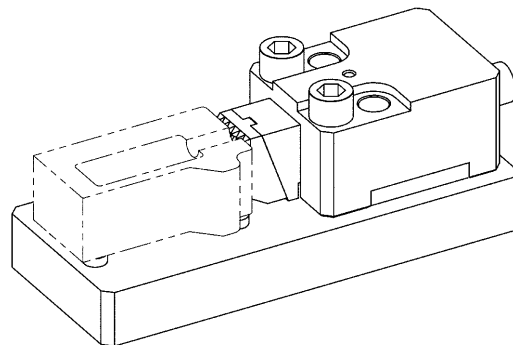
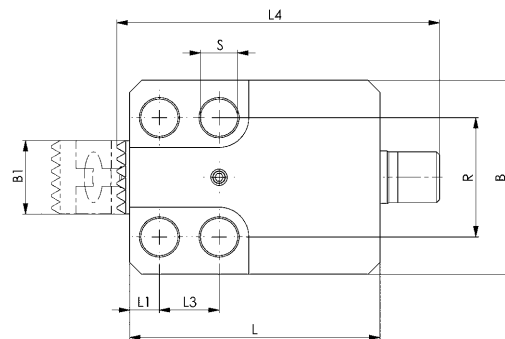
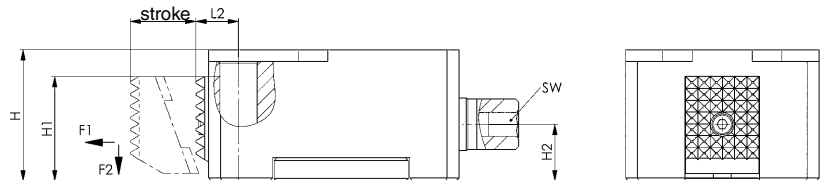


CAD

Order no.	Size	B	B1	H	H1	H2	F1 [kN]	F2 [kN]	Weight [g]
88492	12	65	25	44	36	19	20	2	1515
79392	16	80	30	50	41	21	40	4	2604

### Application:

This clamping jaw must be able to run on the mounting surface.



### Recommendations



No. 6365G,  
page 100



No. 6365N,  
page 100

### Dimensions:

Order no.	L	L1	L2	L3	L4	R	dia. S	SW	Stroke [mm]
88492	84	10	14	20	108,5	40	12,5	8	22
79392	102	15	18	25	123,0	50	16,5	10	27

## No. 6365G

### Clamping Jaws, serrated

Hardened steel

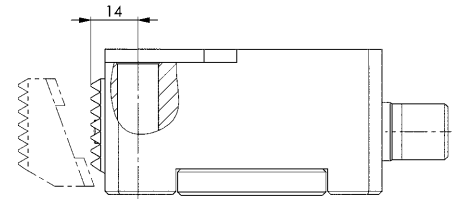
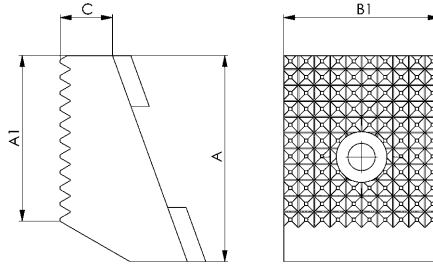


Order no.	Size	A	A1	B1	C	Weight [g]
88500	12	32,5	26	24,6	8,5	69
120360	16	37,5	31	29,8	7,5	99



#### Note:

This clamping jaw be part of standart sortiment for draw-down clamp 6365-\*\*-001.



## No. 6365N

### Clamping Jaws, with ridge

hardened steel

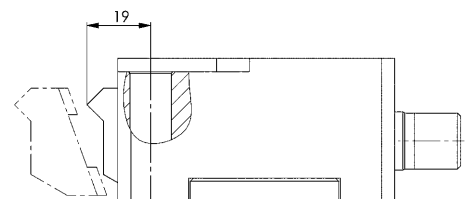
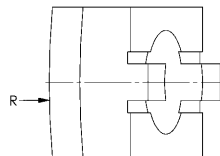
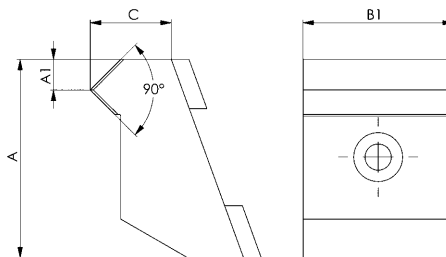


Order no.	Size	A	A1	B1	C	R	Weight [g]
88526	12	32,5	5	24,6	13	200	74
88542	16	37,5	5	29,8	12,5	250	110

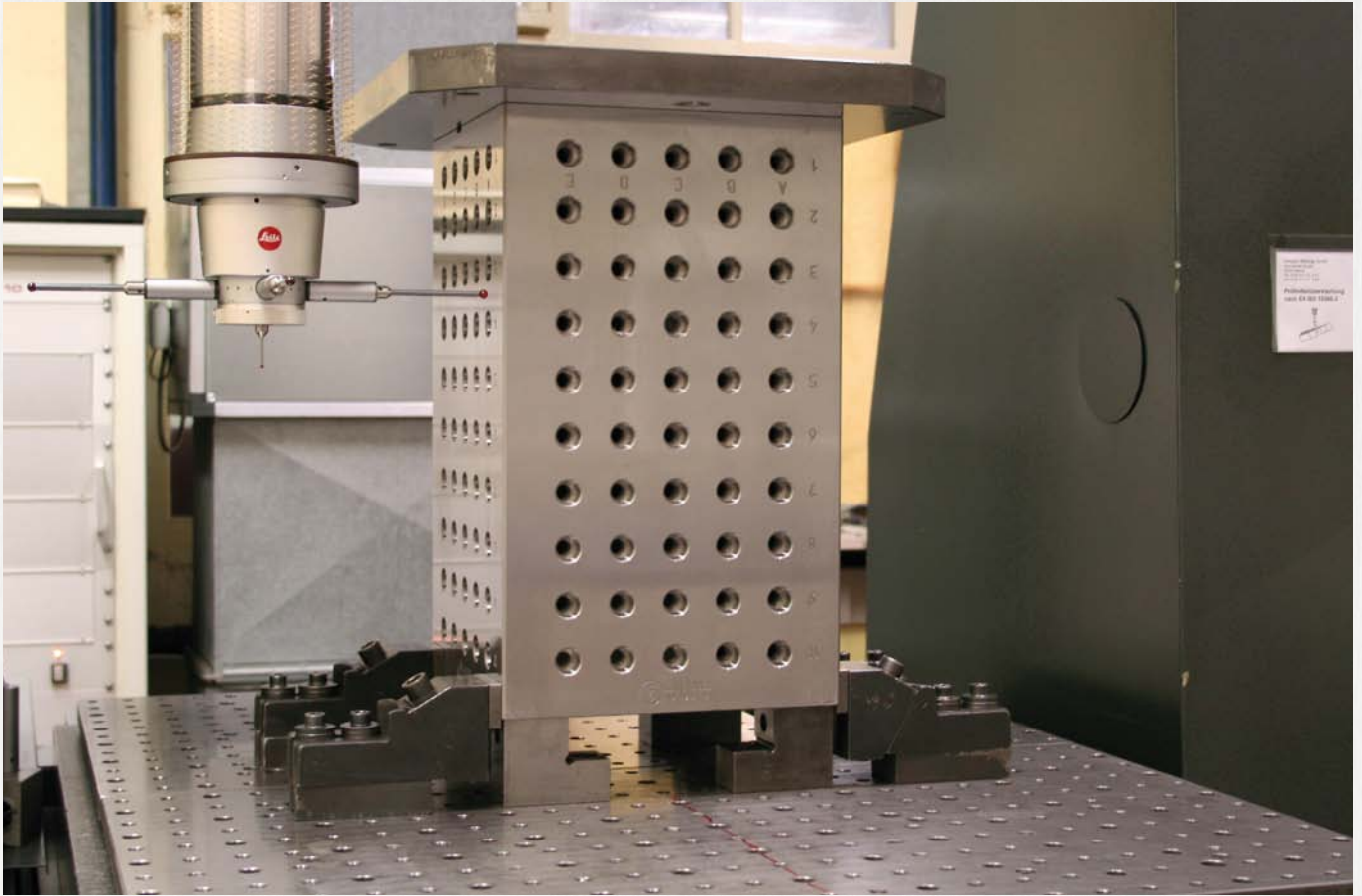


#### Application:

Suitable for pull-down clamp no. 6365. Especially suitable for workpieces with a very uneven or hard surface (castings).



Subject to technical alterations.



No. 6494

## Low height clamping jaws, model „Maxi-Bulle“

Body: spherical casting. Jaws: tempered and burnished. Packing: 2 units in carton with hexagon key ISO 2936 without screw s or bolts. Available in pairs only!



CAD

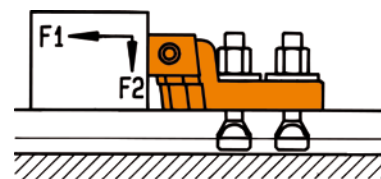
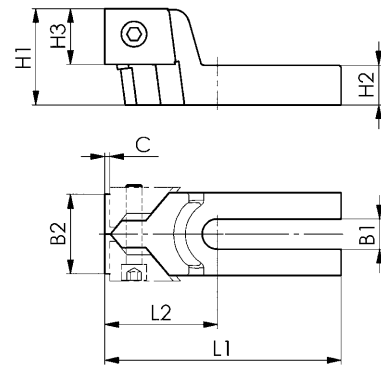


Order no.	Slot	B1	B2	C	H1	H2	H3	L1	L2	F1* [kN]	F2* [kN]	Weight [g]
73130	10	13	40	3	50	20	30	115	60	6	0,2	1590
	12									10	0,4	
	14									15	0,6	
73148	16	19	50	4	60	25	35	150	72	20	0,8	2940
	18									28	1,1	
	20									36	1,4	
73155	22	31	80	5	75	30	45	205	102	38	1,5	7900
	24									38	1,5	
	28									40	1,6	
	30									40	1,6	
	32									44	1,7	
	36									44	1,7	

\* Clamping forces F1 and F2 depend on the groove width.

### Application:

The clamping jaws „Maxi-Bulle“ for work on larger heights was developed from the tried and tested Model „Bulle“ no. 6490. The wedge faces of these clamps are skilfully arranged to achieve maximum clamping force with low exertion. For fastening, 2 T-slot bolts DIN 787 for each clamping jaw, according to T-slot size in use, should be ordered separately. For lower arrangement of clamping screws use cap screws ISO 4762 with washers DIN 6340 and T-nuts 508.



### Recommendations



No. 911LG-H100F

Subject to technical alterations.

## No. 6497

### Extra strong clamping jaw

High design with exact prismatic guide.

Main body: malleable iron.

Clamping jaws: case-hardening steel, case-hardened. Reversible clamping jaws with smooth side for machined workpieces and serrated side for rough clamping surfaces.



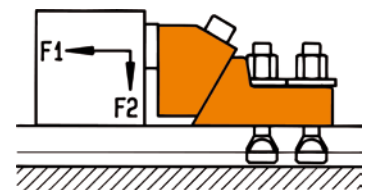
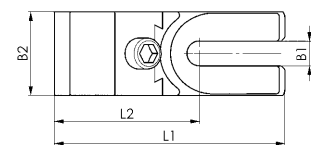
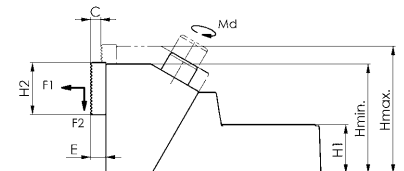
CAD

Order no.	Slot	B1	B2	C	E	H min.	H max.	H1	H2	L1	L2	F1* [kN]	F2* [kN]	Md [Nm]	Weight [g]
73213	12	19	65	8	12	85	99	38	40	179	112,5	8	1,2	20	4037
	14											2,2	40		
	16											3,0	45		
	18											4,2	60		
73221	20	26	75	11	12	100	118	45	40	230	138,5	25	4,5	85	6688
	22											4,5	85		
	24											4,8	95		
	28											4,8	95		
	30											5,4	110		
73239	32	38	90	15	12	120	145	56	40	265	158	50	7,5	160	11031
	36														
	42														

\* Clamping forces F1 and F2 depend on the groove width.

### Application:

Due to their large clamping faces these clamping jaws are suitable for lateral clamping of high workpieces. For fastening on the machine table we recommend the use of 2 clamping screws! Related to T-slot size in use, 2 T-slot bolts DIN 787 for each clamp should be ordered separately.



## No. 6497G

### Stable clamping jaws, closed

High design with exact prismatic guide.

Body: malleable casting.

Clamping jaws: Case-hardening steel, case-hardened.

Reversible clamping jaws with smooth side for machined workpieces and serrated side for rough clamping surfaces.

Closed groove for use on vertical turning and boring machines.



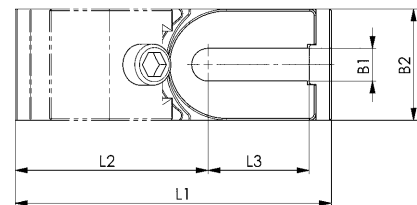
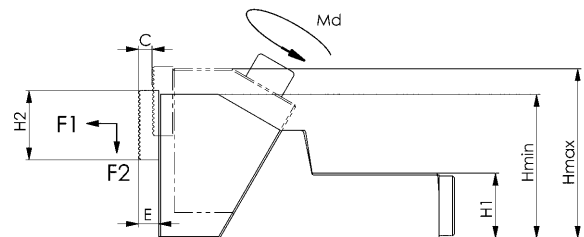
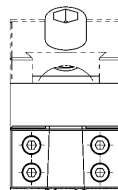
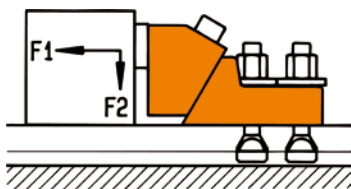
CAD



Order no.	Slot	B1	B2	C	E	H min.	H max.	H1	H2	L1	L2	L3	F1* [kN]	F2* [kN]	Md [Nm]	Weight [g]
376426	12	19	65	8	12	85	99	38	40	187	112,5	60	8	1,2	20	4202
	14												2,2	40		
	16												3,0	45		
	18												4,2	60		
376442	20	26	75	11	12	100	118	45	40	242	138,5	83	25	4,5	85	7029
	22												4,5	85		
	24												4,8	95		
	28												4,8	95		
	30												5,4	95		
376467	32	38	90	15	12	120	145	56	40	283	158,0	95	50	7,5	170	12150
	36															
	42															

### Application:

Due to their large clamping faces these clamping jaws are suitable for lateral clamping of high workpieces. For fastening on the machine table we recommend the use of 2 clamping screws! Related to T-slot size in use, 2 T-slot bolts DIN 787 for each clamp should be ordered separately.



### Recommendations



No. 6497B,  
page 106



No. 911LG-H100F

Subject to technical alterations.



## No. 6497A

### Stop, fixed

High design.

Body: Cast steel.

Clamping jaws: Case-hardening steel, case-hardened.

Reversible clamping jaws with smooth side for machined workpieces and serrated side for rough clamping surfaces.



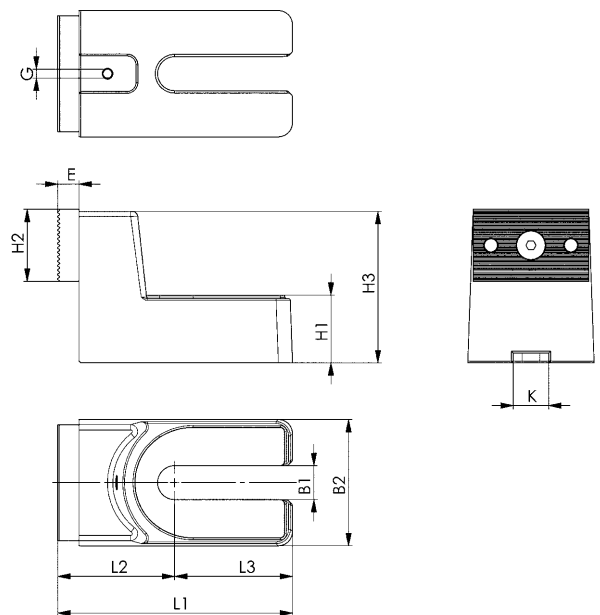
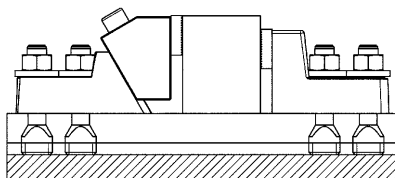
Order no.	Slot	B1	B2	E	G	H1	H2	H3	K	L1	L2	L3	Weight [g]
550509	12 14 16 18	19	65	12	M6	38	40	85	20	132	66,0	66,0	2857
550510	20 22 24 28 30	26	75	12	M6	45	40	100	20	177	85,5	91,5	4673
550511	32 36 42	38	90	12	M6	56	40	120	20	211	95,0	116,0	7900

### Application:

Stop for workpieces or fixtures that are clamped or fastened to the machine table using a stable clamping jaw. Depending on requirements, the clamping jaw can be rotated so that either a smooth surface or a serrated surface is available.

### Note:

Flat sliding block no. 6322A or 6322B enables the stop to be accurately positioned in the machine table groove.



### Recommendations



No. 6497B,  
page 106

Subject to technical alterations.

No. 6497B

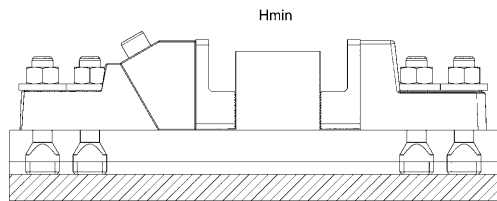
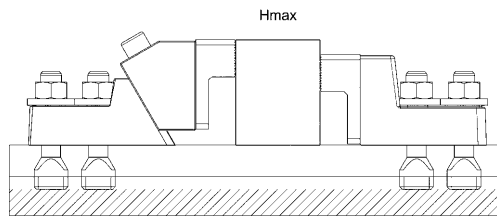
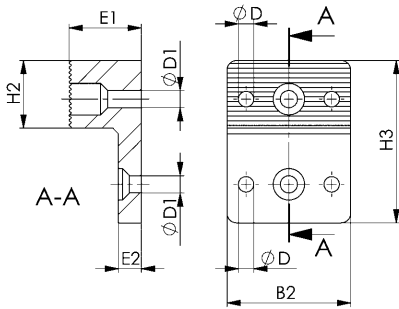
## Clamping jaw

Case-hardened steel, nitrided, with fastening bolt M8

Order no.	Size	B2	D	D1	E1	E2	H2	H3	Weight [g]
550512	19	65	8,1	9	38	12	35	85	889
550513	26	75	8,1	9	38	12	45	100	1306
550514	38	90	8,1	9	38	12	50	120	1829

### Application:

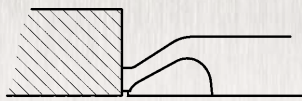
Clamping jaw with serrated surface for machining of unmachined parts. Can be mounted on the stable clamping jaw or the stop.



## CLAMPING WITH HORIZONTAL PRESSURE:

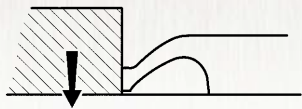
Fastening the horizontal clamp with screws is sufficient to hold and clamp the workpiece. The active part of the clamp consists of three elements - one rigid and two flexible parts

### A workpiece is clamped in 3 steps:



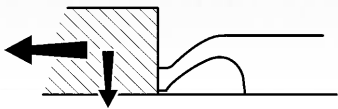
#### Contact:

The flexible clamp elements are positioned against the workpiece.



#### Hold:

The flexible clamp elements push the workpiece down until it comes into contact with the rigid clamping fingers.

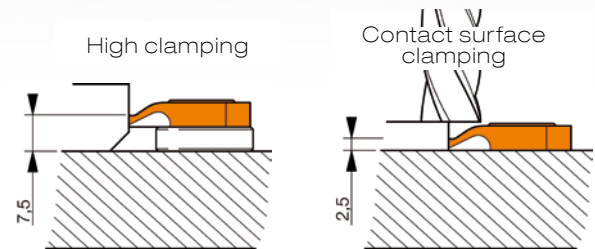
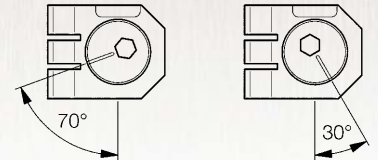


#### Clamping and positioning:

The rigid clamping finger clamps the workpiece.

Clamping force: 4,000 N  
Tightening torque: 9 Nm  
Cam stroke: 1.2 mm

Use of the cam:  
1/4-turn quick clamp



## No. 6493N

### Flat clamp for slotted table, horizontal

consisting of one clamping element and one stop.



Order no.	Slot	Clamping force [N]	Clamping height [mm]	Stroke	A	B	Weight [g]
70144	10	4000	7,5	1,2	46	18	140
70169	12	4000	7,5	1,2	48	18	150
70185	14	4000	7,5	1,2	52	22	162
70342	16	4000	7,5	1,2	48	25	178
70664	18	4000	7,5	1,2	48	25	190

#### Recommendations



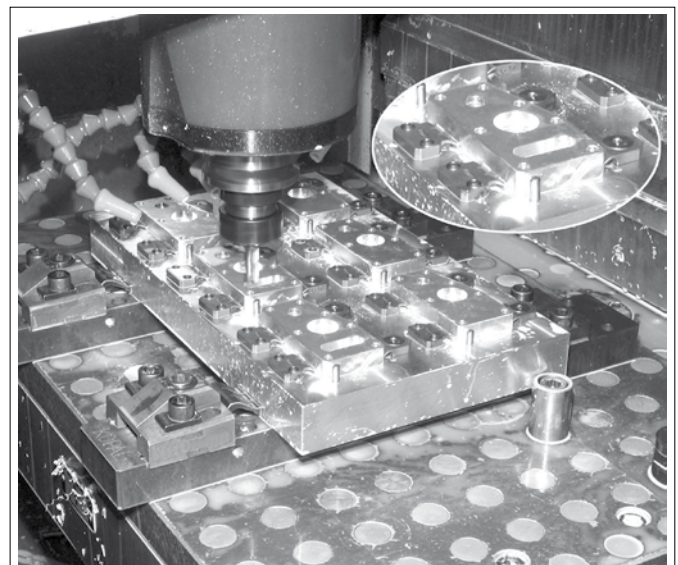
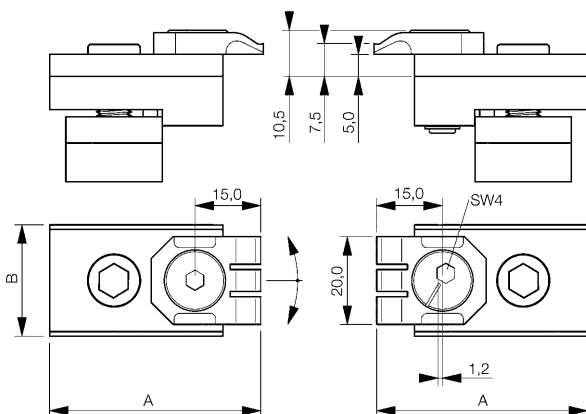
No. 6493SP, page 108



No. 6493S, page 108



No. 6493F, page 109



Subject to technical alterations.

## No. 6493SP

### Clamping element, horizontal



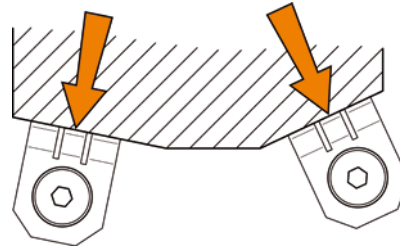
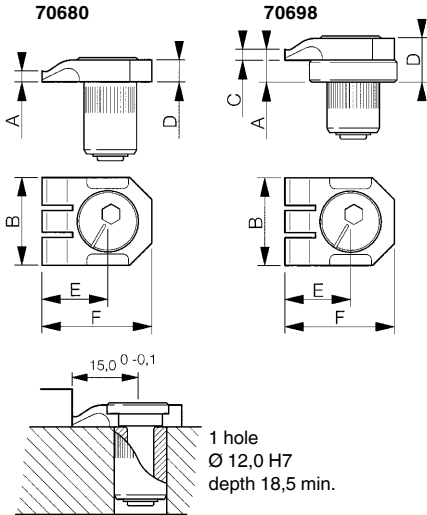
Order no.	Clamping force [N]	Clamping height A [mm]	B	C	D	E	F	Weight [g]
70680	4000	2,5	20	-	5	15*	25	29
70698	4000	7,5	20	2,5	10	15*	25	29

\* Cam stroke = 1.2 mm.

#### Application:

These hold-down clamps rotate around a camshaft that provides the clamping force. They can clamp in any direction.

Clamping element (1 rigid stop) enables the workpiece to lie flush with the stops.



## No. 6493S

### Stop, pivoting

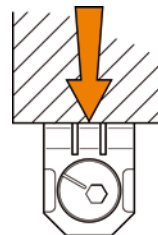
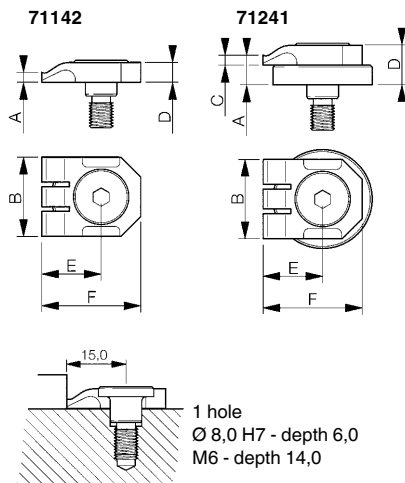
the rigid, ground, pivoting stops are secured by special screws that guarantee high accuracy during installation.



Order no.	Clamping height A [mm]	B	C	D	E	F	Weight [g]
71142	2,5	20	-	5	15	25	19
71241	7,5	20	2,5	10	15	25	19

#### Application:

The pivoting stop (1 rigid stop) requires two stops to position a workpiece along a straight line.



## No. 6493F

### Stop, fixed

the ground, fixed stops are secured by special screws that guarantee high accuracy during installation.

Size 1 - Simple stop

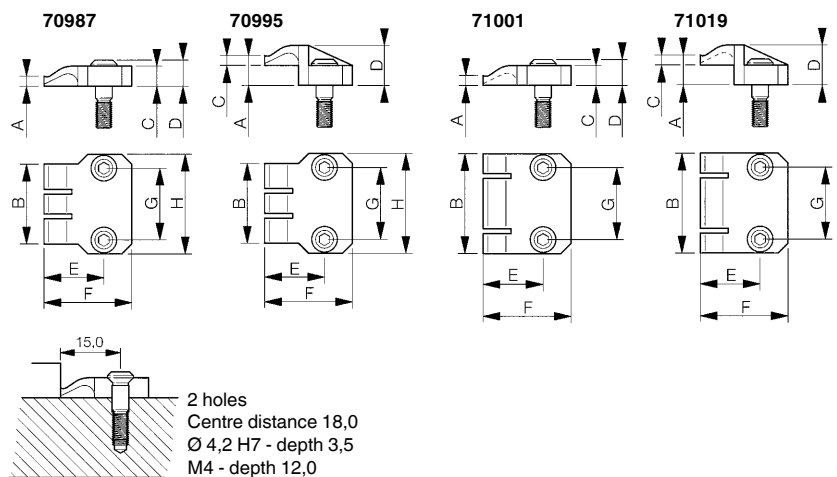
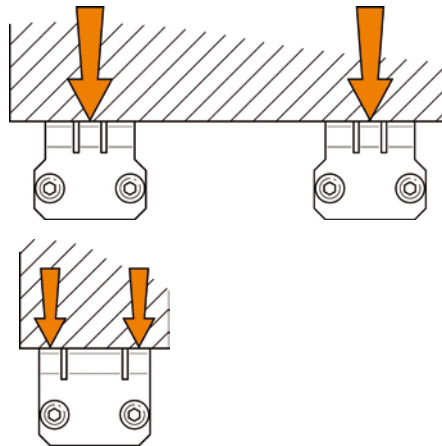
Size 2 - Double stop

Order no.	Size	Clamping height A [mm]	B	C	D	E	F	G	H	Weight [g]
70987	1	2,5	20	5,0	6,5	15	22	18	25	23
70995	1	7,5	20	2,5	10,0	15	22	18	25	23
71001	2	2,5	25	5,0	6,5	15	22	18	-	23
71019	2	7,5	25	2,5	10,0	15	22	18	-	23

### Application:

Size 1 - Single stop (1 rigid stop): Two stops are required to position a workpiece along a straight line.

Size 2 - Double stop (2 rigid stops): One stop is sufficient to position a workpiece along a straight line.



No. 6489

## Mechanical pull-down spring clamp, eccentric

Quenched and tempered steel, plasma-nitrated.



Order no.	Clamping force vertical [kN]	torque Md [Nm]	dia. K [mm]	Lateral compensation per clamp [mm]	Clamping rim height min. for Al-alloy [mm]	Weight [g]
375600	5	18	10,9-11,8	±0,25	9	2150
375667	5	18	11,9-12,8	±0,25	9	2150
375683	5	18	12,9-13,8	±0,25	9	2150
375709	5	18	13,9-14,8	±0,25	10	2250
375725	5	18	14,9-15,8	±0,25	10	2250
375741	5	18	15,9-16,8	±0,25	10	2250

### Application:

- Used for workpieces with existing or retrofitted holes.
- Once the clamping segments are engaged in the holes, reliable 5-sided finishing is possible without a problem.
- A simple hexagon socket spanner (SW 10) is used to actuate the element.
- The existing clamping rim fastens the pull-down clamping element on the machine table.
- For positioning on a fixture, the underside has two positioning holes (pin ISO 8734 - 8 mm).

### Advantage:

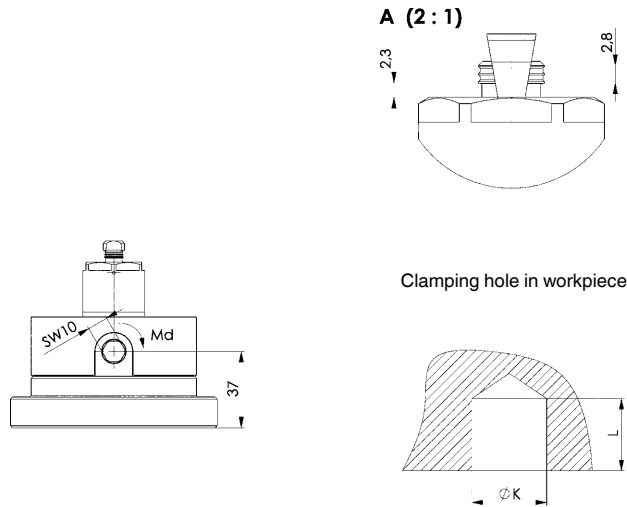
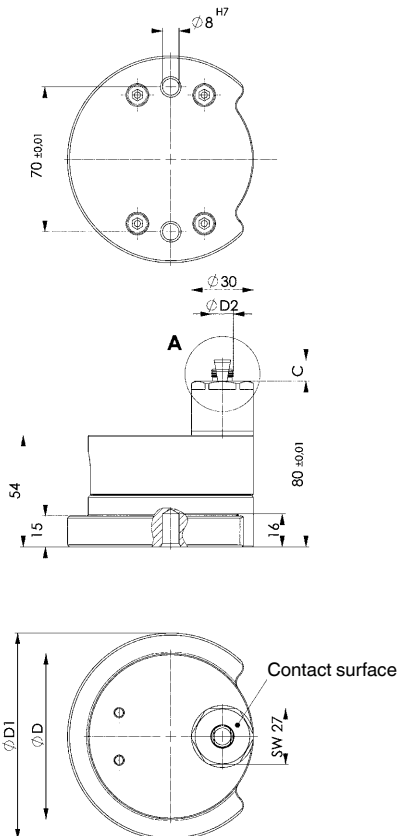
- All components are plasma-nitrated and are hence very resistant to wear and corrosion.
- Two-part clamping segments are interlocked externally.
- Flexible in use thanks to ease of handling and clamping on the machine table.

### Note:

- Please check with us for clamping of hardened workpieces or workpieces made of GG / GGG.
- The radial force must be observed!
- The lateral force when positioning the workpiece must not exceed the „lateral force“ specified in the table.
- The clamping jaws for the machine vices can be used for clamping on the machine table (No. 6325; Order no.: 74682, 373878).

### On request:

Other sizes and special versions without pull-down and as support elements.



### Recommendations



DIN 6314, page 20



No. 6310, page 18

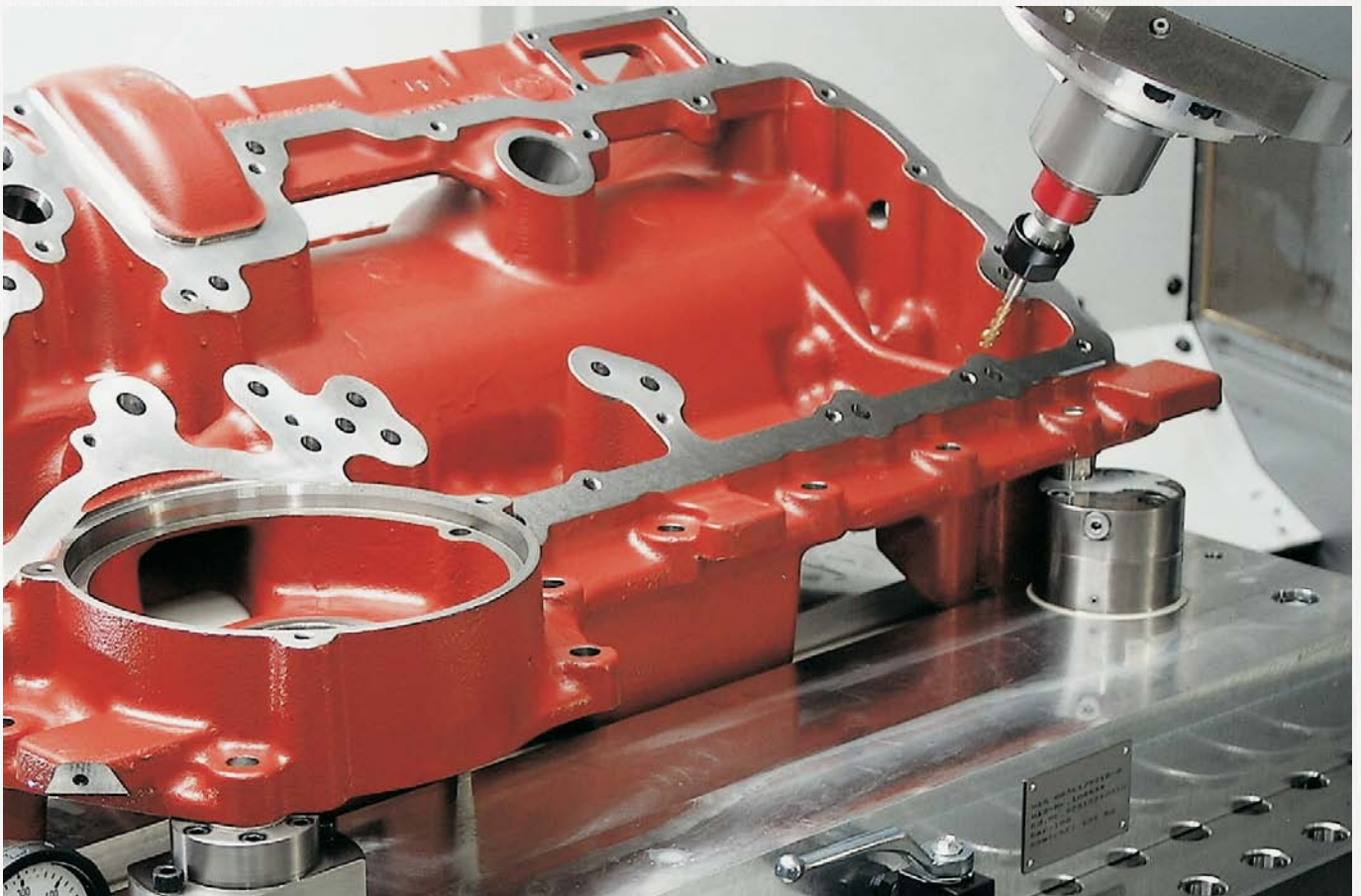
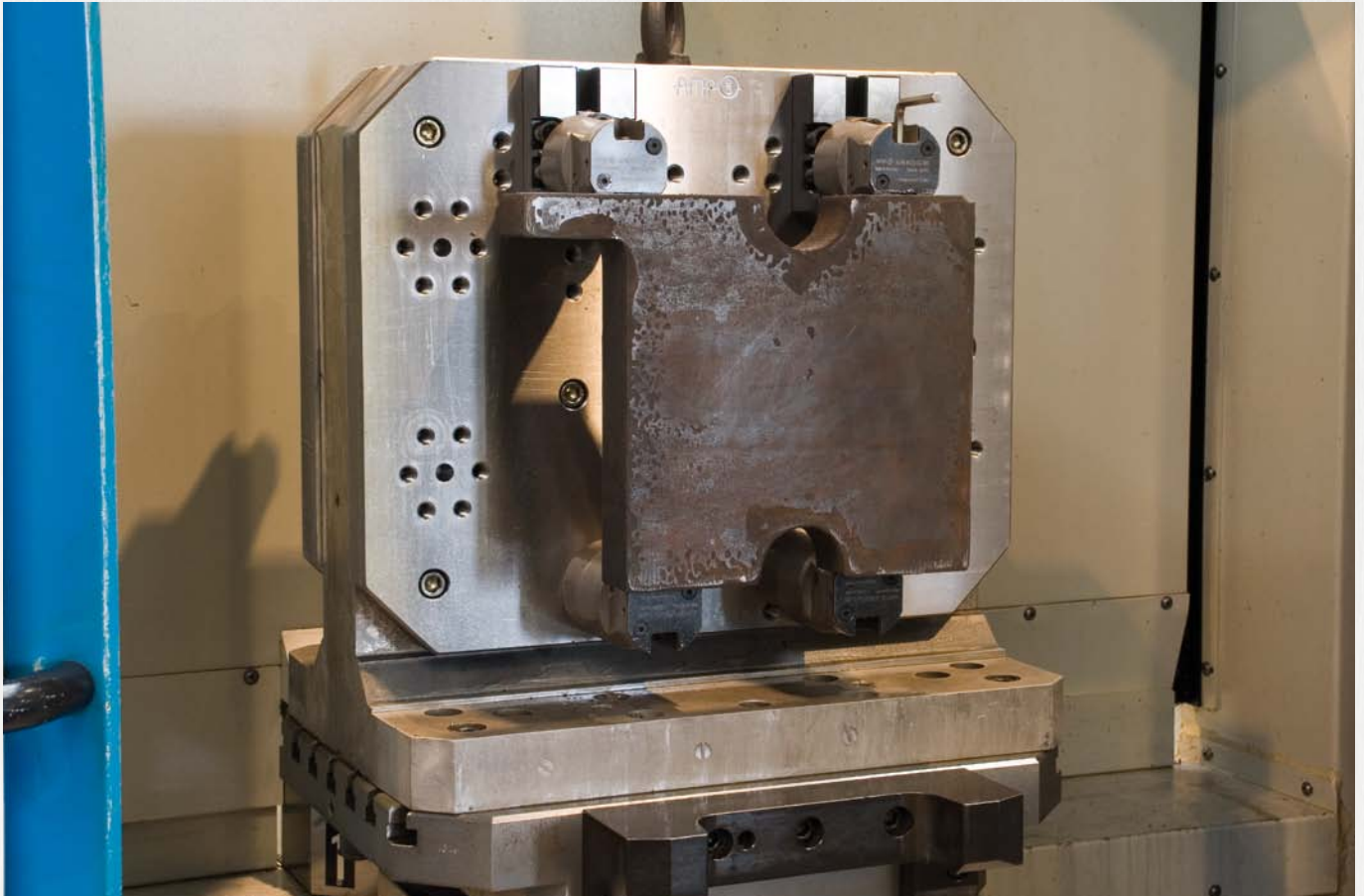


No. 6311, page 19

### Dimensions:

Order no.	Permissible horizontal force [kN]	Radial force of sleeve segments [kN]	Expansion of sleeve [mm]	Clamping piston diameter [mm]	Side load (unclamped) [N]	C	D	D1	D2
375600	2,8	27	1,5	22	100	10,5	80	100	10,6
375667	2,8	27	1,5	22	110	10,5	80	100	11,6
375683	3,0	27	1,5	22	130	10,5	80	100	12,6
375709	3,0	27	1,5	22	160	10,5	80	100	13,6
375725	3,5	27	1,5	22	200	10,5	80	100	14,6
375741	3,5	27	1,5	22	250	10,5	80	100	15,6

Subject to technical alterations.



Subject to technical alterations.

No. 6498

## Edge Clamp

complete with mounting. Fastened with screws of strength class 10.9.

Order no.	Size	Slot	torque Md [Nm]	H ±0,1	F1 [kN]	F2 [kN]	Weight [g]
73890	M12x14	14	75	65	12	7	1530
375501	M16x18	18	80	75	20	10	2627
374355	M20x24	24	160	100	25	17	5996

### Application:

The mechanical side clamp with hold-down effect can be used as a clamping element and as a fixed stop. Moving the adjusting bolt causes hook ends to clamp the workpiece. At the same time, a pull-down effect occurs on the contact surface. Attaching a lateral stop enables the workpiece to be repeatedly clamped. When used in conjunction with base plate 6498FT, the side clamp can also be placed across the table groove. In conjunction with round base plate no. 6498FR, only along the table groove.

### Advantage:

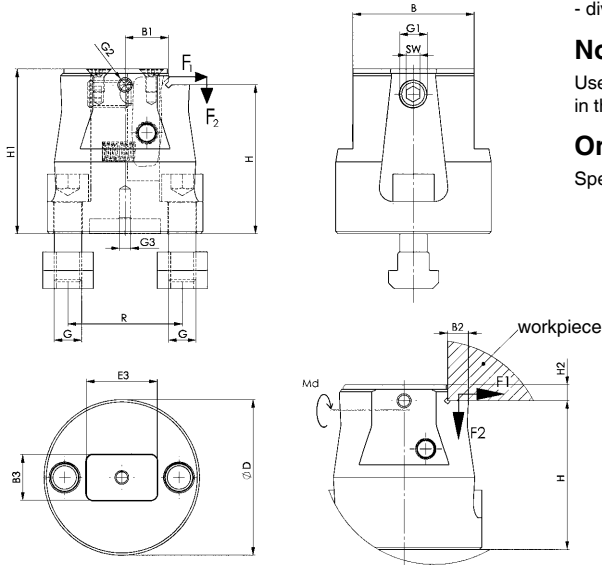
- compact dimensions
- workpiece fastened rigid and secure through pull-down effect
- plate tension increased to make holes and grooves
- lateral plate tension to completely finish surfaces without collision contour
- lateral thread enables a stop to be fastened
- can be used for horizontal and vertical applications
- reduced tooling time and tool elements cuts tooling costs
- diverse and variable applications.

### Note:

Use of a flat sliding block no. 6322A or no. 6322B enables the side clamp to be accurately positioned in the machine table groove.

### On request:

Special versions (dimension H ±0.01) are available.



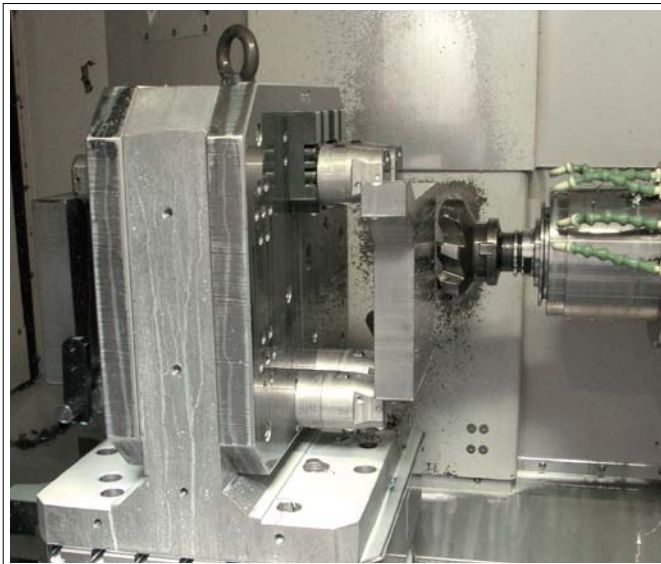
### Recommendations



No. 911LG-H100F

### Dimensions:

Order no.	Size	B	B1	B2	B3	D +2	E3	G	G1	G2	G3	H1	H2	R	SW
73890	M12x14	53	19,0	9,0	20	68	31,0	M12	M12	M6	M6	72	7	50	6
375501	M16x18	60	20,5	13,5	20	78	25,5	M16	M16	M6	M6	95	20	50	8
374355	M20x24	88	28,5	18,0	20	108	38,0	M20	M16	M6	M6	118	18	75	10



Subject to technical alterations.



## No. 6498FR

### Base plate, round

complete with fixing screws. Fastened with screws of strength class 10.9.

Order no.	Size	Slot	H ±0,1	B3	D +2	E3	E4	G	G3	R	Weight [g]
73916	M12x14	14	30	20	68	31,0	28,0	M12	M6	50	930
375527	M16x18	18	50	20	78	25,5	25,5	M16	M6	50	1780
374371	M20x24	24	60	20	108	40,0	31,0	M20	M6	75	4680

### Application:

Used in conjunction with side clamp no. 6498 to clamp across and along the table groove. The size M16x18 fits properly for use on the M16 grid plate.

### Advantage:

- Simple use of the side clamp when clamping along and across the groove
- Increase in the workpiece mounting surface.

### Note:

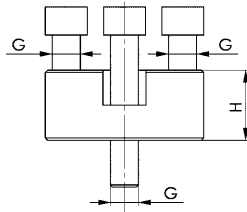
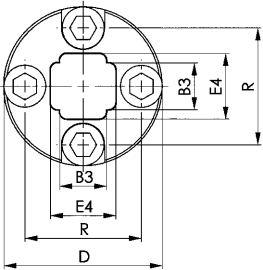
Use of two flat sliding blocks no. 6322B enables exact connection of the side clamp to the round base plate. The base plate can be exactly positioned on the machine with the flat sliding blocks no. 6322A or no. 6322B.

### On request:

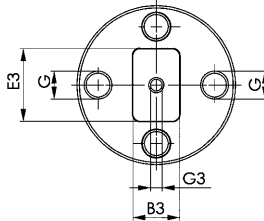
Special versions (dimension H ±0.01) are available.



View from above



View from below



### Recommendations



No. 911LG-H100F

## No. 6498FT

### Base plate

complete with mounting. Fastened with screws of strength class 10.9.

Order no.	Size	Slot	H ±0,1	B	E1	E2	G	L	R	Weight [g]
73908	M12x14	14	30	70	40	65	M12	110	50	1330
375543	M16x18	18	50	125	40	90	M16	130	100	4864
374397	M20x24	24	60	120	75	150	M20	200	85	7614

### Application:

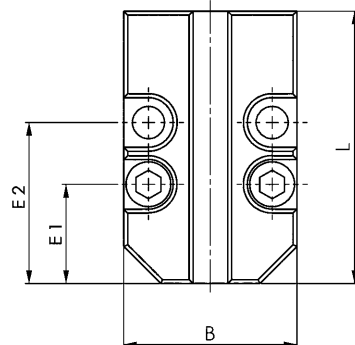
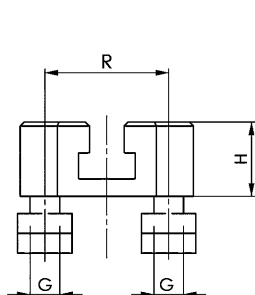
Used in conjunction with side clamp no. 6498 to also clamp across the table groove.

### Advantage:

- Simple use of the side clamp when clamping even across the groove
- Increase in the workpiece mounting surface.

### On request:

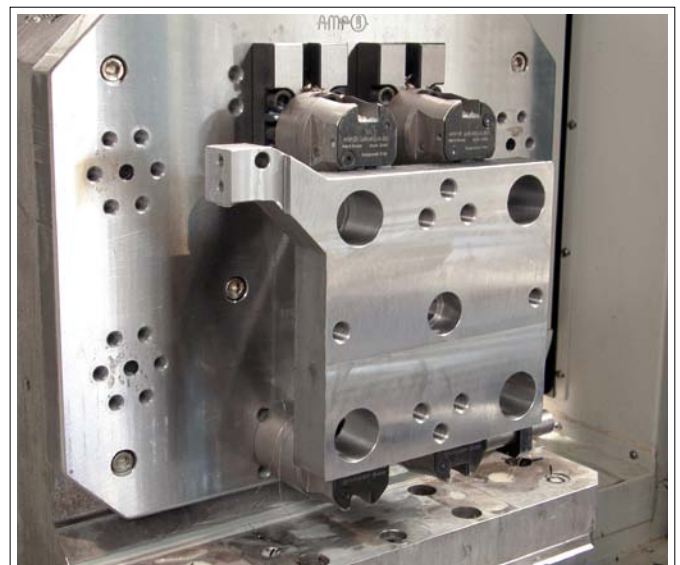
Special versions (dimension H ±0.01) are available.



### Recommendations



No. 911LG-H100F



Subject to technical alterations.

## No. 6495

### T-slot clamp

complete with mounting.  
Steel, tempered and burnished.

Order no.	Size	Slot	F1 [kN]	F2 [kN]	H2	SW [mm]	Weight [g]
374140	12	14	7	3,5	10	5	91
374132	16	18	10	5,0	12	6	188
374124	20	22	16	8,0	15	8	363

### Application:

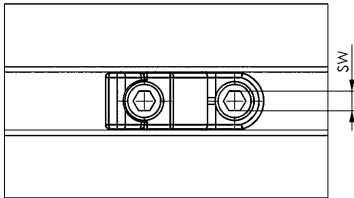
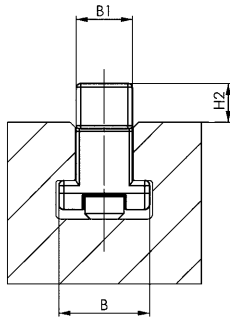
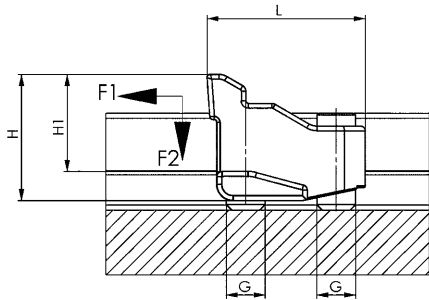
1. Slide T-slot clamp into T-slot of the machine table.
2. Position on workpiece.
3. Secure fastening bolt for machine table.
4. Actuating the clamping bolt clamps the workpiece.

### Advantage:

- For clamping of very thin workpieces
- Lateral clamping of workpieces to completely finish surfaces without interference contours
- Can be used for horizontal and vertical applications.

### Note:

To reduce wear to the fastening bolt, we recommend using AMF screw compound No. 6339. It possesses a synergistic combination of highly-effective solid lubricants and is heat-resistant and does not wash out.



### Recommendations



No. 911LG-H100F

### Dimensions:

Order no.	Size	B	B1	G	H	H1	L
374140	12	22	13,6	M10	31	24	40
374132	16	28	17,4	M12	39	30	49
374124	20	35	21,5	M16	50	37	63

## No. 6495S

### Fastening bolt for T-slot clamp

Strength class 10.9

Order no.	Size	G	L	SW [mm]	Weight [g]
79186	12	M10	25	5	14
78907	16	M12	30	6	24
77834	20	M16	40	8	59



CAD

## No. 6496

### Flat clamp

Complete with mounting.  
Steel, tempered and burnished.



Order no.	Size	Slot	G	F1 [kN]	F2 [kN]	H min.	H max.	Weight [g]
374157	M12x14	14	M12	15	7,5	16	25	579
374165	M12x16	16	M12	15	7,5	16	25	600
374173	M16x18	18	M16	20	10,0	19	30	1011
374181	M16x20	20	M16	20	10,0	19	30	1055
374199	M20x22	22	M20	30	15,0	22	36	1670
374207	M20x24	24	M20	30	15,0	22	36	1705
374215	M20x28	28	M20	30	15,0	22	36	1807

### Application:

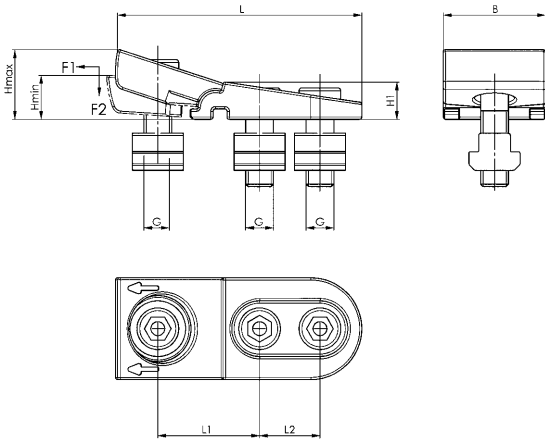
1. Slide flat clamp into T-groove of the machine table.
2. Position on workpiece.
3. Secure fastening bolts for machine table.
4. Actuating the clamping bolt clamps the workpiece.

### Advantage:

- For clamping of very thin workpieces
- Lateral clamping of workpieces to completely finish surfaces without interference contours
- Can be used for horizontal and vertical applications.

### Note:

To reduce wear to the fastening bolts, we recommend using AMF screw compound No. 6339. It possesses a synergistic combination of highly-effective solid lubricants and is heat-resistant and does not wash out.



### Dimensions:

Order no.	Size	B	H1	L	L1	L2
374157	M12x14	44	16	110	45-48	26
374165	M12x16	44	16	110	45-48	26
374173	M16x18	56	19	130	50-54	33
374181	M16x20	56	19	130	50-54	33
374199	M20x22	62	22	152	58-63	41
374207	M20x24	62	22	152	58-63	41
374215	M20x28	62	22	152	58-63	41



## No. 6496BF

### Mounting kit for flat clamp

comprising 3 DIN 6912 hexagonal bolts, 3 DIN 508 T-groove nuts and 1 DIN 6319C spherical washer.



Order no.	Size	Slot	G	L	SW [mm]	Weight [g]
313379	M12x14	14	M12	30	10	49
313395	M12x16	16	M12	35	10	56
313411	M16x18	18	M16	35	14	90
313437	M16x20	20	M16	40	14	104
313452	M20x22	22	M20	45	17	177
313478	M20x24	24	M20	45	17	189
313494	M20x28	28	M20	55	17	228

### Recommendations



No. 911LG-H100F



## ABOUT ALIGNING AND POSITIONING

- > **Design:** The skilfull graduation of sizes to DIN series figures allows for numerous combinations.
- > **Quality:** AMF-parallels guarantee for long life due to their high wear resistance.
- > **The right quality for any application:** Our parallel washers are available in three quality levels:

Standard ★  
 Precision ★★  
 Super-precision ★★★

AMF-parallels are used as packing blocks, stops or distance pieces on machine tools. They are indispensable for the parallel support of components in machine vices and on surface plates.

- > AMF parallel washers, stops and power clamp being used for drilling a base plate.



## DIN 6346

### Parallel supports-set

In wooden box with detachable folding lid.  
Plain parallel, fine-ground, in pairs.  
Size data on the product.  
Case-hardened.

Pair tolerance in height tp2 and width tp1 to IT 5.  
Rated dimensional tolerance in height and width to DIN ISO 2768m.  
Remaining dimensions to DIN ISO 2768m.

Geometrical graduation enables full use of the support height.  
2.5 - 25 mm over 40 different heights 2.5 - 45 mm  
4 - 32 mm over 40 different heights 4 - 57 mm  
4 - 40 mm over 40 different heights 4 - 72 mm  
8 - 50 mm over 30 different heights 8 - 90 mm  
8 - 63 mm over 40 different heights 8 - 113 mm  
20 - 100 mm over 14 different heights 20 - 180 mm.



Order no.	Size	Pair	Case L x B x H	Weight [Kg]
72322	2,5-25	9	200x100x 36	1,3
72330	4-40	7	305x115x 50	3,8
72348	8-63	5	305x115x 70	7,4
72355	20-100	3	280x215x125	27,1
72165	4-32	5	132x145x 50	1,5
72173	8-50	4	192x158x 75	4,9

### Note:

#### Workshop sets

Size 2.5-25 including (BxHxL):

2.5x8x63 / 3.2x10x63 / 4.0x12x63 / 5.0x16x63 / 6.3x20x63 / 4.0x12x100 / 5.0x16x100 / 6.3x20x100 / 8.0x25x100 mm

Size 4.0-40 including (BxHxL):

4.0x12x100 / 5.0x16x100 / 6.3x20x100 / 8.0x25x100 / 8.0x25x160 / 10.0x32x160 / 12.0x40x160 mm

Size 8.0-63 including (BxHxL):

8.0x25x100 / 10.0x32x100 / 12.0x40x100 / 16.0x50x160 / 20.0x63x160 mm

Size 20-100 including (BxHxL):

20.0x63x250 / 25.0x80x250 / 32.0x100x250 mm

#### Vice sets

Size 4.0-32 including (BxHxL):

4.0x12x100 / 5.0x16x100 / 6.3x20x100 / 8.0x25x100 / 10.0x32x100 mm

Size 8.0-50 including (BxHxL):

8.0x25x160 / 10.0x32x160 / 12.0x40x160 / 16.0x50x160 mm

## DIN 6346P

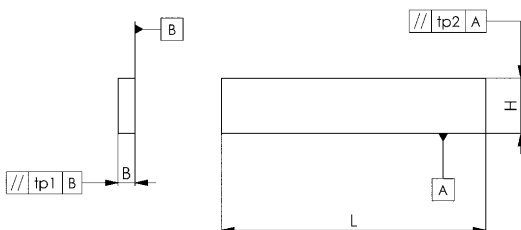
### Parallel supports-pairs

Plain parallel, fine-ground, in pairs.  
Size data on the product.  
Case-hardened.

Pair tolerance in height tp2 and width tp1 to IT 5.  
Rated dimensional tolerance in height and width to DIN ISO 2768m.  
Remaining dimensions to DIN ISO 2768m.



Order no.	B	H	L	Weight [g]
75309	2,5	8	63	20
75317	3,2	10	63	30
75325	4,0	12	63	45
75333	5,0	16	63	80
75341	6,3	20	63	125
72181	4,0	12	100	75
72199	5,0	16	100	125
72207	6,3	20	100	200
72215	8,0	25	100	315
72223	10,0	32	100	500
72231	12,0	40	100	750
72249	8,0	25	160	500
72256	10,0	32	160	800
72264	12,0	40	160	1200
72272	16,0	50	160	2000
72280	20,0	63	160	3170
72298	20,0	63	250	4950
72306	25,0	80	250	7900
72314	32,0	100	250	12680
72363	40,0	100	400	25300



CAD



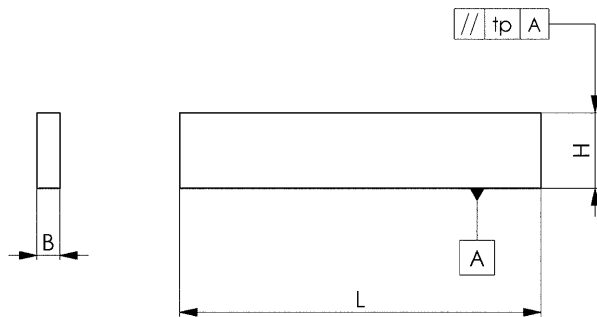
Subject to technical alterations.

## No. 6347SP

### Parallel supports-set, super-precision

In wooden box.  
Plain parallel, fine-ground, in pairs.  
Size data on the product.  
Case-hardened.

Pair tolerance  $t_p$  at height 0.004 mm.  
Rated dimensional tolerance in height  $\pm 0.004$  mm.  
Remaining dimensions to DIN ISO 2768m.



Order no.	Pair	L	Weight [Kg]
558279	14	150	10,9

### Design:

1 pair each (B x H):  
10x14 / 10x16 / 10x18 / 10x20 / 10x22 / 10x24 / 10x26 / 10x28 / 10x30 / 10x32 / 10x35 / 10x40 / 10x45 / 10x50 mm.

### Application:

These documents are used as washers for workpieces exposed to diverse machining processes. The high precision of the parallel washers guarantees parallel workpiece clamping.

Optimised wooden case for perfect handling!

## No. 6347P

### Parallel supports-set, precision

In wooden box.  
Plain parallel, fine-ground, in pairs.  
Size data on the product.  
Case-hardened.

Pair tolerance  $t_p$  at height 0.01 mm.  
Rated dimensional tolerance in height  $\pm 0.01$  mm.  
Remaining dimensions to DIN ISO 2768m.



Order no.	Pair	L	Weight [Kg]
558280	14	150	10,9

## No. 6347S

### Parallel supports-set, standard

In wooden box.  
Plain parallel, fine-ground, in pairs.  
Size data on the product.  
Case-hardened.

Pair tolerance  $t_p$  at height 0.01 mm.  
Rated dimensional tolerance in height and width to DIN ISO 2768m.  
Remaining dimensions to DIN ISO 2768m.



Order no.	Pair	L	Weight [Kg]
558281	14	150	10,9

## No. 6347PSP

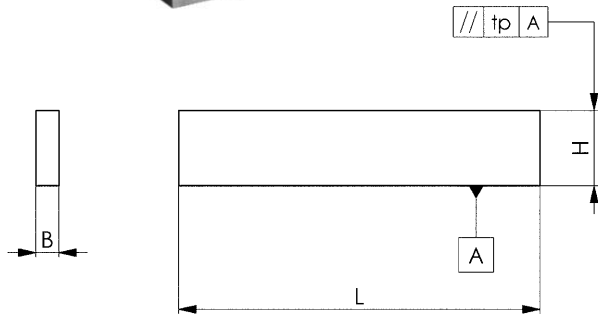
### Parallel supports-pairs, super-precision

Plain parallel, fine-ground, in pairs.  
Size data on the product.  
Case-hardened.

Pair tolerance  $tp$  at height 0.004 mm.  
Rated dimensional tolerance in height  $\pm 0.004$  mm.  
Remaining dimensions to DIN ISO 2768m.



Order no.	B	H	L	Weight [g]
75473	10	14	150	330
75481	10	16	150	380
75499	10	18	150	420
75507	10	20	150	470
75515	10	22	150	520
75523	10	24	150	570
75531	10	26	150	610
75549	10	28	150	660
75556	10	30	150	710
75564	10	32	150	750
75572	10	35	150	830
75580	10	40	150	940
75291	10	45	150	1060
75283	10	50	150	1180



### Application:

These documents are used as washers for workpieces exposed to diverse machining processes. The high precision of the parallel washers guarantees parallel workpiece clamping.

CAD



## No. 6347PP

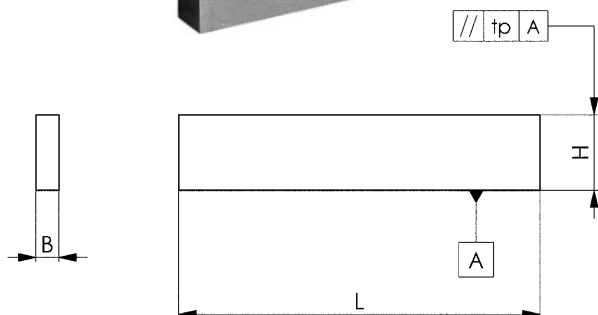
### Parallel supports-pairs, precision

Plain parallel, fine-ground, in pairs.  
Size data on the product.  
Case-hardened.

Pair tolerance  $tp$  at height 0.01 mm.  
Rated dimensional tolerance in height  $\pm 0.01$  mm.  
Remaining dimensions to DIN ISO 2768m.



Order no.	B	H	L	Weight [g]
370684	10	14	150	330
370692	10	16	150	380
370700	10	18	150	420
370718	10	20	150	470
370726	10	22	150	520
370734	10	24	150	570
370742	10	26	150	610
370759	10	28	150	660
370767	10	30	150	710
370775	10	32	150	750
370783	10	35	150	830
370791	10	40	150	940
370809	10	45	150	1060
370817	10	50	150	1180



### Application:

These documents are used as washers for workpieces exposed to diverse machining processes.

CAD



Subject to technical alterations.

## No. 6347PS

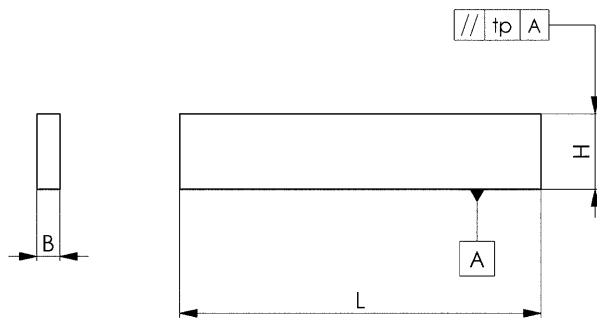
### Parallel supports-pairs, standard

Plain parallel, fine-ground, in pairs.  
Size data on the product.  
Case-hardened.

Pair tolerance  $tp$  at height 0.01 mm.  
Rated dimensional tolerance in height and width to DIN ISO 2768m.  
Remaining dimensions to DIN ISO 2768m.

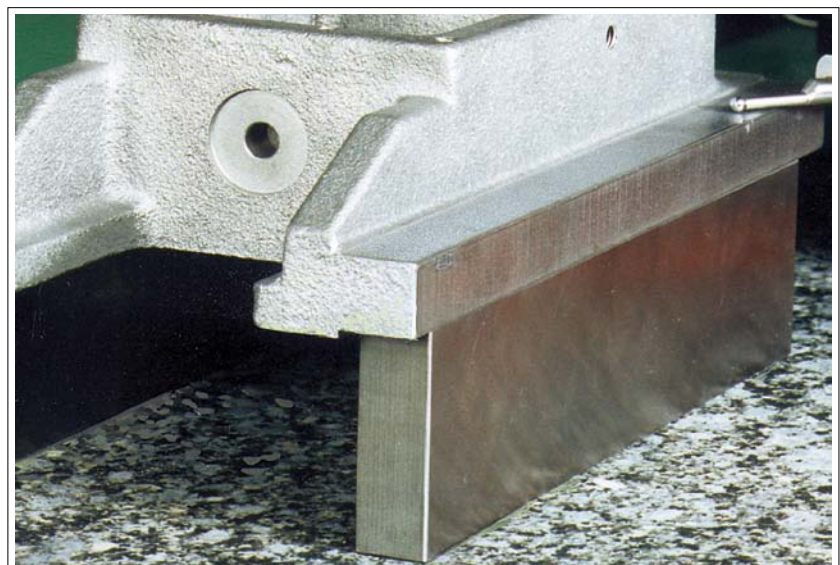


Order no.	B	H	L	Weight [g]
370825	10	14	150	330
370833	10	16	150	380
370841	10	18	150	420
370858	10	20	150	470
370866	10	22	150	520
370874	10	24	150	570
370882	10	26	150	610
370890	10	28	150	660
370908	10	30	150	710
370916	10	32	150	750
370924	10	35	150	830
370932	10	40	150	940
370940	10	45	150	1060
370957	10	50	150	1180



### Application:

These documents are used as washers for workpieces exposed to diverse machining processes.



Subject to technical alterations.



CAD

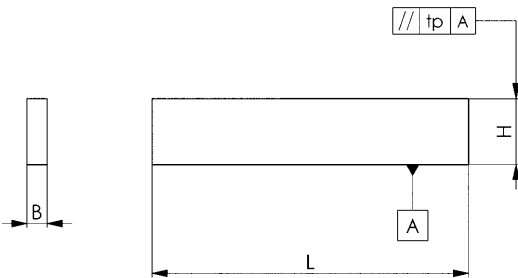
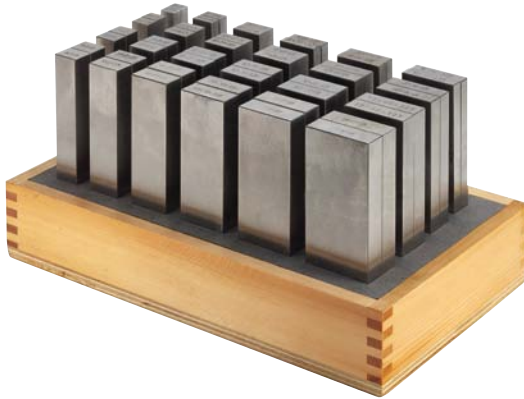


## No. 6348SP

### Parallel supports-set, super-precision

In wooden stand.  
Plain parallel, fine-ground, in pairs.  
Size data on front of product.  
Sets offer a large range with 1 mm graduation.  
Case-hardened.

Pair tolerance  $t_p$  at height IT 5.  
Rated dimensional tolerance in height and width  $\pm 0.01$  mm.  
Remaining dimensions to DIN ISO 2768m.



Order no.	Size	Pair	L	Weight [Kg]
75606	100	20	100	2,2
75614	125	24	125	14
75648	150	24	150	17

### Design:

Size 100, 1 pair each (B x H):  
2x5 / 2x10 / 2x15 / 2x20 / 3x6 / 3x11 / 3x16 / 3x21 / 4x7 / 4x12 / 4x17 / 4x22 / 5x8 / 5x13 / 5x18 / 5x23 / 6x9 / 6x14 / 6x19 / 6x24 mm.  
Size 125, 1 pair each (B x H):  
8x11 / 8x16 / 8x21 / 8x26 / 8x31 / 8x36 / 10x13 / 10x18 / 10x23 / 10x28 / 10x33 / 10x38 / 12x15 / 12x20 / 12x25 / 12x30 / 12x35 / 12x40 / 14x17 / 14x22 / 14x27 / 14x32 / 14x37 / 14x42 mm.  
Size 150, 1 pair each (B x H):  
8x11 / 8x16 / 8x21 / 8x26 / 8x31 / 8x36 / 10x13 / 10x18 / 10x23 / 10x28 / 10x33 / 10x38 / 12x15 / 12x20 / 12x25 / 12x30 / 12x35 / 12x40 / 14x17 / 14x22 / 14x27 / 14x32 / 14x37 / 14x42 mm.

### Application:

These documents are used as washers for workpieces exposed to diverse machining processes. The high precision of the parallel washers guarantees parallel workpiece clamping.

## No. 6348P

### Parallel supports-set, precision

In wooden stand.  
Plain parallel, fine-ground, in pairs.  
Size data on front of product.  
Sets offer a large range with 1 mm graduation.  
Case-hardened.

Pair tolerance  $t_p$  at height IT 5.  
Rated dimensional tolerance in height  $\pm 0.01$  mm.  
Remaining dimensions to DIN ISO 2768m.



Order no.	Size	Pair	L	Weight [Kg]
371062	100	20	100	2,2
371070	125	24	125	14
371088	150	24	150	17

## No. 6348S

### Parallel supports-set, standard

In wooden stand.  
Plain parallel, fine-ground, in pairs.  
Size data on front of product.  
Sets offer a large range with 1 mm graduation.  
Case-hardened.

Pair tolerance  $t_p$  at height IT 5.  
Rated dimensional tolerance in height and width to DIN ISO 2768m.  
Remaining dimensions to DIN ISO 2768m.



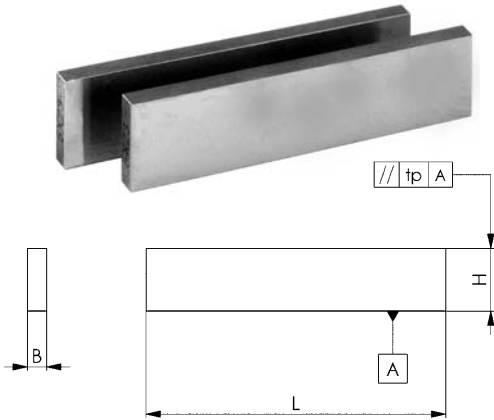
Order no.	Size	Pair	L	Weight [Kg]
371096	100	20	100	2,2
371104	125	24	125	14
371112	150	24	150	17

## No. 6348PSP

### Parallel supports-pairs, super-precision, 100 mm long

Plain parallel, fine-ground, in pairs.  
Size data on front of product.  
Sets offer a large range with 1 mm graduation.  
Case-hardened.

Pair tolerance  $tp$  at height IT 5.  
Rated dimensional tolerance in height and width  $\pm 0.01$  mm.  
Remaining dimensions to DIN ISO 2768m.



Order no.	B	H	L	Weight [g]
370007	2	5	100	16
370015	2	10	100	31
370023	2	15	100	47
370031	2	20	100	62
370049	3	6	100	28
370056	3	11	100	51
370064	3	16	100	75
370072	3	21	100	98
370080	4	7	100	44
370098	4	12	100	75
370106	4	17	100	106
370114	4	22	100	137
370122	5	8	100	62
370130	5	13	100	101
370148	5	18	100	140
370155	5	23	100	179
370163	6	9	100	84
370171	6	14	100	131
370189	6	19	100	178
370197	6	24	100	224

#### Application:

These documents are used as washers for workpieces exposed to diverse machining processes. The high precision of the parallel washers guarantees parallel workpiece clamping.

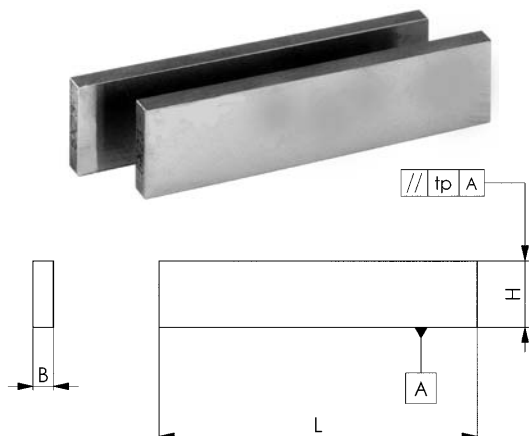


## No. 6348PSP

### Parallel supports-pairs, super-precision, 125 mm long

Plain parallel, fine-ground, in pairs.  
Size data on front of product.  
Sets offer a large range with 1 mm graduation.  
Case-hardened.

Pair tolerance  $tp$  at height IT 5.  
Rated dimensional tolerance in height and width  $\pm 0.01$  mm.  
Remaining dimensions to DIN ISO 2768m.



Order no.	B	H	L	Weight [g]
370205	8	11	125	171
370213	8	16	125	249
370221	8	21	125	326
370239	8	26	125	404
370247	8	31	125	482
370254	8	36	125	561
370262	10	13	125	253
370270	10	18	125	351
370288	10	23	125	448
370296	10	28	125	545
370304	10	33	125	642
370312	10	38	125	741
370320	12	15	125	350
370338	12	20	125	466
370346	12	25	125	583
370353	12	30	125	700
370361	12	35	125	817
370379	12	40	125	933
370387	14	17	125	462
370395	14	22	125	599
370403	14	27	125	734
370411	14	32	125	871
370429	14	37	125	1009
370437	14	42	125	1144

#### Application:

These documents are used as washers for workpieces exposed to diverse machining processes. The high precision of the parallel washers guarantees parallel workpiece clamping.



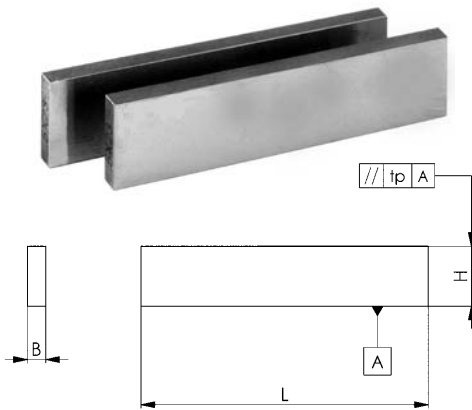
Subject to technical alterations.

## No. 6348PSP

### Parallel supports-pairs, super-precision, 150 mm long

Plain parallel, fine-ground, in pairs.  
Size data on front of product.  
Sets offer a large range with 1 mm graduation.  
Case-hardened.

Pair tolerance  $t_p$  at height IT 5.  
Rated dimensional tolerance in height and width  $\pm 0.01$  mm.  
Remaining dimensions to DIN ISO 2768m.



Order no.	B	H	L	Weight [g]
370445	8	11	150	203
370452	8	16	150	295
370460	8	21	150	389
370478	8	26	150	482
370486	8	31	150	574
370494	8	36	150	668
370502	10	13	150	300
370510	10	18	150	417
370528	10	23	150	533
370536	10	28	150	649
370544	10	33	150	768
370551	10	38	150	884
370569	12	15	150	416
370577	12	20	150	556
370585	12	25	150	694
370593	12	30	150	835
370601	12	35	150	974
370619	12	40	150	1113
370627	14	17	150	550
370635	14	22	150	714
370643	14	27	150	879
370650	14	32	150	1040
370668	14	37	150	1203
370676	14	42	150	1369

#### Application:

These documents are used as washers for workpieces exposed to diverse machining processes. The high precision of the parallel washers guarantees parallel workpiece clamping.

CAD

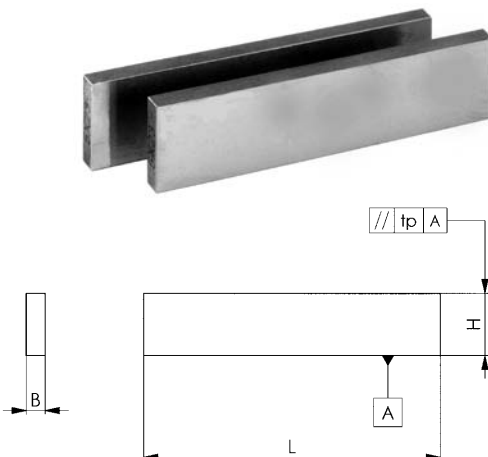


## No. 6348PP

### Parallel supports-pairs, precision, 100 mm long

Plain parallel, fine-ground, in pairs.  
Size data on front of product.  
Sets offer a large range with 1 mm graduation.  
Case-hardened.

Pair tolerance  $t_p$  at height IT 5.  
Rated dimensional tolerance in height  $\pm 0.01$  mm.  
Remaining dimensions to DIN ISO 2768m.



Order no.	B	H	L	Weight [g]
371120	2	5	100	16
371138	2	10	100	31
371146	2	15	100	47
371153	2	20	100	62
371161	3	6	100	28
371179	3	11	100	51
371187	3	16	100	75
371195	3	21	100	98
371203	4	7	100	44
371211	4	12	100	75
371229	4	17	100	106
371237	4	22	100	137
371245	5	8	100	62
371252	5	13	100	101
371260	5	18	100	140
371278	5	23	100	179
371286	6	9	100	84
371294	6	14	100	131
371302	6	19	100	178
371310	6	24	100	224

#### Application:

These documents are used as washers for workpieces exposed to diverse machining processes.

CAD



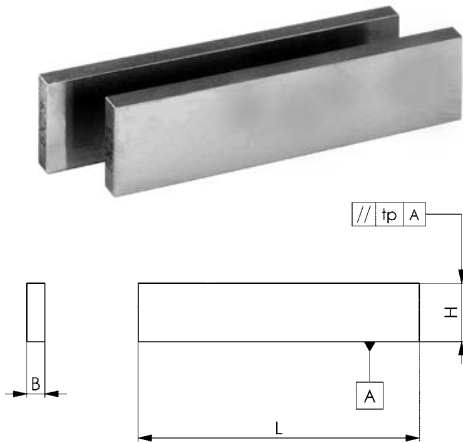
Subject to technical alterations.

## No. 6348PP

### Parallel supports-pairs, precision, 125 mm long

Plain parallel, fine-ground, in pairs.  
Size data on front of product.  
Sets offer a large range with 1 mm graduation.  
Case-hardened.

Pair tolerance  $tp$  at height IT 5.  
Rated dimensional tolerance in height  $\pm 0.01$  mm.  
Remaining dimensions to DIN ISO 2768m.



Order no.	B	H	L	Weight [g]
371328	8	11	125	171
371336	8	16	125	249
371344	8	21	125	326
371351	8	26	125	404
371369	8	31	125	482
371377	8	36	125	561
371385	10	13	125	253
371393	10	18	125	351
371401	10	23	125	448
371419	10	28	125	545
371427	10	33	125	642
371435	10	38	125	741
371443	12	15	125	350
371450	12	20	125	466
371468	12	25	125	583
371476	12	30	125	700
371484	12	35	125	817
371492	12	40	125	933
371500	14	17	125	462
371518	14	22	125	599
371526	14	27	125	734
371534	14	32	125	871
371542	14	37	125	1009
371559	14	42	125	1144

#### Application:

These documents are used as washers for workpieces exposed to diverse machining processes.

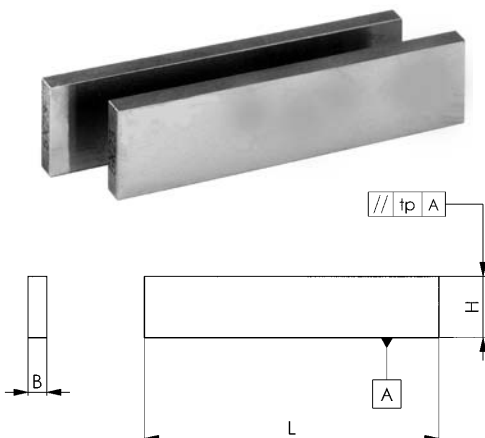


## No. 6348PP

### Parallel supports-pairs, precision, 150 mm long

Plain parallel, fine-ground, in pairs.  
Size data on front of product.  
Sets offer a large range with 1 mm graduation.  
Case-hardened.

Pair tolerance  $tp$  at height IT 5.  
Rated dimensional tolerance in height  $\pm 0.01$  mm.  
Remaining dimensions to DIN ISO 2768m.



Order no.	B	H	L	Weight [g]
372243	8	11	150	203
372250	8	16	150	295
372268	8	21	150	389
372276	8	26	150	482
372284	8	31	150	574
372292	8	36	150	668
372300	10	13	150	300
372318	10	18	150	417
372326	10	23	150	533
372334	10	28	150	649
372342	10	33	150	768
372359	10	38	150	884
372367	12	15	150	416
372375	12	20	150	556
372383	12	25	150	694
372391	12	30	150	835
372409	12	35	150	974
372417	12	40	150	1113
372425	14	17	150	550
372433	14	22	150	714
372441	14	27	150	879
372458	14	32	150	1040
372466	14	37	150	1203
372474	14	42	150	1369

#### Application:

These documents are used as washers for workpieces exposed to diverse machining processes.



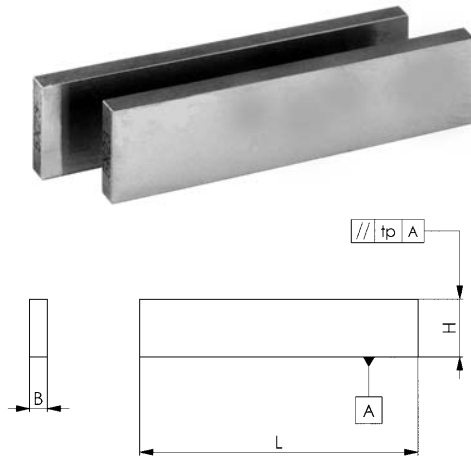
Subject to technical alterations.

## No. 6348PS

### Parallel supports-pairs, standard, 100 mm long

Plain parallel, fine-ground, in pairs.  
Size data on front of product.  
Sets offer a large range with 1 mm graduation.  
Case-hardened.

Pair tolerance  $t_p$  at height IT 5.  
Rated dimensional tolerance in height and width to DIN ISO 2768m.  
Remaining dimensions to DIN ISO 2768m.



Order no.	B	H	L	Weight [g]
371807	2	5	100	16
371815	2	10	100	31
371823	2	15	100	47
371831	2	20	100	62
371849	3	6	100	28
371856	3	11	100	51
371864	3	16	100	75
371872	3	21	100	98
371880	4	7	100	44
371898	4	12	100	75
371906	4	17	100	106
371914	4	22	100	137
371922	5	8	100	62
371930	5	13	100	101
371948	5	18	100	140
371955	5	23	100	179
371963	6	9	100	84
371971	6	14	100	131
371989	6	19	100	178
371997	6	24	100	224

### Application:

These documents are used as washers for workpieces exposed to diverse machining processes.

CAD

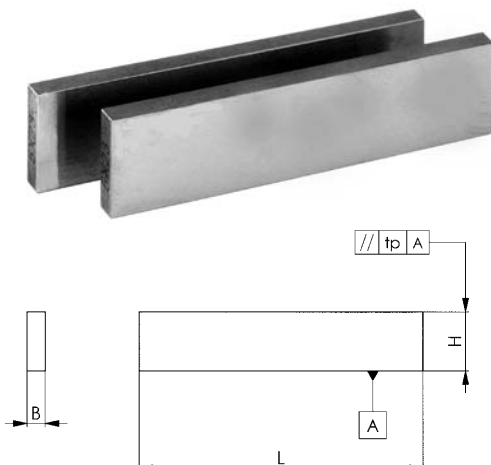


## No. 6348PS

### Parallel supports-pairs, standard, 125 mm long

Plain parallel, fine-ground, in pairs.  
Size data on front of product.  
Sets offer a large range with 1 mm graduation.  
Case-hardened.

Pair tolerance  $t_p$  at height IT 5.  
Rated dimensional tolerance in height and width to DIN ISO 2768m.  
Remaining dimensions to DIN ISO 2768m.



Order no.	B	H	L	Weight [g]
372003	8	11	125	171
372011	8	16	125	249
372029	8	21	125	326
372037	8	26	125	404
372045	8	31	125	482
372052	8	36	125	561
372060	10	13	125	253
372078	10	18	125	351
372086	10	23	125	448
372094	10	28	125	545
372102	10	33	125	642
372110	10	38	125	741
372128	12	15	125	350
372136	12	20	125	466
372144	12	25	125	583
372151	12	30	125	700
372169	12	35	125	817
372177	12	40	125	933
372185	14	17	125	462
372193	14	22	125	599
372201	14	27	125	734
372219	14	32	125	871
372227	14	37	125	1009
372235	14	42	125	1144

### Application:

These documents are used as washers for workpieces exposed to diverse machining processes.

CAD



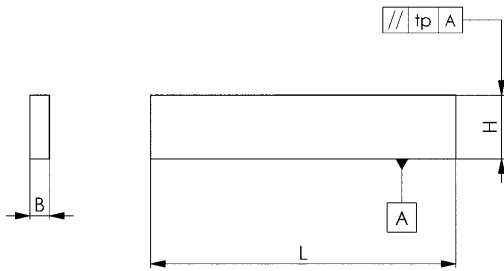
Subject to technical alterations.

## No. 6348PS

### Parallel supports-pairs, standard, 150 mm long

Plain parallel, fine-ground, in pairs.  
Size data on front of product.  
Sets offer a large range with 1 mm graduation.  
Case-hardened.

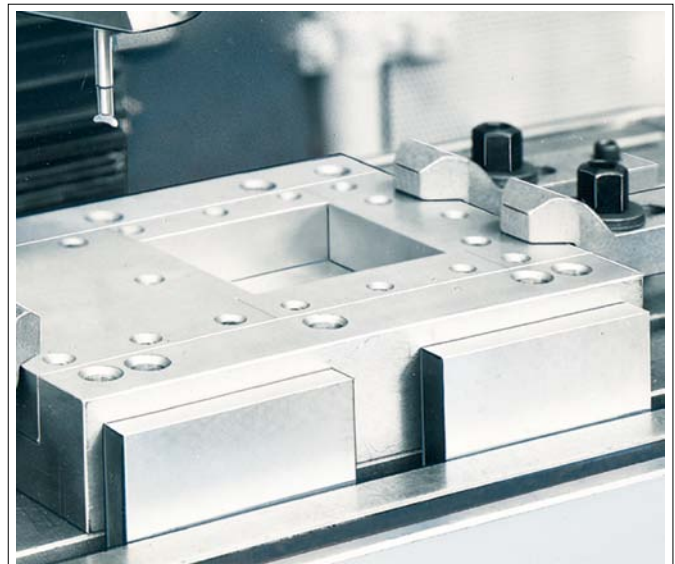
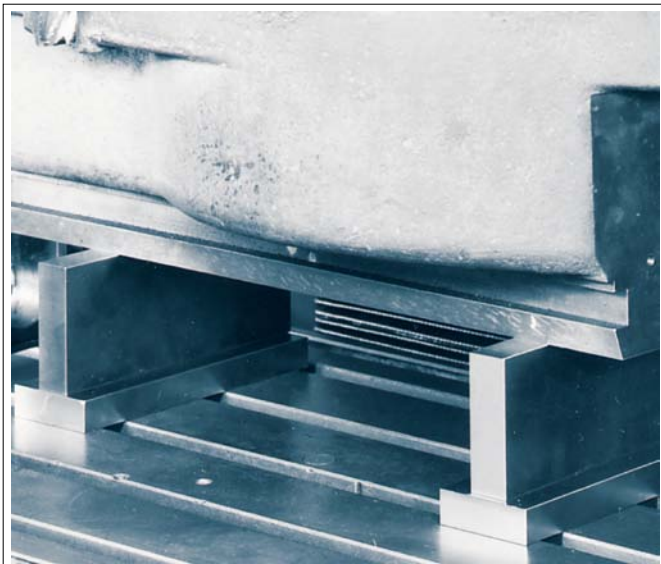
Pair tolerance  $t_p$  at height IT 5.  
Rated dimensional tolerance in height and width to DIN ISO 2768m.  
Remaining dimensions to DIN ISO 2768m.



Order no.	B	H	L	Weight [g]
371567	8	11	150	203
371575	8	16	150	295
371583	8	21	150	389
371591	8	26	150	482
371609	8	31	150	574
371617	8	36	150	668
371625	10	13	150	300
371633	10	18	150	417
371641	10	23	150	533
371658	10	28	150	649
371666	10	33	150	768
371674	10	38	150	884
371682	12	15	150	416
371690	12	20	150	556
371708	12	25	150	694
371716	12	30	150	835
371724	12	35	150	974
371732	12	40	150	1113
371740	14	17	150	550
371757	14	22	150	714
371765	14	27	150	879
371773	14	32	150	1040
371781	14	37	150	1203
371799	14	42	150	1369

### Application:

These documents are used as washers for workpieces exposed to diverse machining processes.



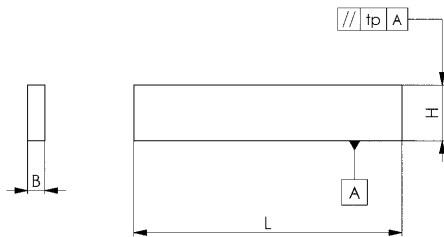
Subject to technical alterations.

## No. 6349PP

### Parallel supports-pairs, precision

Plain parallel, fine-ground, in pairs.  
Size data on the product.  
Hardened.

Pair tolerance  $tp$  at height IT 5.  
Rated dimensional tolerance in height  $\pm 0.01$  mm.  
Remaining dimensions to DIN ISO 2768m.



Order no.	B	H	L	Weight [g]
372508	3	11	125	64
372516	3	12	125	70
372524	3	13	125	76
372532	3	14	125	82
372540	3	15	125	88
372557	3	16	125	94
372565	3	17	125	100
372573	3	18	125	106
372581	3	19	125	112
372599	3	20	125	118
372607	3	21	125	124
372615	3	22	125	130
372623	3	23	125	136
372631	3	24	125	142
372649	3	25	125	148
372656	3	26	125	154
372664	3	27	125	160
372672	3	28	125	164
372680	3	29	125	170
372698	3	30	125	176
372706	3	31	125	182
372714	3	32	125	188
372722	3	33	125	194
372730	3	34	125	200
372748	3	35	125	206
372755	3	36	125	212
372763	3	37	125	218
372771	3	38	125	224
372789	3	39	125	230
372797	3	40	125	236
372805	3	41	125	242
372813	3	42	125	248

### Application:

These documents are used as washers for workpieces exposed to diverse machining processes.

CAD



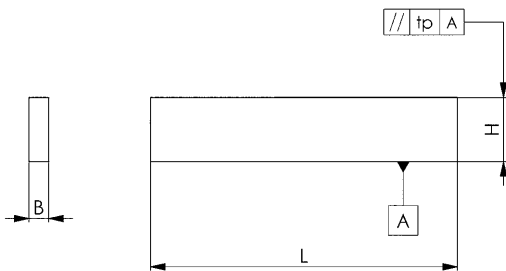
Subject to technical alterations.

## No. 6349P

### Parallel supports-pairs, precision

In wooden stand.  
Plain parallel, fine-ground, in pairs.  
Size data on the product.

Pair tolerance  $tp$  at height IT 5.  
Rated dimensional tolerance in height  $\pm 0.01$  mm.  
Remaining dimensions to DIN ISO 2768m.



Order no.	Size	Pair	L	Weight [Kg]
372482	24	24	125	4,5
372490	32	32	125	5,5

### Design:

Size 24, 1 pair each (B x H):  
3x11 / 3x13 / 3x15 / 3x16 / 3x17 / 3x18 / 3x20 / 3x21 / 3x22 / 3x23 / 3x25 / 3x26 / 3x27 / 3x28 / 3x30 / 3x31 / 3x32 / 3x33 / 3x35 / 3x36 / 3x37 / 3x38 / 3x40 / 3x42 mm.

Size 32, 1 pair each (B x H):  
3x11 / 3x12 / 3x13 / 3x14 / 3x15 / 3x16 / 3x17 / 3x18 / 3x19 / 3x20 / 3x21 / 3x22 / 3x23 / 3x24 / 3x25 / 3x26 / 3x27 / 3x28 / 3x29 / 3x30 / 3x31 / 3x32 / 3x33 / 3x34 / 3x35 / 3x36 / 3x37 / 3x38 / 3x39 / 3x40 / 3x41 / 3x42 mm.

### Application:

These documents are used as washers for workpieces exposed to diverse machining processes.

## No. 6344SP

### Parallel supports-set, corrugated

In wooden box with folding lid.  
Material thickness 0.3 mm.  
Precision ground.  
Hardened, tempered spring steel.  
2 mm height graduation.

Pair tolerance  $tp$  at height IT 5.  
Rated dimension tolerance at height  $\pm 0.004$  mm.  
Remaining dimensions to DIN ISO 2768m.



Order no.	Size	Pair	L	Weight [g]
372821	9 -23	8	110	450
372839	25-39	8	110	490

### Design:

Size 9-23, 1 pair each (B x H):  
0.3x9 / 0.3x11 / 0.3x13 / 0.3x15 / 0.3x17 / 0.3x19 / 0.3x21 / 0.3x23 mm.

Size 25-39, 1 pair each (B x H):  
0.3x25 / 0.3x27 / 0.3x29 / 0.3x31 / 0.3x33 / 0.3x35 / 0.3x37 / 0.3x39 mm.

### Application:

The corrugated parallel washers create a time-saving when clamping workpieces for grinding, milling, cutting, boring, etc.

### Advantage:

- no swarf remains on the mounting surface
- parallelism of the clamped workpiece is not affected
- several flat or single thin workpieces can easily be clamped.

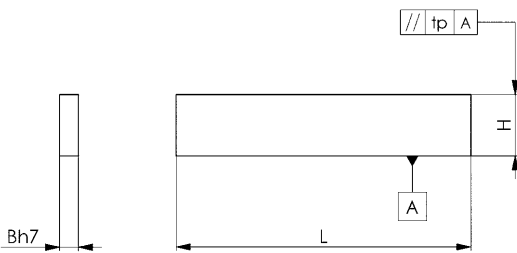


## No. 6350

### Parallel stops in pairs

For machine grooves.  
Can also be used as parallel washers.  
Plain parallel in height, fine-ground, in pairs.  
Case-hardened.

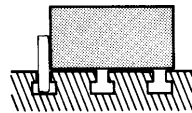
Pair tolerance  $t_p$  at height IT 5.  
Rated dimensional tolerance in height ISO 2768m.  
Rated dimensional tolerance in width h7.  
Remaining dimensions to DIN ISO 2768m.



Order no.	B	H	L	Weight [g]
74260	8	25	100	315
74278	10	32	100	500
74286	12	40	100	750
74294	14	50	100	1100
74302	16	50	160	2000
74310	18	63	160	2850
74328	20	63	160	3170
74336	22	80	160	4400
74344	24	80	160	4800
74351	28	100	160	7000

### Application:

The parallel stops are intended primarily for small to medium-sized machines. Their thickness is matched to the machine groove with a tolerance of H8. A pair of these stops is inserted into a machine groove, allowing the workpieces to be quickly positioned parallel to the table.



CAD



## No. 6328

### Cylindrical stop

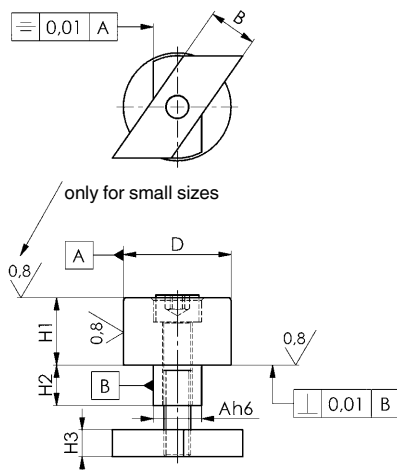
case hardened and ground. The short version, ground to  $\pm 0.01$  mm tolerance in height can be used as support.



Order no.	Slot	A h6	B -0.6	D $\pm 0.01$	H1 $\pm 0.01$ short	H1 $\pm 0.2$ long	H2	H3	Screw ISO 4762	Weight [g]
75150	12	0-0,011	12	20	15	-	8	6	M6x25	55
75192	12	0-0,011	12	20	-	25	8	6	M6x35	80
75200	14	0-0,011	14	32	25	-	9	8	M8x35	200
75218	14	0-0,011	14	32	-	50	9	8	M8x60	355
75168	16	0-0,011	16	32	25	-	10	8	M8x45	220
75176	16	0-0,011	16	32	-	50	10	8	M8x70	375
75226	18	0-0,011	18	40	25	-	15	10	M10x50	360
75234	18	0-0,011	18	40	-	50	15	10	M10x75	600
75242	22	0-0,013	20	40	25	-	15	14	M10x55	410
75259	22	0-0,013	20	40	-	50	15	14	M10x80	650
75267	28	0-0,013	22	46	25	-	20	16	M12x60	630
75275	28	0-0,013	22	46	-	50	20	16	M12x90	950

### On request:

Further sizes available.



Subject to technical alterations.

## No. 6351

### Parallel stop, single

case hardened and ground. Parallelism within 0.02 mm, matched tolerance 0.02 mm. Nominal tolerance DIN 7168 medium.



Order no.	Slot	B	C	H	L	suitable bolt combination: DIN508, ISO4762, DIN6340, DIN787 compl.	Weight [Kg]
74369	10-24	60	40	30	125	M10x10-M20x24	1,6
74377	12-36	80	55	60	160	M12x12-M24x36	5,7
74385	12-36	100	75	100	160	M12x12-M24x36	12,1



## No. 6351

### Parallel stop, in pairs

case hardened and ground. Parallelism within 0.02 mm, matched tolerance 0.02 mm. Nominal tolerance DIN 7168 medium.



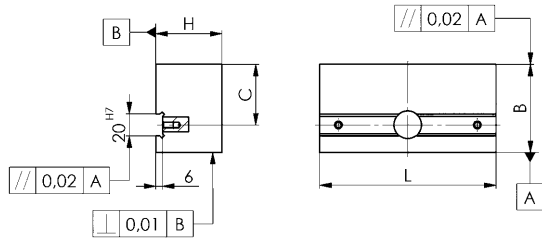
Order no.	Slot	B	C	H	L	suitable bolt combination: DIN508, ISO4762, DIN6340, DIN787 compl.	Weight [Kg]
75358	10-24	60	40	30	125	M10x10-M20x24	3,2
75366	12-36	80	55	60	160	M12x12-M24x36	11,4
75374	12-36	100	75	100	160	M12x12-M24x36	24,2

### Application:

Parallel stops are the ideal setting elements for medium and large sized machines. Fixed type blocks. 6322 A and sliding blocks DIN 6323 fit the 20H7 slots of the parallel stop. Combinations with the various precision blocks allow use on tables with different slot sizes.

The following clamping options on the machine table are possible:

- 1) Bolts for T-slots DIN 787 complete (consisting of bolts for T-slots DIN 787, hexagonal nuts DIN 6330B and washers DIN6340) or
- 2) Allen bolts ISO 4762 with T-nuts DIN 508 and washers DIN 6340.



## No. 6353

### Precision angle stop

case hardened and ground.

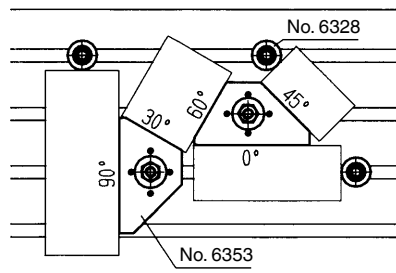
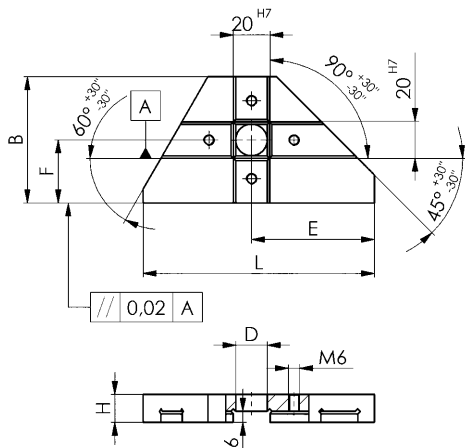
Setting: parallel and at angles of 30, 45, 60 and 90° related to T-slots. Guaranteed precision for all faces according to slots ±30°.



Order no.	Size	Slot	B	D	E	F	H	L	Weight [g]
74450	125	10-20	68	17	66,5	34	15	125	550
74468	200	12-36	98	25	100,0	49	20	200	1900

### Application:

Fixed type tenons no. 6322A and loose type tenons DIN 6323 match with the mentioned table slots. The universal stops can alternatively be fastened complete with T-slots bolts DIN 787 or with T-nuts DIN 508 with screws ISO 4762 and washers DIN 6340. The high precision of the above mentioned universal stops guarantees the positioning accuracy required for almost any machining job. Machining can start straight away. There is no need to meter stop.



Subject to technical alterations.

**No. 6355V**
**Prismatic clamping block, single**

case hardened and ground

Order no.	Size	B	D	E ±0.01	F	G1	G2	H1 ±0.014	H2	L1	L2	L3	Weight [Kg]
75085	12-65	80	12-65	30,0	15	M 12	M 8	35	60	100	56	27	3,2
75093	20-110	125	20-110	52,5	25	M 16	M 10	55	100	100	53	32	8,1



CAD

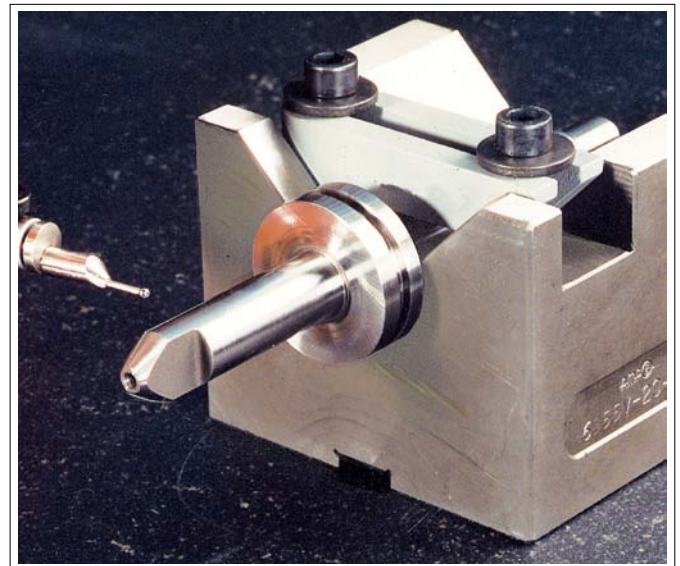
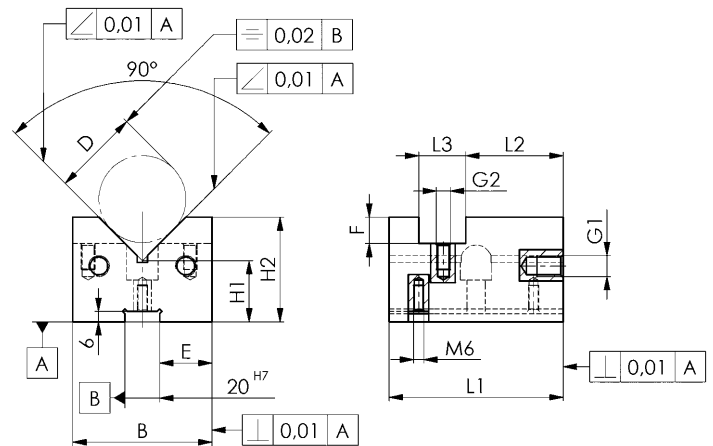

**No. 6355V**
**Prismatic clamping block, pair**

case hardened and ground

Order no.	Size	B	D	E ±0.01	F	G1	G2	H1 ±0.014	H2	L1	L2	L3	Weight [Kg]
75143	12-65	80	12-65	30,0	15	M 12	M 8	35	60	100	56	27	6,4
75184	20-110	125	20-110	52,5	25	M 16	M 10	55	100	100	53	32	16,2

**Application:**

For alignment and clamping of round shafts and workpieces parallel and centric to a table slot. Can be used as parallel stops and supports!



Subject to technical alterations.



## No. 6357

### Stop, adjustable

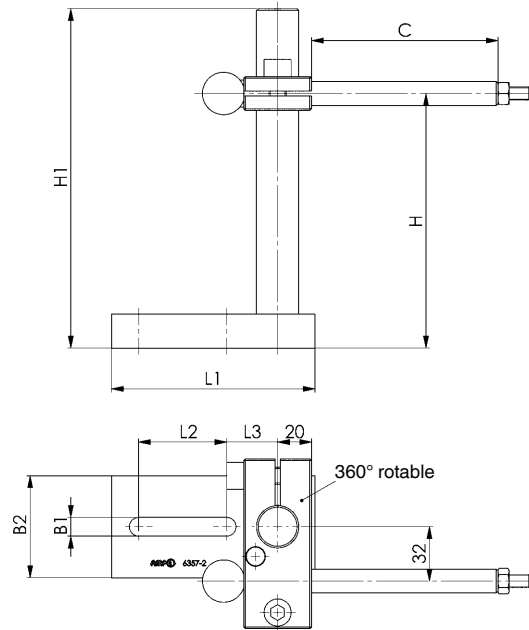
with hexagon key.  
Tempering steel



Order no.	Size	Slot	B1	B2	C	H	H1	L1	L2	L3	Weight [g]
75655	2	10, 12, 14, 16, 18	11	60	0-110	30-190	200	120	52	30	2450
75663	3	16, 18, 20, 22, 24, 28	17	80	0-110	30-190	200	160	73	40	3250

### Application:

The quickly adjustable stop is suitable for positioning workpieces on various tooling machines and vices. It has a wide range for height and length adjustments. Setting is done with the supplied T-handle hexagon key.



## No. 6358

### Side stop

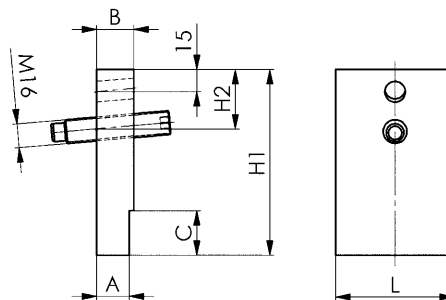
Tempering steel blued, with 2 threaded holes M16 for 2 positions. Set screw DIN 915 M16x80.



Order no.	Slot	B	C	H1	H2	L	Weight [g]
75879	18	20	20	100	40	50	805
75887	20	25	30	125	40	80	1880
75895	22	25	30	125	40	80	1920
75903	24	32	40	150	65	100	3515
75911	28	32	40	150	65	100	3645
75929	36	40	50	160	65	120	4870

### Application:

The stop is used for safe positioning of long and heavy workpieces on slotted machine tables. It is inserted into the slot - at an inclined position due to its undersize and locks the workpiece against the parallel stop, e.g. no. 6351.



Subject to technical alterations.

## DIN 6323

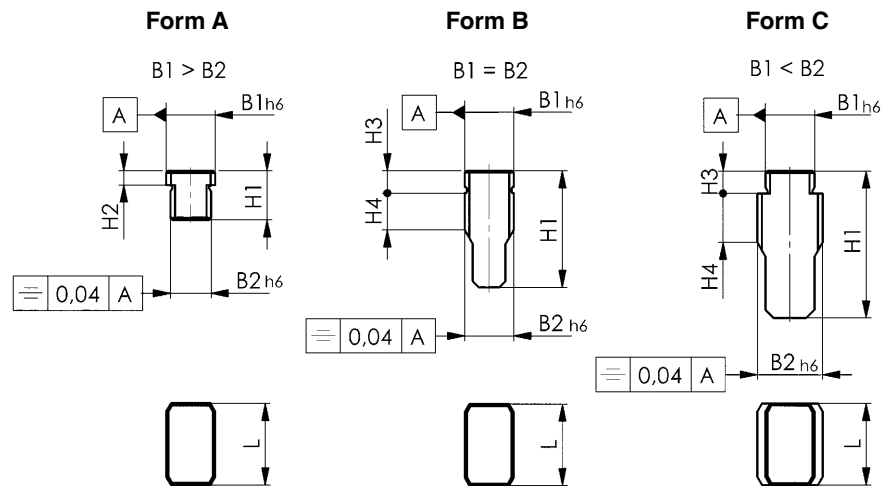
### Loose type tenons

Steel C15, case hardened and ground.

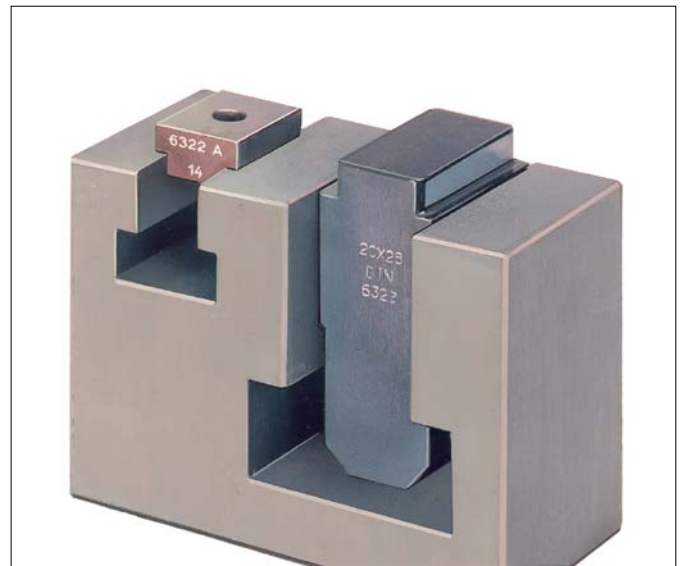
Order no.	Nominal width of T-slot on fixture B1	Nominal width of T-slot on machine B2	Form	H1	H2	H3	H4	L	Weight [g]
71811	12	10	A	12,0	3,6	-	-	20	20
71829	12	12	B	28,6	-	5,5	9	20	45
71837	20	12	A	14,0	5,5	-	-	32	50
71845	20	14	A	14,0	5,5	-	-	32	55
71852	20	16	A	14,0	5,5	-	-	32	60
71860	20	18	A	14,0	5,5	-	-	32	65
71878	20	20	B	45,5	-	7	16	32	200
71886	20	22	C	50,5	-	7	18	40	290
71894	20	24	C	55,5	-	7	20	40	350
71902	20	28	C	61,5	-	7	24	40	460
71910	20	36	C	76,5	-	7	30	50	940

### Application:

After rough alignment of fixture, the tenons DIN 6323 are pushed into T-slot from the side. No fixed T-nuts can obstruct the transport of fixtures and no damage to machine tables can occur.



CAD



Subject to technical alterations.

## No. 6322A

### Fixed type tenons

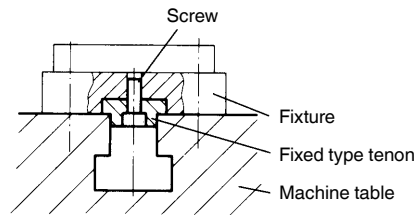
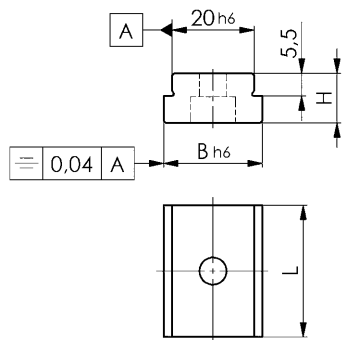
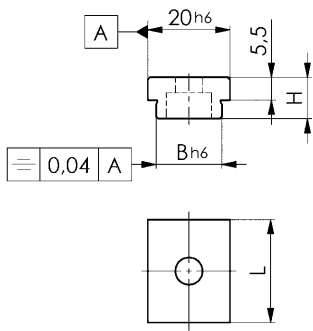
(previously DIN 6322 developed 1957)  
C15 case-hardened.



Order no.	Nominal width of T-slot on machine B	Nominal width of T-slot on fixture	H	L	Screw DIN84 or ISO4762	Weight [g]
71555	10	20	10	22	M6x10	20
71563	12	20	10	22	M6x10	25
71571	14	20	10	25	M6x16	28
71589	16	20	10	25	M6x16	30
71597	18	20	10	25	M6x16	30
71613	22	20	12	32	M6x16	50
71621	24	20	12	32	M6x16	55
71639	28	20	12	32	M6x16	60
71647	36	20	12	32	M6x16	75

### Application:

These fixed type tenons are screwed in pairs into the standard 20 mm wide set slots of vices or fixtures. By changing the tenons you can work on machines with different slot sizes. For very heavy fixtures we recommend the use of loose type tenons DIN 6323.



## No. 6322B

### Low type tenons

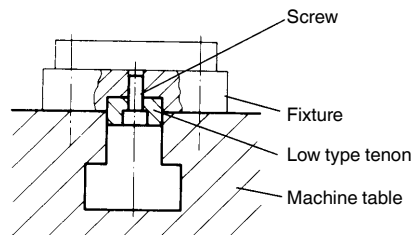
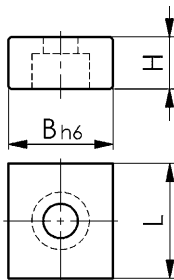
Steel C15, case hardened and ground.



Order no.	B	H	L	Screw DIN84 or ISO4762	Weight [g]
71696	10	8	20	M4x10	15
71704	12	8	20	M5x12	19
71712	14	10	22	M6x16	21
71720	16	10	22	M6x16	26
71738	18	10	22	M6x16	30
71746	20	10	22	M6x16	34
71753	22	12	32	M6x16	55
71761	24	12	32	M6x16	62

### Application:

Low-type tenons are useful and inexpensive to use, when a fixture is always used on the same machine. For very heavy fixtures we recommend the use of loose type tenons DIN 6323.



Subject to technical alterations.

## No. 6600

### Eccentric clamp with end clamping

hardened and burnished.

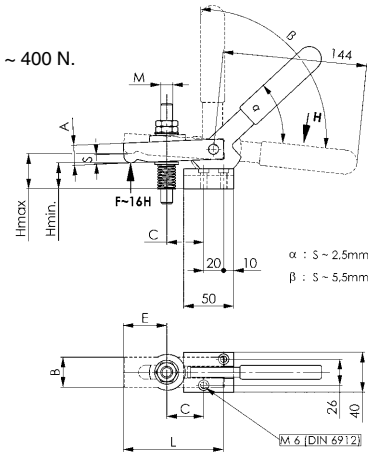


Order no.	Size	H min.	H max.	A	B	C	E	L	M	Weight [g]
73502	1	26	35	20	30	37	21-43	100	M12	1000
73510	2	26	35	20	40	45	34-66	125	M16	1400

Eccentric clamps are useful for specialized fixtures.

#### Note:

Actuation by hand - hand force ~ 400 N.



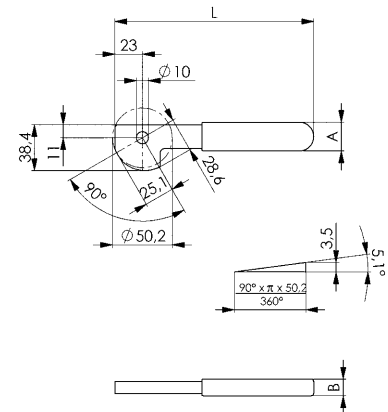
## No. 6601

### Eccentric lever, loose

for end clamping  
(part of 6600)



Order no.	A	B	L	Weight [g]
73569	24	14	167	300



## No. 6610

### Eccentric clamp with middle clamping

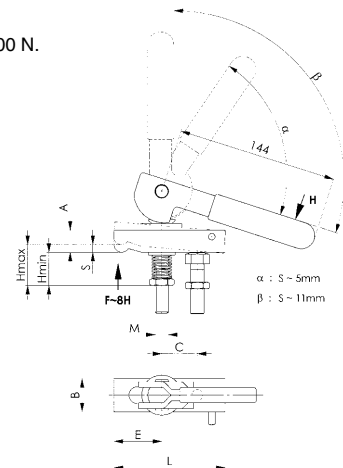
hardened and burnished, lever plastic coated.



Order no.	Size	H min.	H max.	A	B	C	E	L	M	Weight [g]
73619	1	30	45	20	30	32	21-43	100	M12	1000
73627	2	35	50	20	40	40	34-66	125	M16	1450

#### Note:

Actuation by hand - hand force ~ 400 N.



Subject to technical alterations.

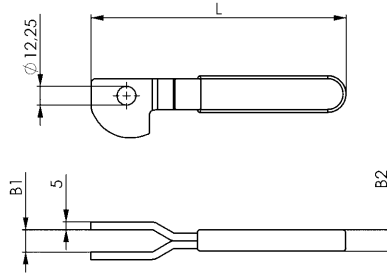
## No. 6611

### Eccentric lever, loose

for middle clamping  
(part of 6610)



Order no.	B1	B2	L	Weight [g]
73676	14	14	167	310



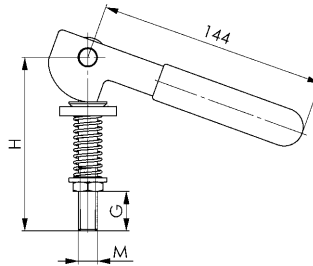
## No. 6612

### Eccentric lever with eye bolt

(part of 6610)



Order no.	Size	G	H	M	Weight [g]
74500	1	25	110	M12	500
74518	2	30	120	M16	610



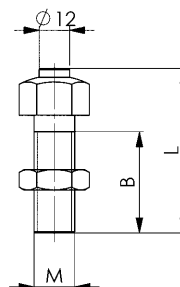
## No. 6616

### Set screw with nut

(part of 6610)

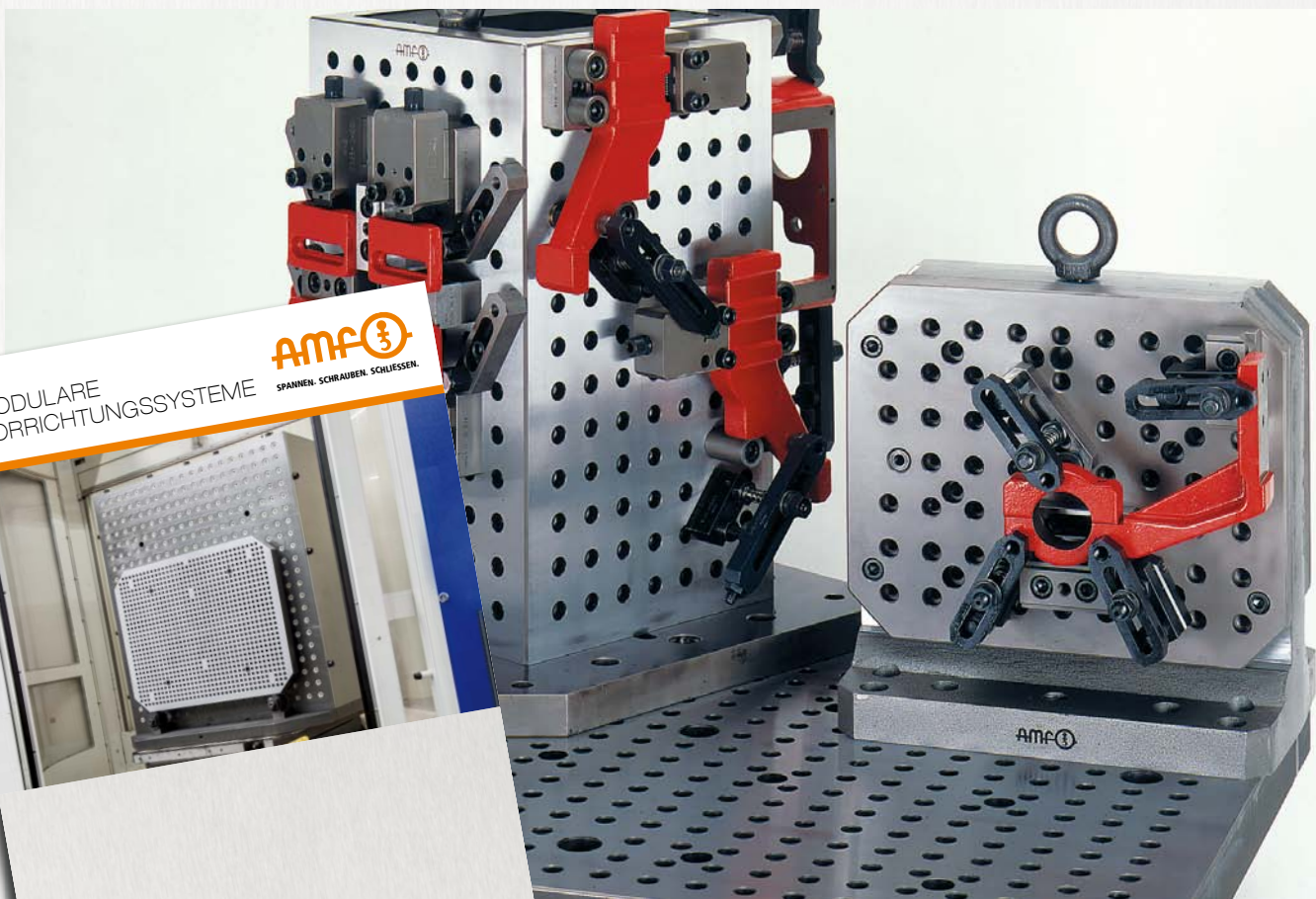
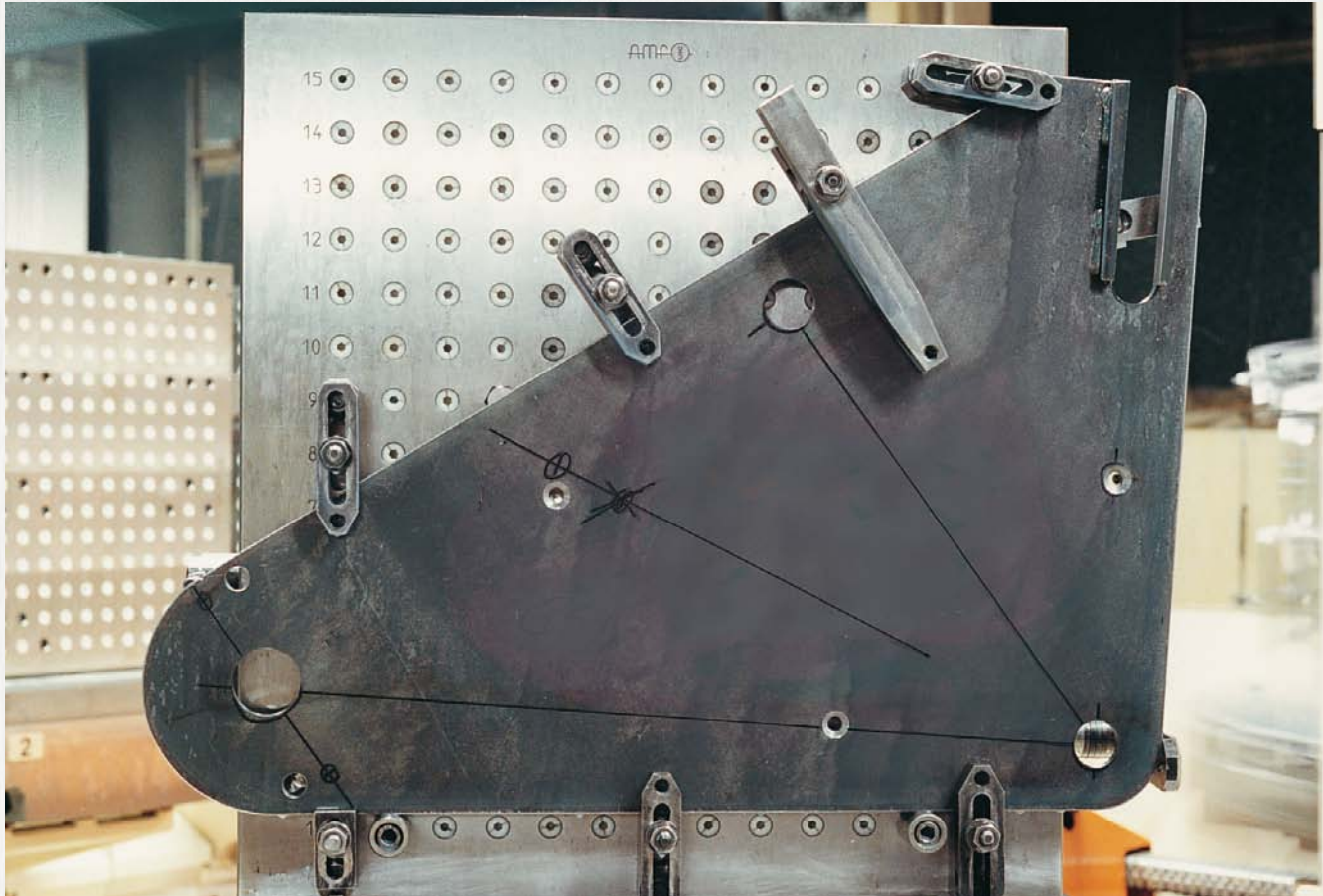


Order no.	Size	B	L	M	Weight [g]
74542	1	40	58,5	M12	70
74559	2	40	65,0	M16	135



Subject to technical alterations.





Subject to technical alterations.

## No. 6383ZEK

### Centring clamp with ball

Can be used from above.  
 Repeatability  $\pm 0.025$  mm  
 Concentricity  $\pm 0.050$  mm



Order no.	D min.	D max.	A min.	A max.	H	P [kN]	Weight [g]
373357	11,7	14,2	3,0	4,2	10,0	0,5	18
373365	14,5	18,5	8,6	9,8	14,5	3,5	20
373373	18,5	22,5	10,4	11,6	16,5	4,0	40
373381	22,5	26,5	13,0	14,2	19,8	4,5	60
373399	26,5	30,5	13,0	14,2	19,8	4,5	86
373407	30,5	38,5	11,9	14,2	23,1	4,5	125
373415	38,5	46,5	15,5	17,8	27,2	6,5	235
373423	46,5	54,5	15,7	18,0	27,2	6,5	325
373431	54,5	70,5	19,1	23,7	40,6	8,0	655
373449	70,5	86,5	23,7	28,3	46,1	10,0	1270
373456	86,5	102,5	25,7	30,2	51,0	12,5	1785

### Application:

For central positioning and clamping in holes where slight ball impressions are acceptable.

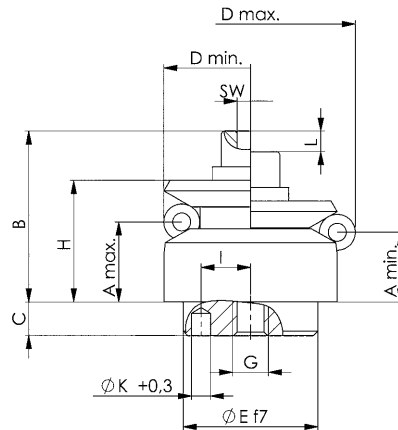
### Advantage:

- Low installation height
- Clamping in the zero point
- Pull-down effect
- Distortion-free clamping

### Note:

For deep installation, clearance D max. must be provided.

Installation tool: Retaining pin for determining the precise position of the balls. (supplied without installation tool)



### Dimensions:

Order no.	B	C	E f7	F	G	I $\pm 0,1$	K	L	Q	QD	SW	T
373357	15,0	3,5	10	9,2	M4	3,5	1,5	1,5	3	2,5	3	2,0
373365	19,5	5,5	12	9,1	M4	4,5	2,0	2,3	3	4,0	3	2,5
373373	23,5	7,5	15	11,6	M5	5,5	2,5	2,3	3	4,0	4	3,5
373381	28,8	6,0	20	15,1	M6	7,0	3,0	2,3	3	4,0	5	3,5
373399	28,8	6,0	20	15,1	M6	7,0	3,0	2,3	3	4,0	5	3,5
373407	32,7	7,0	25	15,2	M6	9,0	4,0	4,6	3	8,0	5	3,5
373415	39,2	7,5	30	18,1	M8	11,0	4,0	4,6	6	8,0	6	4,5
373423	39,2	7,5	30	18,1	M8	11,0	4,0	4,6	6	8,0	6	6,5
373431	54,6	9,0	45	23,7	M10	15,0	5,0	9,3	6	16,0	8	6,5
373449	63,1	10,0	60	28,3	M12	17,0	5,0	9,3	6	16,0	10	6,5
373456	73,0	10,0	60	28,3	M16	25,0	5,0	9,3	6	16,0	14	6,5

Q = number of balls, QD = diameter of the balls

## No. 6383ZES

### Centring clamp with protective segments

Can be used from above.  
 Repeatability  $\pm 0.025$  mm  
 Concentricity  $\pm 0.050$  mm



Order no.	D min.	D max.	A min.	A max.	H	P [kN]	Weight [g]
373464	14,5	18,5	8,6	9,8	14,5	3,5	20
373472	18,5	22,5	10,4	11,6	16,5	4,0	40
373480	22,5	26,5	13,0	14,2	19,8	4,5	60
373498	26,5	30,5	13,0	14,2	19,6	4,5	85
373506	30,5	38,5	11,9	14,2	23,1	4,5	125
373514	38,5	46,5	15,5	17,8	27,2	6,5	235
373522	46,5	54,5	15,7	18,0	27,2	6,5	325
373530	54,5	70,5	19,1	23,7	40,6	8,0	655
373548	70,5	86,5	23,7	28,3	46,1	10,0	1270
373555	86,5	102,5	25,7	30,2	51,0	12,5	1785

#### Application:

For unmarred surfaces with central positioning and clamping in holes.

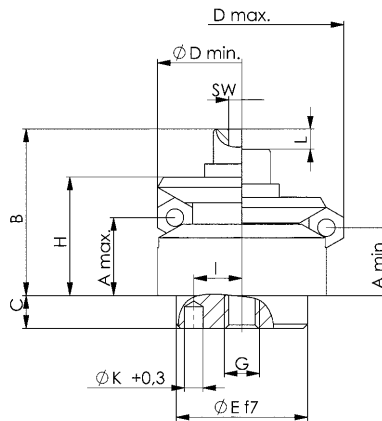
#### Advantage:

- Low installation height
- Clamping in the zero point
- Pull-down effect
- Distortion-free clamping

#### Note:

For deep installation, clearance D max. must be provided.

Installation tool: Retaining pin for determining the precise position of the segments. (supplied without installation tool)



#### Dimensions:

Order no.	B	C	E f7	F	G	I $\pm 0,1$	K	L	Q	QD	SW	T
373464	19,5	5,5	12	4,3	M4	4,5	2,0	2,3	3	4	3	4,3
373472	23,5	7,5	15	5,3	M5	5,5	2,5	2,3	3	4	4	5,3
373480	28,8	6,0	20	6,4	M6	7,0	3,0	2,3	3	4	5	6,4
373498	28,8	6,0	20	6,4	M6	7,0	3,0	2,3	3	4	5	6,4
373506	32,7	7,0	25	6,4	M6	9,0	4,0	4,6	3	8	5	6,4
373514	39,2	7,5	30	8,4	M8	11,0	4,0	4,6	6	8	6	8,4
373522	39,2	7,5	30	8,4	M8	11,0	4,0	4,6	6	8	6	8,4
373530	54,6	9,0	45	10,5	M10	15,0	5,0	9,3	6	16	8	10,5
373548	63,1	10,0	60	13,0	M12	17,0	5,0	9,3	6	16	10	13,0
373555	73,0	10,0	60	17,0	M16	25,0	5,0	9,3	6	16	14	13,0

Q = number of segments, QD = diameter of the segments



No. 6383ZUK

## Centring clamp with ball

Can be used from below.  
 Repeatability  $\pm 0.025$  mm  
 Concentricity  $\pm 0.050$  mm



Order no.	D min.	D max.	A min.	A max.	H	P [kN]	Weight [g]
373563	11,7	14,2	3,0	4,0	10,0	0,5	8
373571	14,5	18,5	8,6	9,8	14,5	3,5	18
373589	18,5	22,5	10,4	11,6	16,5	4,0	36
373597	22,5	26,5	13,0	14,2	19,8	4,5	61
373605	26,5	30,5	13,0	14,2	19,8	4,5	80
373613	30,5	38,5	11,9	14,2	23,2	4,5	114
373621	38,5	46,5	15,5	17,8	27,2	6,5	221
373639	46,5	54,5	15,7	18,0	27,2	6,5	305
373647	54,5	70,5	19,1	23,7	40,6	8,0	590
373654	70,5	86,5	23,7	28,3	46,1	10,0	1180
373662	86,5	102,5	25,7	30,2	51,0	12,5	1880

### Application:

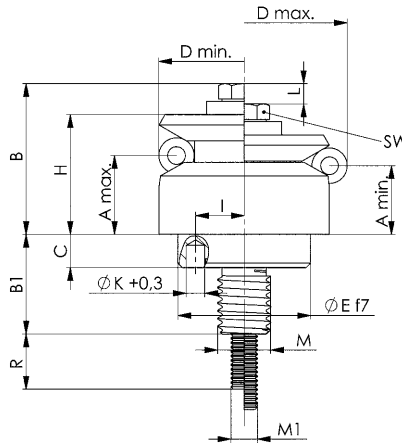
For central positioning and clamping in blind holes where slight ball impressions are acceptable. Operation from below, automated or manual.

### Advantage:

- Low installation height
- Clamping in the zero point
- Pull-down effect
- Distortion-free clamping

### Note:

For deep installation, clearance D max. must be provided.  
 Installation tool: Hole K for retaining pin for determining the precise position of the balls. (supplied without installation tool)



### Dimensions:

Order no.	B	B1	C	E f7	F	G	I $\pm 0,1$	K	L	M	M1	Q	QD	R	SW	T
373563	12,8	11,0	3,5	10	5	M5	3,5	1,5	1,4	M5	M3	3	2,5	10	5,5	2,0
373571	17,3	14,1	5,5	12	6	M6	4,5	2,0	2,3	M6	M3	3	4,0	12	5,5	2,5
373589	20,9	18,2	7,5	15	8	M8	5,5	2,5	2,3	M8	M4	3	4,0	14	7,0	3,5
373597	25,4	17,4	6,0	20	10	M10	7,0	3,0	2,3	M10	M5	3	4,0	15	8,0	3,5
373605	25,4	17,4	6,0	20	10	M10	7,0	3,0	2,3	M10	M5	3	4,0	15	8,0	3,5
373613	30,3	21,9	7,0	25	12	M12	9,0	4,0	4,6	M12	M6	3	8,0	20	10,0	3,5
373621	34,2	22,5	7,5	30	12	M12	11,0	4,0	4,6	M12	M6	6	8,0	20	10,0	4,5
373639	34,2	22,5	7,5	30	12	M12	11,0	4,0	4,6	M12	M6	6	8,0	20	10,0	6,5
373647	49,9	24,5	9,0	45	14	M14 x 1,5	15,0	5,0	9,3	M14 x 1,5	M8	6	16,0	32	13,0	6,5
373654	55,4	29,4	10,0	60	16	M16 x 1,5	17,0	5,0	9,3	M16 x 1,5	M8	6	16,0	20	13,0	6,5
373662	61,6	29,4	10,0	60	16	M16 x 1,5	25,0	5,0	9,3	M16 x 1,5	M10	6	16,0	25	16,0	6,5

Q = number of balls, QD = diameter of the balls

## No. 6383ZUS

### Centring clamp with protective segments

Can be used from below.  
 Repeatability  $\pm 0.025$  mm  
 Concentricity  $\pm 0.025$  mm



Order no.	D min.	D max.	A min.	A max.	H	P [kN]	Weight [g]
373670	14,5	18,5	8,6	9,8	14,5	3,5	18
373688	18,5	22,5	10,4	11,6	16,5	4,0	36
373696	22,5	26,5	13,0	14,2	19,8	4,5	61
373704	26,5	30,5	13,0	14,2	19,8	4,5	80
373712	30,5	38,5	11,9	14,2	23,2	4,5	114
373720	38,5	46,5	15,5	17,8	27,2	6,5	221
373738	46,5	54,5	15,7	18,0	27,2	6,5	305
373746	54,5	70,5	19,1	23,7	40,6	8,0	590
373753	70,5	86,5	23,7	28,3	46,1	10,0	1180
373761	86,5	102,5	25,7	30,2	51,0	12,5	1880

#### Application:

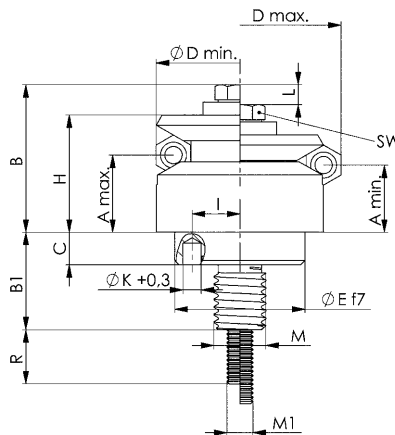
For unmarred surfaces with central positioning and clamping in blind holes. Operation from below, automated or manual.

#### Advantage:

- Low installation height
- Clamping in the zero point
- Pull-down effect
- Distortion-free clamping

#### Note:

For deep installation, clearance D max. must be provided.  
 Installation tool: Hole K for retaining pin for determining the precise position of the segments.  
 (supplied without installation tool)



#### Dimensions:

Order no.	B	B1	C	E f7	F	G	I $\pm 0,1$	K	L	M	Q	M1	QD	R	SW	T
373670	17,3	14,1	5,5	12	6	M6	4,5	2,0	2,3	M6	3	M3	4	12	5,5	2,5
373688	20,9	18,2	7,5	15	8	M8	5,5	2,5	2,3	M8	3	M4	4	14	7,0	3,5
373696	25,4	17,4	6,0	20	10	M10	7,0	3,0	2,3	M10	3	M5	4	15	8,0	3,5
373704	25,4	17,4	6,0	20	10	M10	7,0	3,0	2,3	M10	3	M5	4	15	8,0	3,5
373712	30,3	21,9	7,0	25	12	M12	9,0	4,0	4,6	M12	3	M6	8	20	10,0	3,5
373720	34,2	22,5	7,5	30	12	M12	11,0	4,0	4,6	M12	6	M6	8	20	10,0	4,5
373738	34,2	22,5	7,5	30	12	M12	11,0	4,0	4,6	M12	6	M6	8	20	10,0	6,5
373746	49,9	24,5	9,0	45	14	M14 x 1,5	15,0	5,0	9,3	M14 x 1,5	6	M8	16	32	13,0	6,5
373753	55,4	29,4	10,0	60	16	M16 x 1,5	17,0	5,0	9,3	M16 x 1,5	6	M8	16	20	13,0	6,5
373761	61,6	29,4	10,0	60	16	M16 x 1,5	25,0	5,0	9,3	M16 x 1,5	6	M10	16	25	16,0	6,5

Q = number of segments, QD = diameter of the segments

# THE FIRST STEP FOR USE AND EMPLOYMENT OF SIDE THRUST PIECES:

- > What is being positioned or clamped?
- > Which side thrust pieces will be used?
- > What size corresponds to the workpiece?
- > What tolerance does the workpiece have?
- > How large is the dimension Y? (Workpiece height)
- > How large is the dimension X? (See table)
- > Should the spring deflection be completely used?
- > How is the coordinate dimension determined?

## EXAMPLE: POSITIONING OR CLAMPING A PLATE 100 X 50 X 8 MM

### Should the pin diameter be 5, 6 or 8 mm?

- > If nothing may extend over the plate 5 mm
- > If projection would not be a problem 6 or 8 mm
- > If clamping will be done additionally 6 mm
- > If drilling will be performed without additional clamping 8 mm

### Workpiece height Y?

The tolerance can be ignored

### What force should be selected?

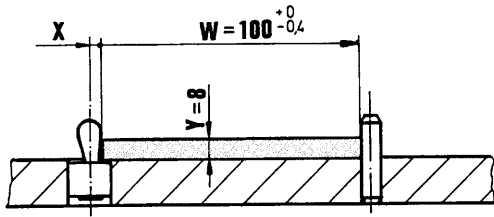
- > For positioning tasks 30 - 60 N
- > For clamping forces 90 - 150 N

### Length / width of the workpiece?

- > Length =  $100 +0/-0.4$  = medium dimension 99,8 mm
- > Width =  $50 +0,2/-0.2$  = medium dimension 50,0 mm

### Dimension X for side thrust pieces with steel spring?

- > See table or formula below



W = workpiece (+/- tolerance)  
- F = pre-tension  
F = (-F) + (+F)

Y = workpiece height  
+ F = clamping force (spring deflection for tolerance)  
T = tolerance

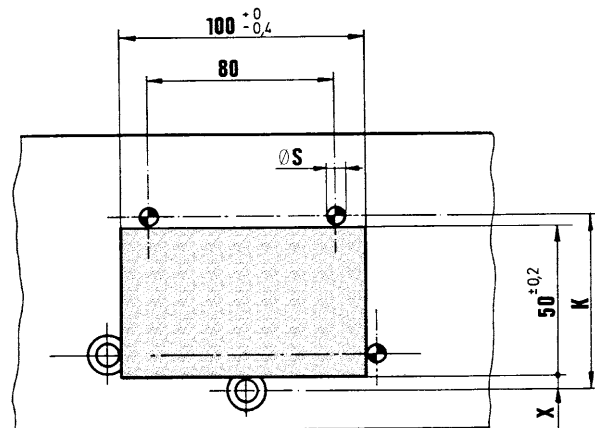
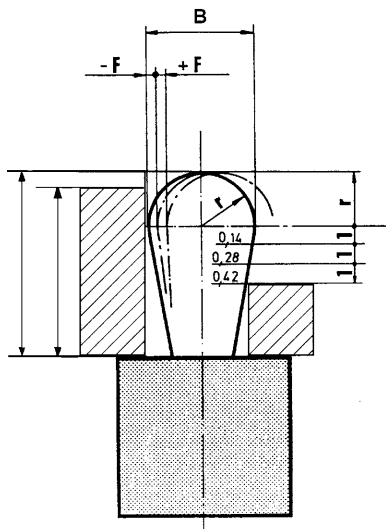
For workpieces that are higher than C minus r, the table values for dimension X or the formula  $X = B/2 - (-F)$  apply.

For workpieces that are smaller than C minus r, the table values for dimension X or the formula  $X = B/2 - (-F) - [(C - r - Y) \times 0,123]$  apply.

Formula for coordinates:

$$K = W - T/2 + x + S/2$$

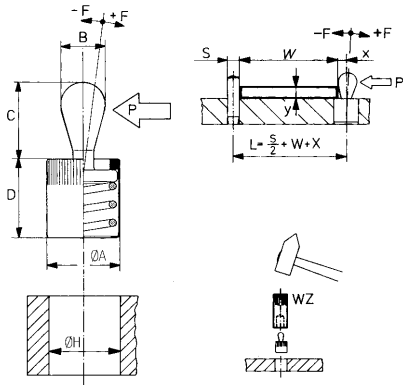
The table values are standard values that should ideally be checked using a sample clamping.



## No. 6380

### Side thrust piece, without seal

Steel pin: hardened and galvanised  
Sleeve: Aluminium



Order no.	dia. A	B	~P Spring force [N]	C	D-1	ØH H8	F	X	Tool 6380WZ	Weight [g]
373001	6	3	10	4,0	7	6	±0,5	0,9	03	0,6
373019	6	3	20	4,0	7	6	±0,5	0,9	03	0,6
373027	6	3	40	4,0	7	6	±0,5	0,9	03	0,7
373035	10	5	20	6,7	11	10	±0,8	1,6	05	2,6
373043	10	5	50	6,7	11	10	±0,8	1,6	05	2,9
373050	10	5	100	6,7	11	10	±0,8	1,6	05	3,1
373068	10	6	40	10,7	11	10	±1,0	1,8	06	3,6
373076	10	6	75	10,7	11	10	±1,0	1,8	06	3,6
373084	10	6	150	10,7	11	10	±1,0	1,8	06	3,9
373092	12	8	50	13,9	13	12	±1,3	2,6	08	7,0
373100	12	8	100	13,9	13	12	±1,3	2,6	08	7,2
373126	16	10	100	16,7	17	16	±1,6	3,2	10	15,0
373134	16	10	200	16,7	17	16	±1,6	3,2	10	15,4
373142	16	10	300	16,7	17	16	±1,6	3,2	10	15,8

#### Note:

Without sealing for operations without dirt, temperature-resistant up to 250°C.  
Installation by pressing in.

#### Recommendations



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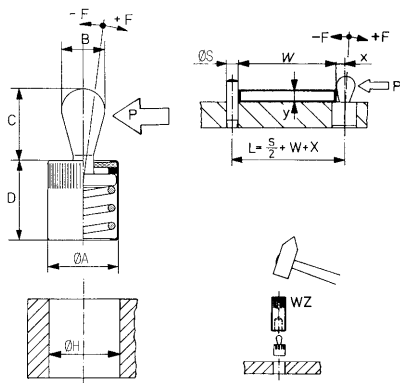
CAD



## No. 6380D

### Side thrust piece, with seal

against chips and dirt.  
Steel pin for clamping: hardened and galvanised  
Sleeve: Aluminium



Order no.	dia. A	B	~P Spring force [N]	C	D-1	ØH H8	F	X	Tool 6380WZ	Weight [g]
373159	6	3	10	4	7	6	±0,5	0,9	03	0,6
373167	6	3	20	4	7	6	±0,5	0,9	03	0,6
373175	6	3	40	4	7	6	±0,5	0,9	03	0,7
373183	10	5	20	6	12	10	±0,8	1,6	05	2,7
373191	10	5	50	6	12	10	±0,8	1,6	05	2,9
373209	10	5	100	6	12	10	±0,8	1,6	05	2,9
373217	10	6	40	10	12	10	±1,0	1,8	06	3,1
373225	10	6	75	10	12	10	±1,0	1,8	06	3,6
373233	10	6	150	10	12	10	±1,0	1,8	06	3,7
373241	12	8	50	13	14	12	±1,3	2,6	08	3,9
373258	12	8	100	13	14	12	±1,3	2,6	08	7,1
373266	12	8	200	13	14	12	±1,3	2,6	08	7,3
373274	16	10	100	16	18	16	±1,6	3,2	10	7,6
373282	16	10	200	16	18	16	±1,6	3,2	10	15
373290	16	10	300	16	18	16	±1,6	3,2	10	15,4

#### Note:

With sealing for chip-producing operations with dirt, temperature-resistant up to 150°C.  
Sealing: CR, black, 60 Shore. Installation by pressing in.

#### Recommendations



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CAD



Subject to technical alterations.

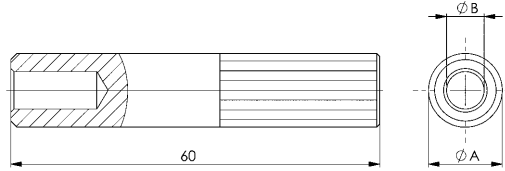
## No. 6380WZ

### Insertion tool

for pressing in the lateral pressure pad.



Order no.	Size	dia. A	B	Weight [g]
373308	03	8	3,1	16
373316	05/06	12	6,1	19
373332	08	14	8,1	64
373340	10	18	10,2	105



## No. 6387

### Eccentric clamping bolt

clamp in x-y direction with pull down effect.  
Hardened steel 56±1 HRC.



Order no.	dia. A	B	C	D	E	F	G	SW	X	Z	max. holding force [kN]	Md [Nm]	Weight [g]
373779	9,2	M4	3	8	3,0	4,6	4,0	2,5	3,5	4,2	0,09	1,5	2
373787	14,2	M6	5	12	4,5	7,1	6,1	4,0	5,4	6,4	0,3	5,0	6
373795	18,0	M8	6	16	5,5	8,9	7,7	5,0	6,6	8,0	2,7	22,0	9
373803	22,2	M10	7	20	6,5	11,1	9,4	6,0	8,3	9,8	4,0	35,0	16
373811	27,0	M12	9	24	8,0	13,5	11,6	8,0	10,1	12,0	5,4	45,0	31

### Application:

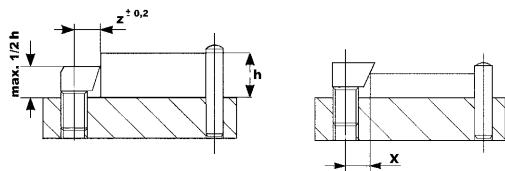
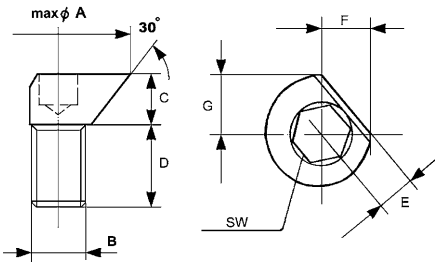
- Clamping above the machining surface
- Clamping below the machining surface
- Clamping in holes.

### Advantage:

- stepless adjustment with eccentric
- high wear resistance.

### On request:

The eccentric clamping bolt is also available with left-hand thread on request.



### Clamping above the machining surface



### Clamping below the machining surface



Subject to technical alterations.





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DIN 6326	43	No. 6328	129	No. 6383ZUK	140	No. 6443G	58	No. 6531	90
DIN 6330B	83	No. 6332S	85	No. 6383ZUS	141	No. 6444	57	No. 6532	91
DIN 6331	84	No. 6333	87	No. 6387	144	No. 6445	57	No. 6535	94
DIN 6340	89	No. 6333S	86	No. 6400	47	No. 6460	52	No. 6600	135
DIN 6346	117	No. 6333SB	87	No. 6400G	48	No. 6465	52	No. 6601	135
DIN 6346P	117	No. 6334	83	No. 6400M	48	No. 6470	92	No. 6610	135
DIN 6379	76-78	No. 6339	95	No. 6401	49	No. 6470H-1	93	No. 6611	136
DIN 787	70-74	No. 6342	95	No. 6405	49	No. 6470H-2	93	No. 6612	136
DIN 894	96	No. 6344SP	128	No. 6406	50	No. 6470-Mxx	92	No. 6616	136
No. 508F	81	No. 6347P	118	No. 6406A	50	No. 6485	95	No. 6621	32
No. 508L	81	No. 6347PP	119	No. 6406AF	50	No. 6486	96	No. 7000	33
No. 508R	82	No. 6347PS	120	No. 6406M	50	No. 6489	110	No. 7110DFX-**xM**	37
No. 510	82	No. 6347PSP	119	No. 6406-125	51	No. 6490	97	No. 7110DHX-**xM**	37
No. 6310	18	No. 6347S	118	No. 6415	46	No. 6491	97	No. 7110DIX-**xM**	37
No. 6311	19	No. 6347SP	118	No. 6416	46	No. 6492	98	No. 7110DKX-**xM**	37
No. 6312S	16	No. 6348P	121	No. 6417	59	No. 6492D	98	No. 7110DMX-**xM**	35
No. 6312V	12	No. 6348PP	123, 124	No. 6417SP	60	No. 6493F	109	No. 7110DX-**xM**	35
No. 6312VI	15	No. 6348PS	125, 126	No. 6417Z	60	No. 6493N	107	No. 7110GD-**-1	36
No. 6312VS	14	No. 6348PSP	122, 123	No. 6418	61	No. 6493S	108	No. 7110GD-**-2	36
No. 6312VT	13	No. 6348S	121	No. 6419	62	No. 6493SP	108	No. 7110GLX-**-1	35
No. 6313K	30	No. 6348SP	121	No. 6419B-12-01	63	No. 6494	102	No. 7110GX-**-1	35
No. 6313L	32	No. 6349P	128	No. 6419B-12-02	63	No. 6495	114	No. 7600	6
No. 6314AT	34	No. 6349PP	127	No. 6419B-12-03	63	No. 6495S	114	No. 7600BFS	8
No. 6314AV	28	No. 6350	129	No. 6419B-12-04	64	No. 6496	115	No. 7600D	8
No. 6314S	32	No. 6351	130	No. 6419B-12-05	64	No. 6496BF	115	No. 7600S	8
No. 6314V	26	No. 6353	130	No. 6419B-16-01	64	No. 6497	103	No. 7600Z	7
No. 6314Z	21	No. 6355V	131	No. 6419B-16-02	65	No. 6497A	105	No. 797	75
No. 6315GN	22	No. 6357	132	No. 6419B-16-03	65	No. 6497B	106		
No. 6315GNG	22	No. 6358	132	No. 6419B-16-04	65	No. 6497G	104		

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159418	80	370189	122	370478	123	370767	119	371153	123
159426	80	370197	122	370486	123	370775	119	371161	123
30064	21	370205	122	370494	123	370783	119	371179	123
3079	21	370213	122	370502	123	370791	119	371187	123
313379	115	370221	122	370510	123	370809	119	371195	123
313395	115	370239	122	370528	123	370817	119	371203	123
313411	115	370247	122	370536	123	370825	120	371211	123
313437	115	370254	122	370544	123	370833	120	371229	123
313452	115	370262	122	370551	123	370841	120	371237	123
313478	115	370270	122	370569	123	370858	120	371245	123
313494	115	370288	122	370577	123	370866	120	371252	123
370007	122	370296	122	370585	123	370874	120	371260	123
370015	122	370304	122	370593	123	370882	120	371278	123
370023	122	370312	122	370601	123	370890	120	371286	123
370031	122	370320	122	370619	123	370908	120	371294	123
370049	122	370338	122	370627	123	370916	120	371302	123
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371393	124	372128	125	373019	143	373761	141	376038	15
371401	124	372136	125	373027	143	373779	144	376046	15
371419	124	372144	125	373035	143	373787	144	376053	15
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371443	124	372177	125	373068	143	373811	144	376087	15
371450	124	372185	125	373076	143	373878	25	376095	15
371468	124	372193	125	373084	143	373886	25	376103	15
371476	124	372201	125	373092	143	37390	21	376137	22
371484	124	372219	125	373100	143	373928	26	376145	22
371492	124	372227	125	373126	143	373936	26	376152	22
371500	124	372235	125	373134	143	373944	26	376160	22
371518	124	372243	124	373142	143	373951	26	376178	22
371526	124	372250	124	373159	143	373969	42	376186	22
371534	124	372268	124	373167	143	<b>374124</b>	114	376194	48
371542	124	372276	124	373175	143	374132	114	376202	22
371559	124	372284	124	373183	143	374140	114	376210	48
371567	126	372292	124	373191	143	374157	115	376228	22
371575	126	372300	124	373209	143	374165	115	376236	48
371583	126	372318	124	373217	143	374173	115	376244	22
371591	126	372326	124	373225	143	374181	115	376251	55
371609	126	372334	124	373233	143	374199	115	376269	22
371617	126	372342	124	373241	143	374207	115	376277	55
371625	126	372359	124	373258	143	374215	115	376285	22
371633	126	372367	124	373266	143	374355	112	376293	55
371641	126	372375	124	373274	143	374371	113	376301	22
371658	126	372383	124	373282	143	374397	113	376319	55
371666	126	372391	124	373290	143	374405	26	376327	22
371674	126	372409	124	373308	144	374413	32	376335	58
371682	126	372417	124	373316	144	374439	26	376343	22
371690	126	372425	124	373332	144	374447	37	376350	58
371708	126	372433	124	373340	144	374454	37	376426	104
371716	126	372441	124	373357	138	374462	37	376442	104
371724	126	372458	124	373365	138	374926	13	376467	104
371732	126	372466	124	373373	138	374942	13	376475	12
371740	126	372474	124	373381	138	374967	13	376555	18
371757	126	372482	128	373399	138	374983	13	376731	19
371765	126	372490	128	373407	138	<b>375006</b>	13	376756	19
371773	126	372508	127	373415	138	375501	112	376772	19
371781	126	372516	127	373423	138	375527	113	376798	19
371799	126	372524	127	373431	138	375543	113	376814	19
371807	125	372532	127	373449	138	375592	52	376830	19
371815	125	372540	127	373456	138	375600	110	376863	18
371823	125	372557	127	373464	139	375618	52	376871	18
371831	125	372565	127	373472	139	375667	110	376889	18
371849	125	372573	127	373480	139	375683	110	376897	18
371856	125	372581	127	373498	139	375709	110	376905	18
371864	125	372599	127	373506	139	375725	110	376913	18
371872	125	372607	127	373514	139	375741	110	376921	18
371880	125	372615	127	373522	139	375766	14	376939	18
371898	125	372623	127	373530	139	375782	14	376947	18
371906	125	372631	127	373548	139	375808	14	376962	19
371914	125	372649	127	373555	139	375816	14	<b>377002</b>	19
371922	125	372656	127	373563	140	375824	14	377044	19
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# WE GENERATE EXCITEMENT - ON YOUR MOBILE DEVICE TOO

The "Clamping technology APP" offers you an overview of AMF's exciting clamping product range. No matter whether mechanical, pneumatic, hydraulic or magnetic clamping technology, as well as vacuum and zero point clamping systems - all the products are presented in detail in this APP, and you can see the numerous application options of AMF clamping technology at a glance.

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Test it now by downloading our clamping technology APP free-of-charge from the Apple App Store or Google Play.



**THE CLAMPING TECHNOLOGY APP -  
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These Terms of Payment apply for companies, legal entities governed by public law and public law special funds. Our goods and services are supplied exclusively on the basis of the following conditions. Any deviating purchasing conditions of the customer not expressly recognised by us will not become part of the contract through acceptance of the order. By placing the order and accepting the goods we deliver, the customer confirms its consent to our terms and conditions.

## 1. Offer and contractual conclusion

All our offers are always subject to change without notice unless otherwise explicitly agreed. Our delivery contracts are based on the latest version of our catalogue. Dimension and weight values, as well as illustrations, drawings and data, are non-binding and can be changed by us at any time. Therefore, deviations cannot be ruled out and do not justify any compensation claims against us.

Orders are considered accepted only when confirmed by us in writing. If, for organisational reasons, the customer does not receive a separate confirmation upon the delivery of goods, the invoice shall also be deemed the order confirmation.

## 2. Prices

The prices are in EURO, ex-works, excluding VAT, packing, freight, postage and insurance. Unless otherwise agreed, our list prices valid on the day of delivery shall apply. For orders below 50 EUR goods net, we must make a minimum quantity surcharge of a 10 EURO for cost reasons.

## 3. Tool costs

Unless any other agreements have been reached, the tools fabricated for the purpose of executing the order shall remain our property in all cases, even if we have invoiced a tool cost component separately.

## 4. Payment

Unless otherwise stated on the invoice, the purchase price falls due for net payment within 30 days of the invoice date (without deduction of discount). Invoice amounts of below 50 EURO are due for payment immediately.

In case of payment default, we shall be entitled to charge default interest. The amount corresponds to our interest rate for current account credits at our main bank; the minimum however being 8 percentage points above the relevant base interest rate applied by the European Central Bank. Moreover, in case of default following written notice to the customer, we shall be entitled to cease to fulfil our obligations until payments are received.

## 5. No set-off

The customer can set-off only with legally confirmed or undisputed counterclaims.

## 6. Right of withdrawal in case of delayed acceptance or payment and insolvency

If the customer fails to accept the goods in due time, we shall be entitled to set a reasonable period of grace, after which we can dispose of the goods elsewhere and supply the customer on a reasonably longer term. Our rights to withdraw from the contract under the provisions of Section 326 BGB and demand damages for non-performance shall not be affected. If the customer fails to pay for the goods once payment is due, we shall be entitled, at the end of a reasonable period of grace we have set, to withdraw from the contract and demand the return of any goods already supplied. Section 323 BGB remains unaffected in all other cases.

If the customer applies for the opening of insolvency proceedings, we shall be entitled, prior to the ordering of security measures by the insolvency court, to withdraw from the contract and demand the immediate return of the goods.

## 7. Customer-specific fabrications/project fabrications (custom fabrications)

Customer-specific fabrications require binding information on design, quantity etc. in written form at the time of ordering. For manufacturing reasons, we reserve the right to supply up to 10% above or below the order quantity. Technical modifications or cancellations are subject to any costs incurred. The return of customer-specific fabrications is impossible.

## 8. Delivery and packaging, transfer of risk

The delivery date is non-binding; although stated to the best of our knowledge. It is subject to us receiving correct, defect-free and complete deliveries. The stated delivery dates relate to completion in the factory, starting on the day the order is accepted by us. Delivery is EXW (ex-works) in accordance with Incoterms 2010. Therefore, the costs are borne by the customer. The risk is transferred to the customer when the goods are passed to the person, company or facility nominated to execute the shipment. This applies also for partial deliveries, or if we have assumed responsibility for delivery and installation. The risk shall be transferred to the customer even in the case of delayed acceptance.

In the absence of specific shipping instructions, we shall proceed as we deem fit and without any obligation to the cheapest or most expedient method. The customer agrees that the order can also be delivered in parts, insofar as this is reasonable for the customer. We shall charge a 5 EURO processing fee for shipping to third parties that we supply on behalf of the customer.

The packaging complies with the packaging ordinance. Disposable packaging shall be charged at cost price. The packaging cannot be taken back.

## 9. Performance impediment and/or impossibility

If we are hindered in the fulfilment of our obligation due to the onset of unforeseeable circumstances, which we are unable to avoid despite reasonable effort in relation to the nature of the circumstances (e.g. operational interruption, delay in the delivery of important raw materials, defects in the delivery), the delivery time shall be extended by a reasonable period, insofar as the supply of goods or services is not rendered unreasonably difficult or impossible.

If we have to accept that these circumstances are not only temporary, we shall be entitled to withdraw from the contract either in whole or in part.

If the supply of goods or services becomes impossible, the customer shall not be obliged to furnish its own contractual service. Section 275 BGB applies mutatis mutandis. If, however, the customer is solely or predominantly responsible for the

circumstances that led to impossibility, it shall remain under an obligation to render the return service. The same applies if this circumstance occurs at a time when the customer is behind schedule with acceptance.

## 10. Samples/returns

Samples shall be provided only against payment. If samples or models are provided, a credit note shall be issued with the subsequent order if the order value is 125 EURO net or more. Goods can be returned only by agreement, although custom fabrications are excluded from such return.

In the case of returns for which we are not responsible (e.g. incorrect order), we shall charge a processing fee of 10%, the minimum value, however, being 7.50 EURO.

## 11. Retention of title

The goods shall remain our property unless full payment of all claims and/or until the cheques provided for this purpose are honoured. The itemisation of claims in an ongoing invoice, as well as balancing the account and the recognition thereof does not affect the retention of title. The customer is entitled to sell on the retained goods during the ordinary course of business. However, the customer is not permitted to pledge the goods or transfer them by way of security. It shall assign its claim ensuing from the selling on of the retained goods to us in advance. The customer shall be entitled to collect the claim to the extent that it has fulfilled its obligations towards us. At our request, the customer shall be obliged to state third-party debtors and we shall be entitled to report this and the assignment.

## 12. Property rights

We reserve property rights and copyrights to all contractual documents such as drafts, drawings, calculations and cost estimates. Such documents must not be reproduced or disclosed to third parties without our consent. Any rights to patents, utility models etc. reside solely with us, insofar as such patents have not yet been filed. Our products are allowed to be replicated only with our written consent.

If objects are fabricated according to drawings or samples, the customer shall warrant that any third party property rights are not infringed by manufacture or delivery. If a third party forbids manufacture and delivery on account of property rights, we shall be entitled to stop manufacture and delivery immediately. The customer shall be obliged to reimburse us with all costs incurred and indemnify us from third party compensation claims. Compensation claims by the customer are impossible.

## 13. Warranty

If the customer agrees with us a particular quality of the goods, we shall base this agreement on our technical delivery specifications. If we have to deliver according to customer drawings, specifications, samples etc., the customer shall assume the risk for suitability for the intended purpose. If, after the contract is concluded, the scope of goods or services is changed at the customer's request and this impairs the quality or suitability of the goods, claims for defects on the part of the customer shall be ruled out, insofar as such impairments are caused by the customer's requests for change. The time at which the risk is transferred is decisive for the contractual state of the goods. Wear and tear of wearing parts caused by ordinary use does not constitute a defect. Claims for defects are ruled out in the following cases in particular: Unsuitable or improper use, incorrect installation and/or commissioning by the customer or third party, normal wear and tear, incorrect or negligent handling - in particular excessive use -, unsuitable equipment, replacement materials, chemical, electrochemical or electrical influences, unless such defects are caused by ourselves.

If the goods contain a defects, we shall provide, following a reasonable period of grace set by the customer, either a replacement or a repair as we deem fit. If such subsequent performance fails, the customer shall be entitled to either reduce the purchase price or withdraw from the contract. Any further warranty claims are ruled out. In case of negligible deviations from the agreed quality, no claims for defects shall be recognised.

The discovery of defects must be communicated to us immediately in writing. In the case of recognisable defects, however, within 10 days of acceptance, in the case of non-recognisable defects immediately after they become evident. The warranty is 12 months, starting with delivery of the goods ex-works.

## 14. Liability

With the exception of harm to life, body or health on account of a breach of duty by ourselves, our liability shall be limited to intent or gross negligence.

## 15. Place of fulfilment, place or jurisdiction and governing law

The place of fulfilment for all obligations ensuing from this contractual relationship is D-70734 Fellbach.

The place of jurisdiction for all legal disputes ensuing from the contractual relationship is the court responsible for the headquarters of Andreas Maier GmbH & Co. KG.

All disputes ensuing from the contract or regarding the validity thereof shall be finally decided by a court of arbitration in accordance with the Court of Arbitration Ordinance of the German Committee for Arbitration Court Procedures or the Conciliation and Arbitration Arrangement of the International Chamber of Commerce, recourse to ordinary courts of law being excluded. The legal dunning process, however, remains permissible.

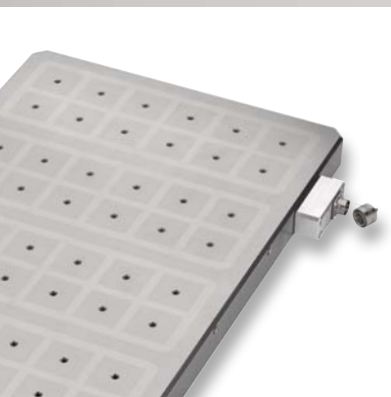
German law shall govern (BGB and HGB). The applicability of the UN Convention on Contracts for the International Sale of Goods (CISG) is ruled out.

## 16. Severability clause

If individual provisions become legally invalid, the remaining provisions shall not be affected. The legally invalid provision shall be replaced by regulations that most closely reflect the economic purpose of the contract with reasonable consideration for the mutual interests. The publication of these Terms of Sale, Delivery and Payment renders all previous versions invalid. This does not apply for any contracts concluded prior to announcement.

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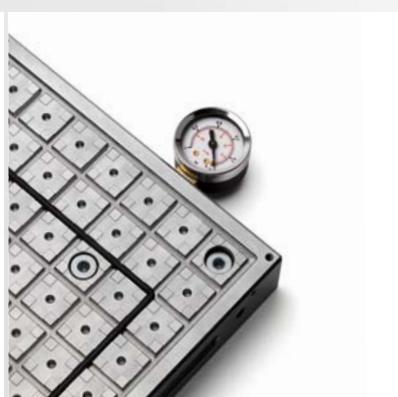
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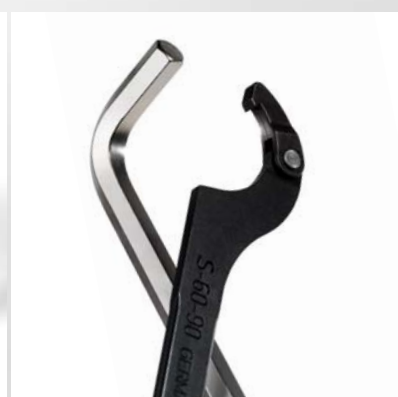
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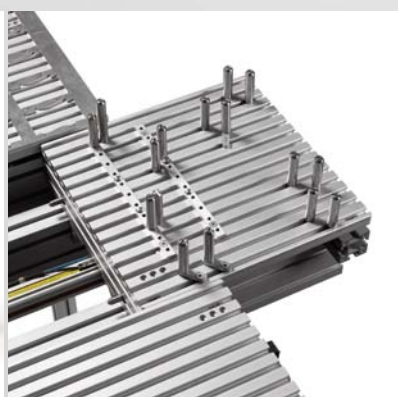
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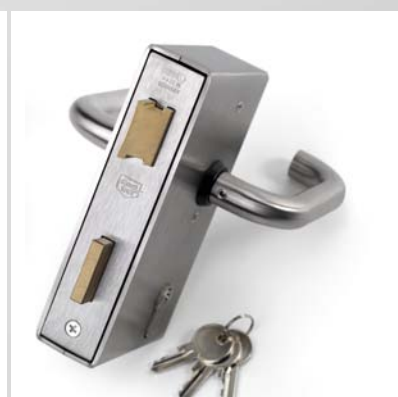
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