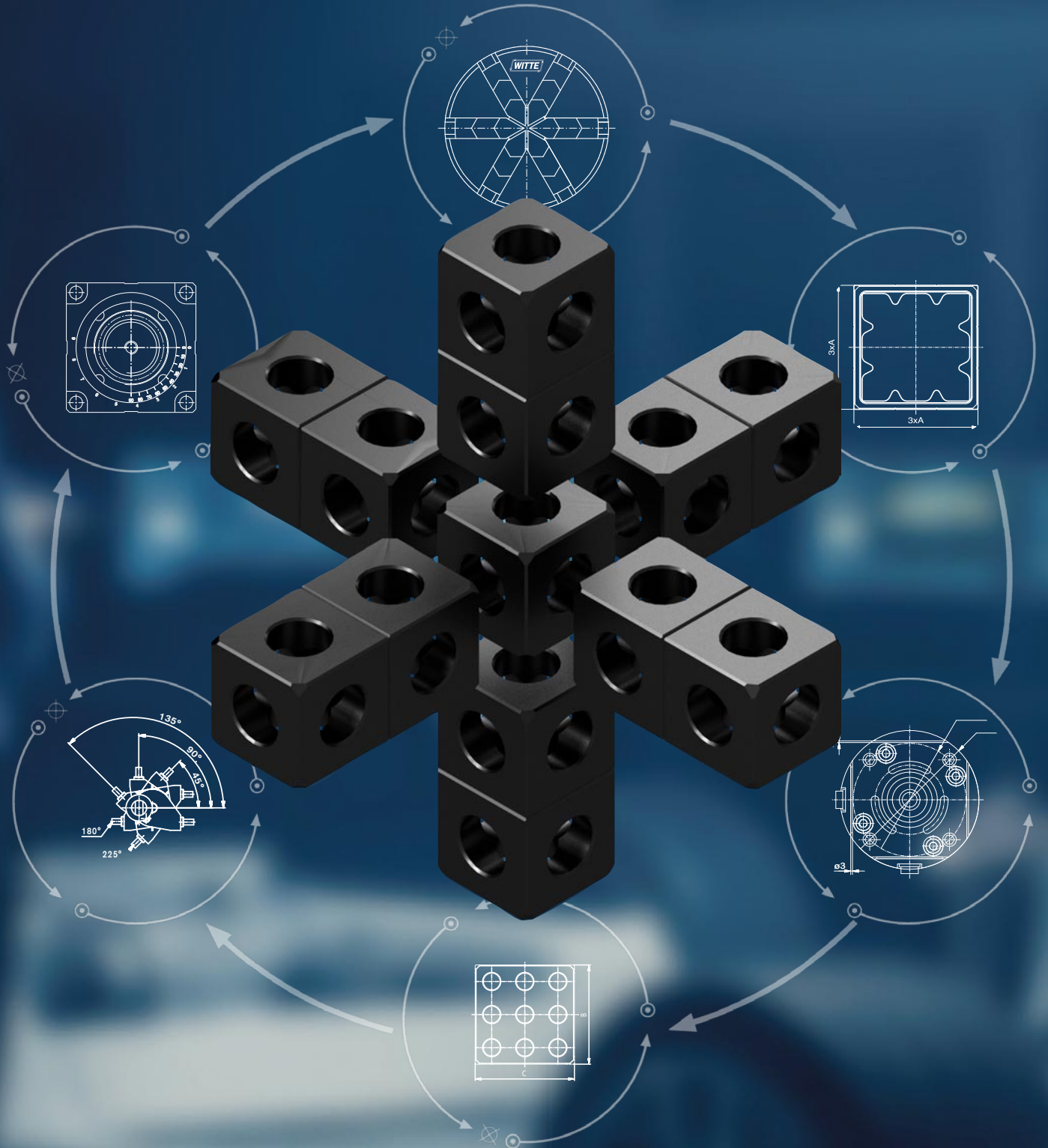


ALUFIX

Main Catalogue



2023

Fixed on precision



Witte Barskamp GmbH & Co. KG: Fixed on precision



Founded in 1969 as a production partner for high-precision components in the aerospace industry, Witte is today one of the leading international developers and manufacturers of modular fixturing, positioning and measuring devices as well as feeder systems. With the ALUFIX modular fixturing system and the versatile vacuum clamping systems, Witte is considered the global market leader.

Branches and representative offices in Singapore, Mexico, USA and Brazil as well as an extensive dealer network ensure the worldwide availability of Witte products and services.

Almost all major companies in the automotive and aerospace industries rely on products and application solutions from Witte. In addition, there is a wide range of applications in all industries in which dimensional quality monitoring, economic efficiency and precision play decisive roles.

In the last 50 years, Witte has acquired over 250 patents, utility models and word marks, 70 of which are still valid today. Many of them for ALUFIX - the quality reference for modular clamping system

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Legend

Unless otherwise defined, all dimensions are given in millimeters and weights in grams.

Depending on the product version, ALUFIX elements are made of high-strength (Classic) or medium-strength (ECO) aluminium. ALUFIX elements can be anodized in different colours.

The colour "black" is standard, "natural" is available as an alternative - simply delete "-1" from the article number when ordering.

ALUFIX preferred range marking



Green: Item is available immediately.

C: Classic version

E: Eco version

C·E: Classic or Eco

■: FColor "black"

E ■ Example: Article is available immediately in the Eco, black anodized version.

Modular precision and systematic flexibility

ALUFIX from Witte is the worldwide proven clamping and fixturing system for reproducible workpiece fixtures in dimensional measurement and manufacturing technology.

Made of high-quality aluminium, depending on the product variant (ECO - medium-strength or Classic - high-strength) ALUFIX guarantees the best material quality, durability and resilience.

Reproducible and retoolable

Fixtures implemented using ALUFIX can be reliably assembled. Consistent implementation of the modular system allows unlimited, long-term multiple use of practically all standard elements built into devices.

System sizes and designs

ALUFIX is available in four system sizes:

- for holding and optical measurement of small parts,
- for fixtures for small to medium size parts,
- for medium-sized to large fixtures for assemblies, meisterbocks etc.
- as well as for the support of large and heavy parts.

In addition to the ALUFIX Classic version made of high-tensile aluminum, Witte's ALUFIX Eco is a particularly economical variant of the system made of medium-tensile aluminum for normal use and moderate part change intervals.

All ALUFIX system elements follow a uniform concept, are unreservedly downward compatible and at the same time secure the basis for future expansion.

The new ECO Plus version of ALUFIX bars combines all the decisive advantages of the previous Classic, Classic light and Eco light product versions: high precision and an advantageous price-performance ratio.

Quality in series: High quality black anodizing

With the product year 2022, Witte is visibly upgrading the entire ALUFIX catalogue range: with black anodizing as a standard.

- For perfect results for the increasing use of optical measuring methods
- For the harmonious fit into most working environments
- For increased availability of the entire ALUFIX catalogue range

ALUFIX quotations and order confirmations automatically show the article number of the elements anodized black.



100% Compatibility

- overall system upwards and downwards compatible
- all system sizes can be combined with one another
- no weight and size limits
- existing systems and clamping aids can be integrated

100% Continuity

- ALUFIX has existed for more than 35 years
- the basic design idea has always been maintained
- future expansion will also follow this principle

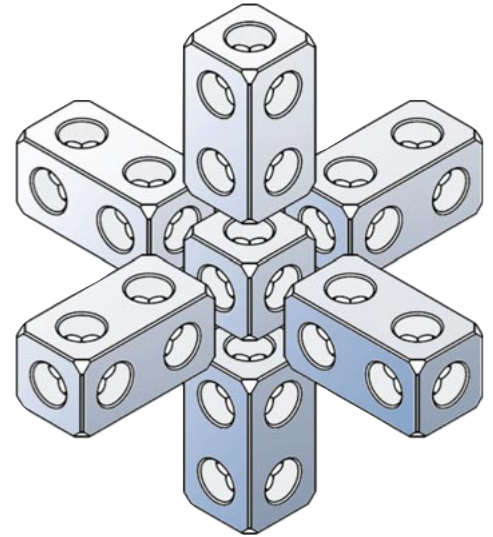
100% Availability

- over 90 percent of the components are in stock
- dispatch within 24 hours
- Witte's own, flexible production with high depth of manufacturing
- worldwide service network

Features and benefits

- highest precision due to fine machining on all sides
- all components are made of high-strength or medium-strength aluminum (depending on the Classic/Eco/ECO Plus product version).
- extremely light and highly resilient
- high stability with extremely low weight
- corrosion-resistant and maintenance-free
- wear-resistant thanks to anodized coating on all sides
- system sizes can be combined
- available in four system sizes
- low space requirement due to well-thought-out variety of components
- no weight and size limits of workpieces to be mounted
- completely reproducible
- long-term multiple use thanks to reusable components
- no special assembly tools required
- parts library for all CAD systems
- free user training at Witte

The ALUFIX principle: ingenious from the base up



Six sides, eight corners, twelve edges: the starting shape and basic element of the ALUFIX system geometry is the cube. All other element configurations are created by multiplying this basic shape - with through bores on all surfaces creating connection options on all sides. Each hole is suitable for both positioning and fixing.

The ALUFIX element geometry ensures that the grid is precisely maintained in all directions and across any number of joins.

Creation of the ALUFIX element geometry



- starting point



- through bore on all surfaces



- chamfers on all edges



- bevels on all corners



- sectional view

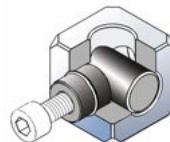
Connection technology



- sleeve for positioning



- crosspiece nut to screw in



- sleeve, nut and screw



- twin bolt for positioning



- lock to secure



- lock and twin bolt

The ALUFIX application and system diversity

ALUFIX elements are used for

- measuring fixtures
- holding fixtures
- checking gauges
- assembly and welding fixtures
- meisterbocks
- support structures for cubings and gauges

As well as

- in prototype building
- in model making
- in design development as support for clay models

Versions

ALUFIX Classic
Made of high-tensile aluminum for the highest demands on load, stability, durability and accuracy.

ALUFIX Eco
Made of medium-tensile aluminum as an inexpensive alternative for normal use and moderate part change intervals.

System sizes

- AF 16 for holding and optical measurement of small parts
- AF 25 for fixtures for small to medium size single parts
- AF 40 for medium-sized to large fixtures for assemblies, meisterbocks etc.
- AF 50 for the support of large and heavy parts

Element groups

- Basic elements
 - plates, structure plates, plate areas
 - bars, struts, angle brackets
- Adjustment elements
 - slides, rocker, jacks, rotary plates
- Contact elements
 - spheres, cones, prisms, contour blocks
- Clamping elements
 - hold-down springs, toggle clamps, clamps, keyless chucks, vises, magnets
- Connection elements
 - couplings, quick connectors, screw connectors

Alufix base plates

The proven base for multiple fixtures



The dimensions: precise variety

ALUFIX base plates are available in Witte system sizes 16, 25 and 40. Standard dimensions and base plates from the preferred range can be found on the following pages. Information on other dimensions is available on request.

Aluminium material: high quality light metal

Depending on the product version (Classic/ECO), ALUFIX base plates are made of high-strength or medium-strength aluminium. Always in selected high-quality materials.

ALUFIX base plates are mainly used for small and medium sized fixtures. The plates are rigid, precise and offer the greatest freedom in assembly, as the entire surface can be used - in contrast to frame type fixtures construction made of profiles, which are suitable for larger structures. ALUFIX base plates are available in two versions:

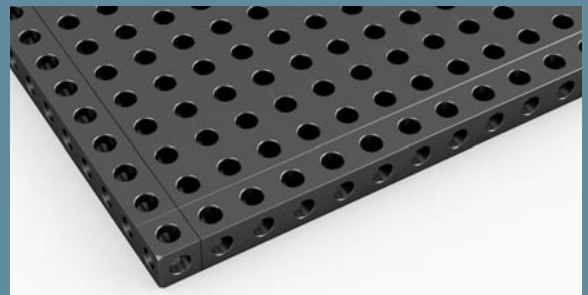
ALUFIX Classic base plates

with mounting holes on all 6 sides.

ALUFIX grid base plates

with mounting holes only on the surface, in Eco design.

ALUFIX Classic base plate:



ALUFIX grid base plates Eco:



ALUFIX Classic Base plates

AF 16 Classic,
Grid (A) 16, hole-diameter 8 mm

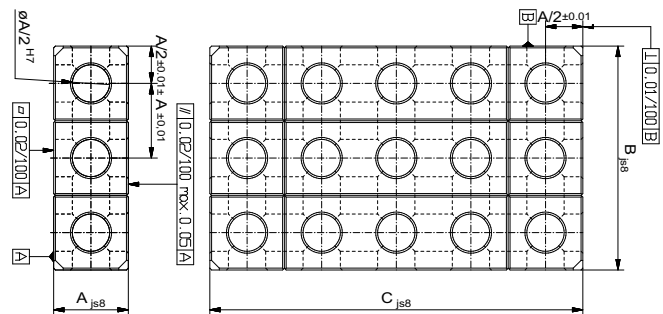
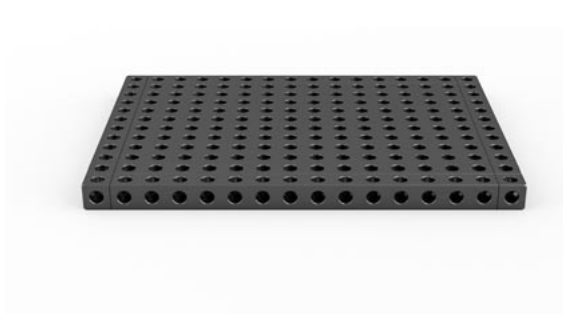
Nr.	A	B	C	h
22093-1	16	32	32	27
C 22094-1	16	32	48	40
C 22095-1	16	32	64	53
C 22096-1	16	32	80	100
C 22932-1	16	32	96	80
22931-1	16	32	112	93
C 20652-1	16	32	160	131
20653-1	16	32	320	300
22930-1	16	64	96	160
21566-1	16	64	112	187
22929-1	16	64	128	214
21567-1	16	80	112	234
22928-1	16	80	128	267
21568-1	16	80	144	305
22926-1	16	80	160	335
C 21569-1	16	96	96	242
21570-1	16	96	112	282
21571-1	16	96	128	325
21572-1	16	96	144	375
21573-1	16	96	160	240
22924-1	16	96	176	447
22907-1	16	96	192	482
21574-1	16	112	240	703
21575-1	16	128	128	431
21576-1	16	128	144	475
21577-1	16	128	256	862
21579-1	16	160	192	804
21578-1	16	160	320	1.400
21580-1	16	192	256	1.298
21581-1	16	192	320	1.611
20112-1	16	240	240	1.510
22097-1	16	320	320	1.350
28076-1	16	384	384	3.812

AF 25 Classic,
Grid (A) 25, hole-diameter 12,5 mm

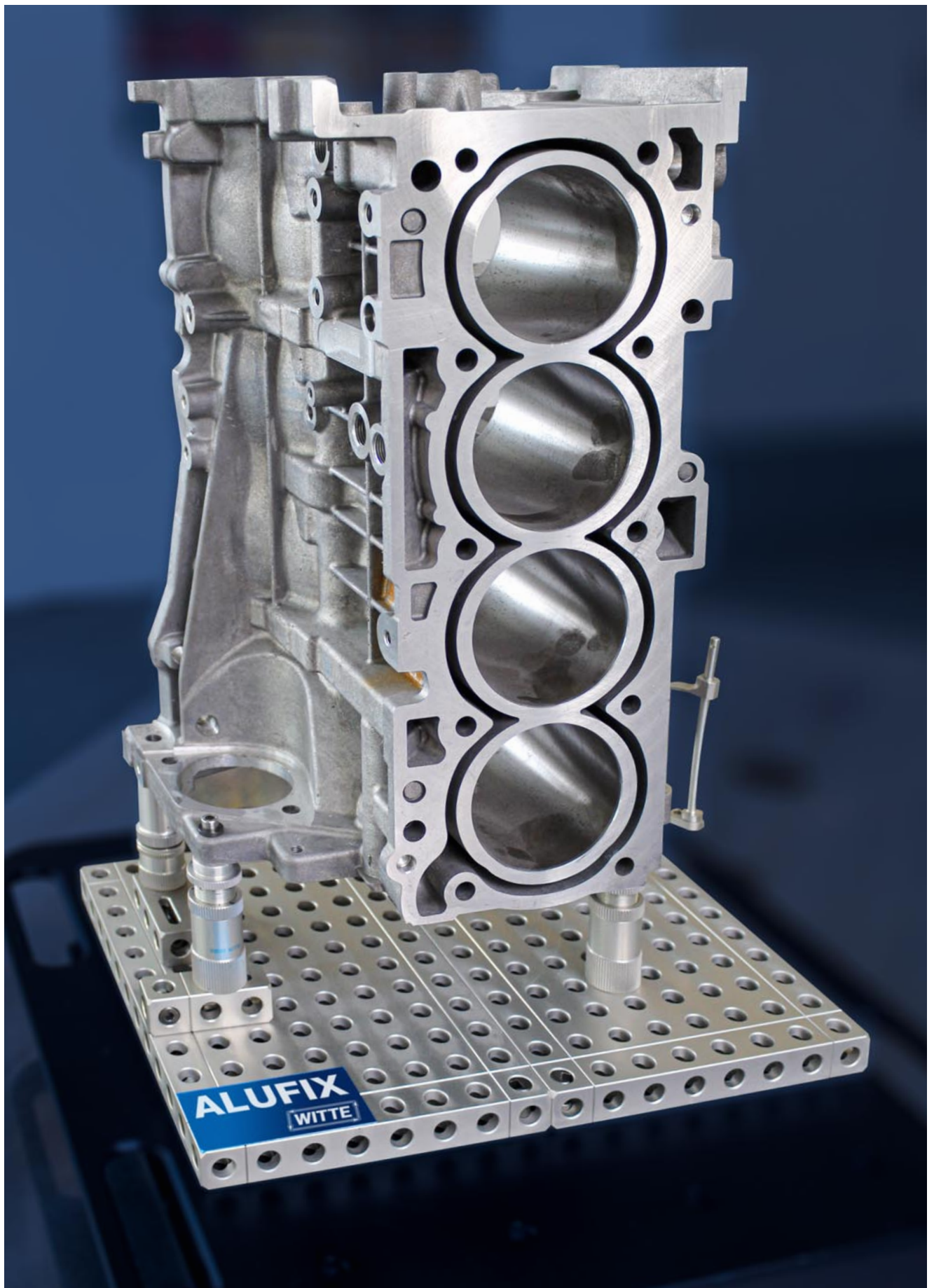
Nr.	A	B	C	h
C 21703-1	25	50	50	100
C 21704-1	25	50	75	150
C 21705-1	25	50	100	200
C 21706-1	25	50	125	250
C 22957-1	25	50	150	302
C 22959-1	25	50	200	403
C 22885-1	25	50	250	503
21707-1	25	50	500	1.009
21488-1	25	100	125	506
28032-1	25	100	150	600
21347-1	25	100	175	708
21496-1	25	125	125	630
21348-1	25	125	175	888
21349-1	25	125	225	1.135
21350-1	25	150	150	908
21351-1	25	150	175	1.048
21352-1	25	150	200	1.211
21353-1	25	150	225	1.348
21354-1	25	150	250	1.523
21355-1	25	175	375	2.606
21356-1	25	200	200	1.617
21357-1	25	200	225	1.826
28033-1	25	200	300	2.590
21358-1	25	200	400	3.246
C 21360-1	25	250	300	3.035
21359-1	25	250	500	5.061
C 21361-1	25	300	400	4.860
21362-1	25	300	500	6.068
22911-1	25	400	500	8.200
22915-1	25	400	600	9.900
22913-1	25	500	500	10.250
22919-1	25	600	600	14.900
22921-1	25	600	800	19.900
20280-1	25	600	1.000	24.700

AF 40 Classic,
Grid (A) 40, hole-diameter 20 mm

Nr.	A	B	C	h
C 21698-1	40	80	80	410
C 21699-1	40	80	120	619
21700-1	40	80	160	825
C 21701-1	40	80	200	1.031
22909-1	40	80	240	1.239
22910-1	40	80	280	1.440
22906-1	40	80	320	1.647
21702-1	40	80	800	4.125
C 22862-1	40	160	200	2.027
22861-1	40	160	240	2.486
21257-1	40	160	280	2.900
22860-1	40	200	200	2.568
22842-1	40	200	240	3.092
21258-1	40	200	280	3.600
22843-1	40	200	320	4.123
21259-1	40	200	360	4.638
22851-1	40	200	400	5.153
21260-1	40	240	240	3.670
21261-1	40	240	280	4.291
21262-1	40	240	320	4.904
21263-1	40	240	360	5.517
21264-1	40	240	400	6.133
22839-1	40	280	320	5.800
22900-1	40	280	360	6.500
21265-1	40	280	600	10.900
21266-1	40	320	320	6.539
21267-1	40	320	360	7.356
21268-1	40	320	640	13.078
21269-1	40	400	480	12.500



C·E ALUFIX preferred range
 Green: Item is available immediately.
 C: Classic version, E: Eco version, CE: Classic or Eco
 ■: color "black"



Application example: Fixture for a cylinder block on an ALUFIX Classic base plate

ALUFIX grid base plates Eco

ALUFIX 25 Eco

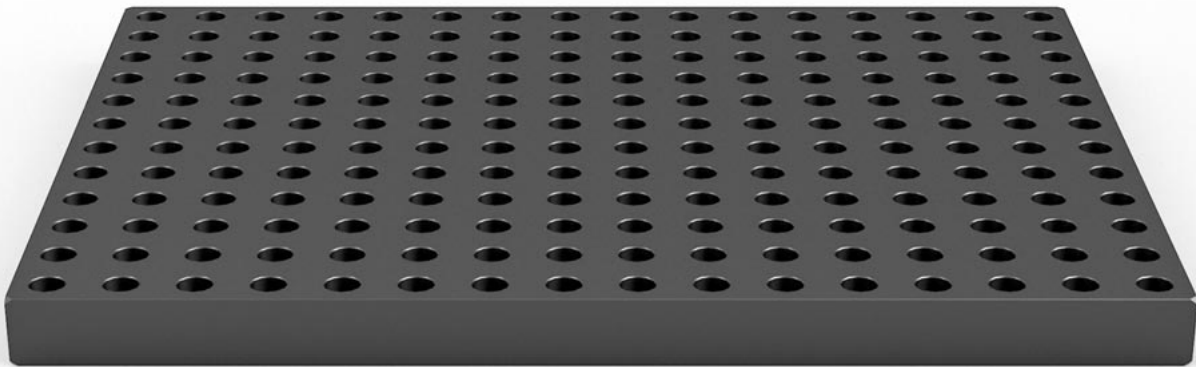
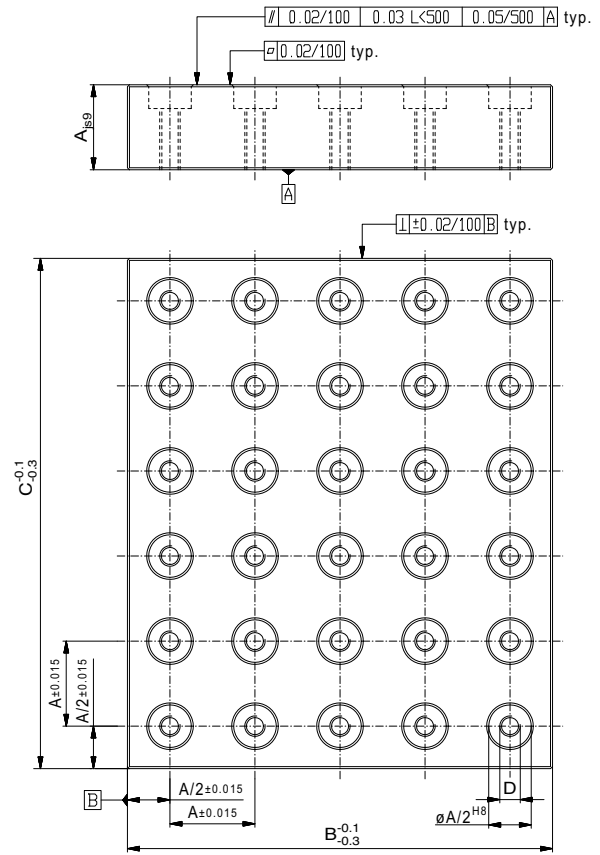
Grid (A) 25, hole-diameter 12,5 mm

Nr.	A	B	C	D	g
20387-E1	25	200	400	M6	5.400
20388-E1	25	250	500	M6	8.438
20403-E1	25	300	400	M6	8.100
20386-E1	25	300	600	M6	11.250
22923-E1	25	400	500	M6	13.500
22925-E1	25	400	600	M6	16.200
20439-E1	25	500	500	M6	16.875
20381-E1	25	500	1.000	M6	33.750
20382-E1	25	600	600	M6	24.300
20384-E1	25	600	800	M6	32.400

ALUFIX 40 Eco

Grid (A) 40, hole diameter 20 mm

Nr.	A	B	C	D	g
20650-E1	40	320	640	M10	22.118
20651-E1	40	400	800	M10	34.560
20710-E1	40	480	640	M10	33.177
20711-E1	40	480	960	M10	49.766
20713-E1	40	640	800	M10	55.296
20714-E1	40	640	960	M10	66.355
20715-E1	40	800	800	M10	69.120
20808-E1	40	800	1.600	M10	138.240
20809-E1	40	960	960	M10	99.533
20810-E1	40	960	1.280	M10	132.710



ALUFIX Precision Grid Base Plates

- Witte Alufix base plates provide a versatile and absolute precise base for repeatable measurements of clamped workpieces and fixtures.
- Individually configured to best fit your measurement volume, your measurement system or your fixture size.
- Designed to accommodate various and changing clamping configurations.
- Universally compatible to all Alufix modular system components as well as other non-Witte systems*

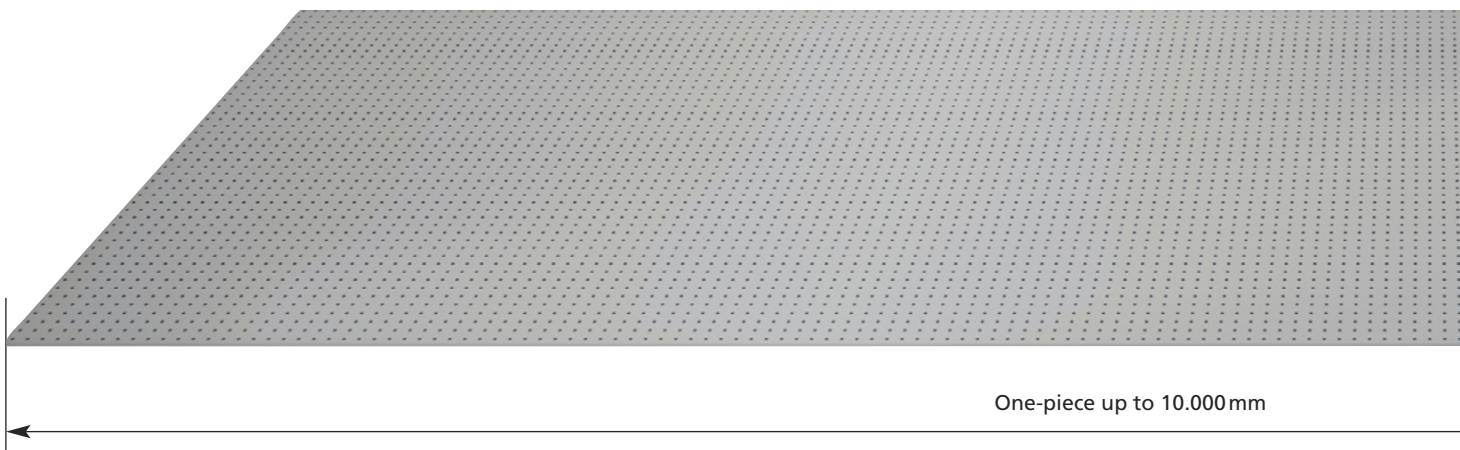
*considering a non-Witte system having the same or smaller thread size and precision bore diameter.

Universal design, individual solution

Witte precision grid base plates are designed to be used on CMM tables. With according size options, mounting through holes and designated eye bolt threads for safe lifting and handling. The plates provided are efficiently suitable for all common CMM tables and optical measurement systems as well as fixtures even as the standard pre-configured versions.

Individual user specific requests range in combination of different grid spacing, plate thickness, length and width, surface treatment and plate surface type.

Whether used as a large universal grid base plate or base of a small part holding fixture: Alufix grid base plates provide the needed precision and stability for your reliable and perfect measurement result. At all conditions, with the flexibility ensured. Proven over a thousand times...



Grid spacing

var. Per customer request

200

100

50

25

Grid holes



Precision hole and thread as a bushing



Precision hole as a bushing, thread in plate material



Precision hole and thread in plate material



Precision hole as exchangeable bushing

Version



One-piece



Multi-piece

Handling



Hoist rings / eye bolts
From 600 x 800 mm



Handle
Up to 600 x 800 mm



Fork lift pockets

Perfect pre-configured::

- Dimensions from 200x400 mm to 2.500x10.000 mm
- Plate thickness options 20 / 25 / 30 mm
- Grid spacing 50 / 100 mm
- High precision bores with thread
- Plate mounting through holes
- Surface treatment black or clear anodizing
- Delivery time approx. 6 weeks

Available special options:

- Feet, with or without frame
- Individual grid spacing and bushings
- Special surface treatment – hard anodized
- traceable test report

Uniquely versatile: size variable high-precision bores

The innovative solution of having size variable high-precision bores makes the Witte grid base plates the **most flexible and versatile bases of their kind.**

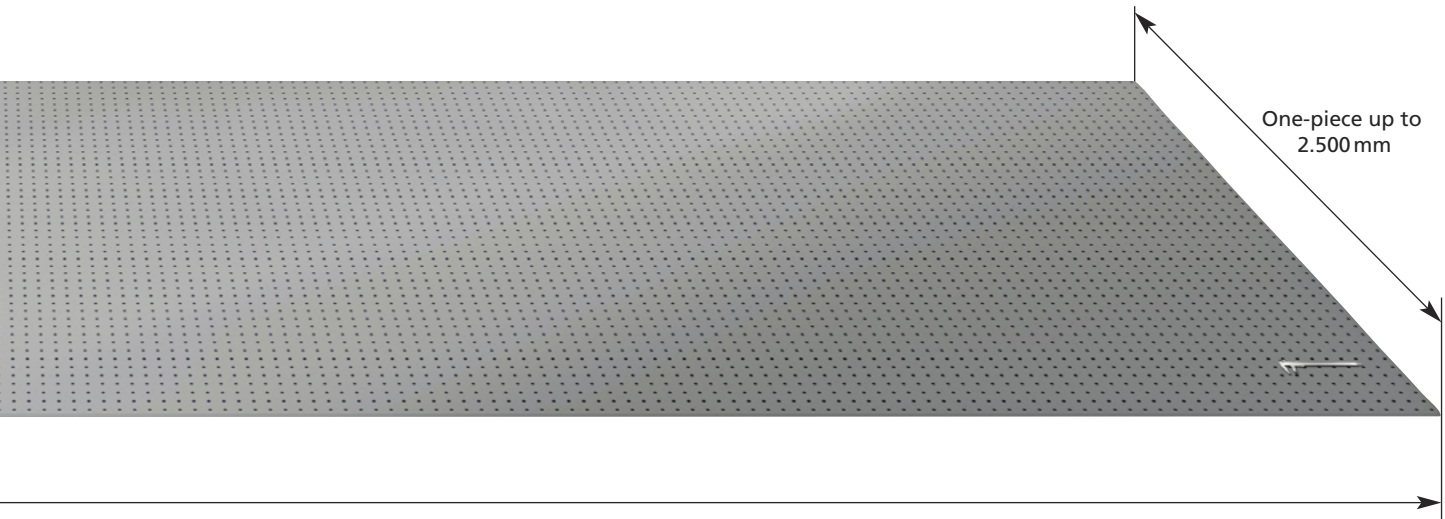


Previously not available: Size variable bushing inserts with precision bore and thread.

The precision bores in the top surface of the plate offer a unique optional benefit: **bol-table inner-diameter and thread reducing bushings.**

This enables the option to have a large and changing variety and also user-specific, but most importantly precisely repeatable, clamping configuration.

Irrelevant of the hole diameter and clamping system used.



Surface-treatment



Clear or black anodizing



Hard anodized (extra thick coating)

Plate surface



Even to floor



Resting on



On feet

Labels



Letter and number grid markings



Individual customer request

Documentation



Traceable test report



= Standard/pre-configured



= Option/Individual

ALUFIX Precision Grid Base Plates

ALUFIX 25 Precision Grid Base Plates

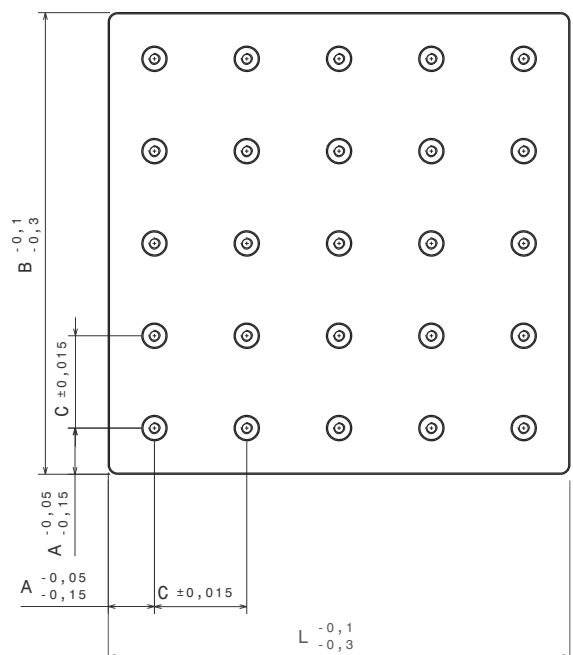
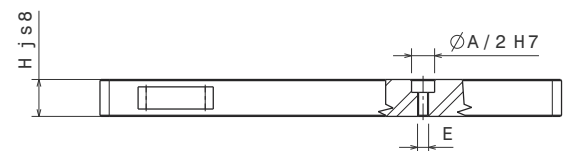
Grid (C): 50, Thread (E): M6, Witte-system (A): 25

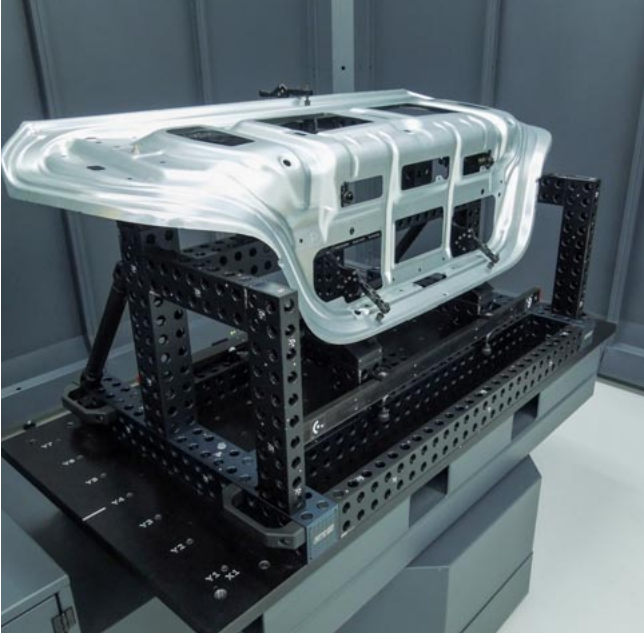
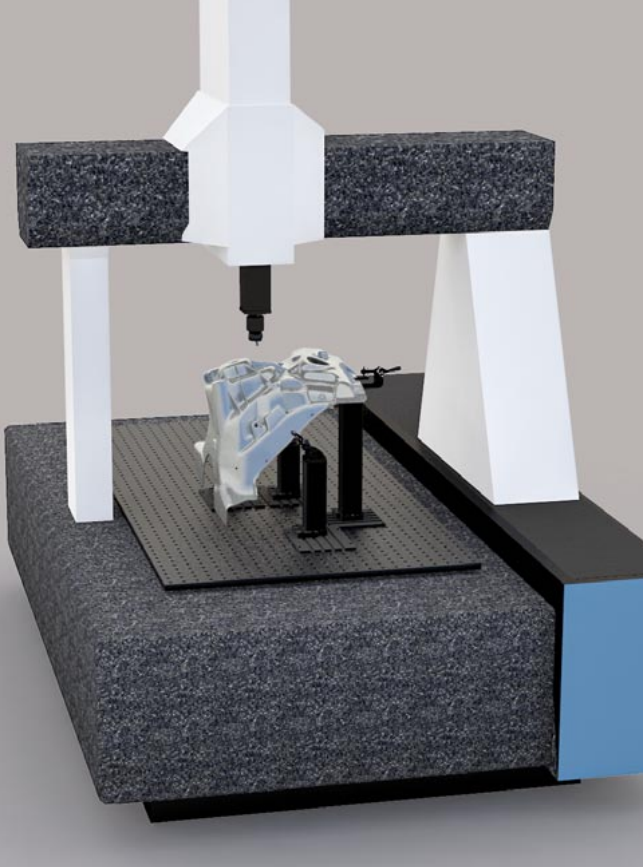
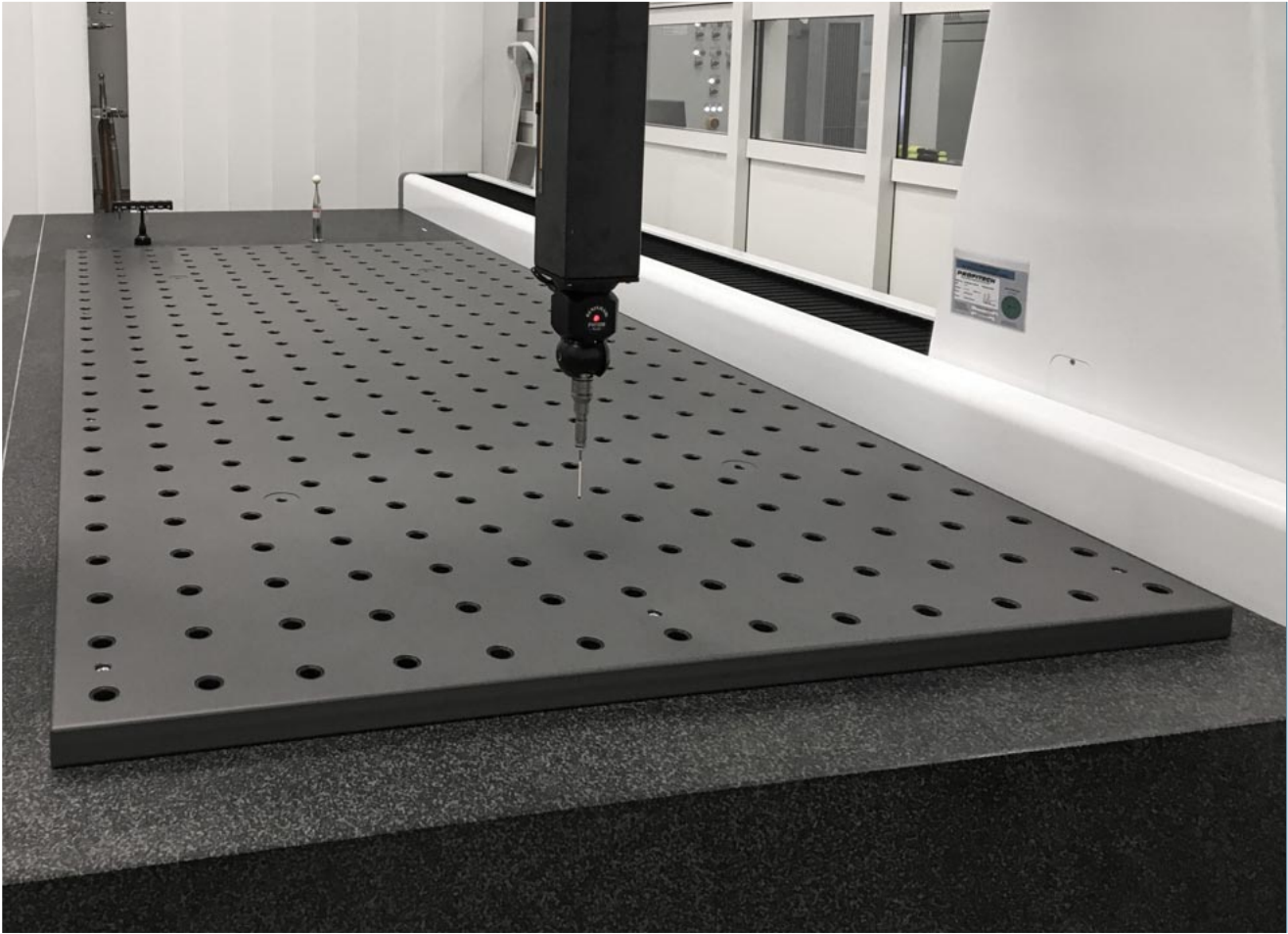
Nr.	B	L	H
124367-1	200	400	20
124500-1	250	250	20
124368-1	250	500	20
124501-1	300	400	20
124369-1	300	600	20
124502-1	400	500	20
124503-1	400	600	20
124504-1	500	500	20
124370-1	600	600	20
124505-1	600	800	20
124371-1	500	1.000	25
124506-1	700	700	25
124507-1	700	800	25
124508-1	700	900	25
124509-1	700	1.000	25
124510-1	900	1.200	25
124511-1	900	1.300	25
124512-1	900	1.600	25
124513-1	1.000	1.200	25
124514-1	1.000	1.600	25
124515-1	1.200	1.800	25
124516-1	1.200	2.400	25
124517-1	1.200	3.000	25
124518-1	1.200	4.200	25
124519-1	1.600	2.400	25
124520-1	1.600	3.000	25
124521-1	1.600	4.200	25
124522-1	2.000	2.400	25
124364-1	2.000	3.000	25
124523-1	2.000	4.200	25
124524-1	2.100	3.200	25
124525-1	2.100	4.400	25

ALUFIX 40 Precision Grid Base Plates

Grid (C): 100, Thread (E): M10, Witte-system (A): 40

Nr.	B	L	H
124377-1	500	1.000	30
124378-1	600	600	30
124379-1	600	800	30
124380-1	700	700	30
124381-1	700	800	30
124382-1	700	900	30
124383-1	700	1.000	30
124384-1	900	1.200	30
124385-1	900	1.300	30
124386-1	900	1.600	30
124387-1	1.000	1.200	30
124388-1	1.000	1.600	30
124389-1	1.200	1.800	30
124390-1	1.200	2.400	30
124391-1	1.200	3.000	30
124392-1	1.200	4.200	30
124393-1	1.600	2.400	30
124394-1	1.600	3.000	30
124395-1	1.600	4.200	30
124396-1	2.000	2.400	30
124397-1	2.000	3.000	30
124398-1	2.000	4.200	30
124399-1	2.100	3.200	30
124400-1	2.100	4.400	30





ALUFIX Bars

Link between base and contact point

ALUFIX Classic Bars:



ALUFIX ECO Plus Bars:



ALUFIX bars are available in two versions:

ALUFIX Classic Bars

ALUFIX Classic bars serve as a link between the base and contact point when creating small to medium-sized fixtures. They are milled from solid material, can be connected on all six sides using quick or screw connectors and can therefore be used very flexibly.

ALUFIX ECO Plus Bars

ALUFIX ECO-Plus bars are ideal for large constructions and as a basis for frame type fixtures. Their specially developed extruded profile combined with extremely careful milling ensures stability, accuracy and low weight.

The new ALUFIX ECO-Plus line ideally combines high precision with an advantageous price-performance ratio and thus perfectly reflects the requirements of today's applications.

The dimensions: precise variety

ALUFIX Classic bars are available in Witte system sizes 16, 25 and 40.

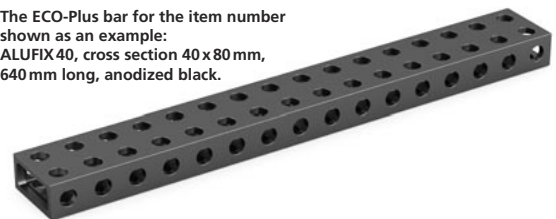
ALUFIX ECO Plus bars are available in Witte system sizes 25, 40 and 50.

Standard dimensions and bars from the preferred range can be found on the following pages. We will be happy to provide information on other dimensions on request.

Breakdown of the item numbers for ECO-Plus bars

System-size (A)	Profile cross section	Profile length in mm	Surface colour
25, 40 or 50.	A: 1A x 1A B: 2A x 2A C: 3A x 3A D: 1A x 2A E: 2A x 3A	4 digits with leading zeros.	-1: standard, anodized black.

The ECO-Plus bar for the item number shown as an example:
ALUFIX 40, cross section 40x80 mm,
640 mm long, anodized black.

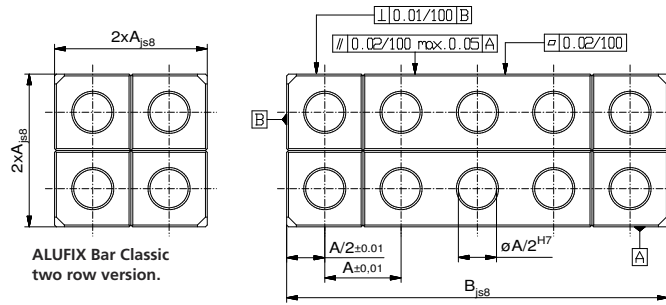
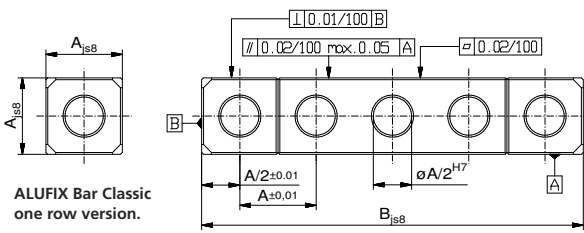


Aluminium material: high quality light metal

Depending on the product version (Classic/ECO), ALUFIX base plates are made of high-strength or medium-strength aluminium.

Always in selected high-quality materials.

ALUFIX Full Bars Classic



AF16 Classic

One row bars, 16x16 mm
Grid (A) 16, hole diameter 8 mm

Nr.	B	g
21582-1	16	7
C 21583-1	32	14
C 21584-1	48	21
C 21585-1	64	27
C 21586-1	80	33
C 20654-1	96	39
20801-1	128	53
C 20799-1	160	66
21587-1	320	140

AF16 Classic

Two row bars, 32x32 mm
Raster (A) 16, hole diameter 8 mm

Nr.	B	g
21588-1	32	53
21589-1	48	79
21590-1	64	108
21591-1	80	131
23892-1	96	160
20812-1	112	200
20848-1	128	230
20849-1	160	268
21592-1	320	537

AF25 Classic

One row bars, 25x25 mm
Grid (A) 25, hole diameter 12,5 mm

Nr.	B	g
C 21372-1	25	25
C 21373-1	50	51
C 21374-1	75	76
C 21375-1	100	102
C 21376-1	125	127
C 22961-1	150	152
C 22963-1	200	204
C 22882-1	250	255
C 21377-1	500	510

AF25 Classic

Two row bars, 50x50 mm
Grid (A) 25, hole diameter 12,5 mm

Nr.	B	g
C 21378-1	50	204
C 21379-1	75	308
C 21380-1	100	410
C 21381-1	125	510
C 22965-1	150	610
22967-1	200	819
22883-1	250	1.025
21382-1	500	2.020

AF40 Classic

One row bars, 40x40 mm
Grid (A) 40, hole diameter 20 mm

Nr.	B	g
21273-1	40	104
C 21274-1	80	208
21279-1	120	404
C 21275-1	160	419
21276-1	200	523
20813-1	240	628
20815-1	320	1.098

AF40 Classic

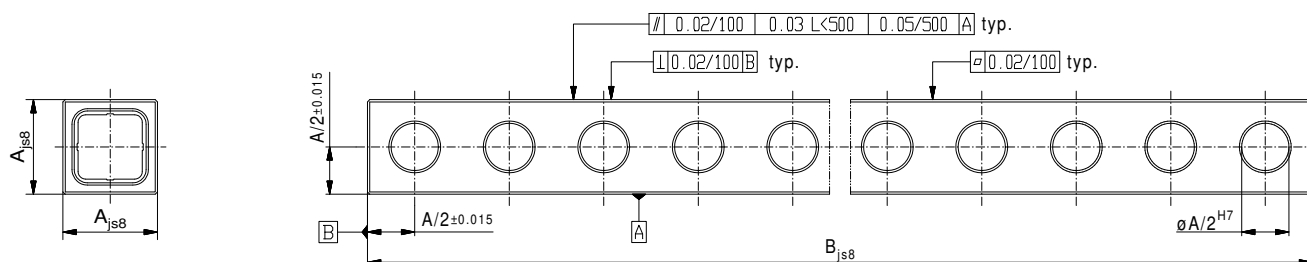
Two row bars, 80x80 mm
Grid (A) 40, hole diameter 20 mm

Nr.	B	g
C 21298-1	80	840
21299-1	120	1.257
21300-1	160	1.682
C 21301-1	200	2.080
20817-1	240	2.511
20818-1	280	2.900
20434-1	320	3.357

C·E ALUFIX preferred range
Green: Item is available immediately.
C: Classic version, E: Eco version, CE: Classic or Eco
■: color "black"

ALUFIX Bars ECO Plus

one row



AF25 ECO Plus

Bars one row, 25x25 mm
Grid (A) 25, hole diameter 12,5 mm

	Nr.	B	Ĝ
E	25A0050-1	50	34
E	25A0100-1	100	69
E	25A0150-1	150	103
	25A0200-1	200	138
	25A0250-1	250	172
	25A0300-1	300	206
	25A0350-1	350	241
	25A0400-1	400	275
	25A0450-1	450	310
	25A0500-1	500	344
	25A0550-1	550	378
	25A0600-1	600	413
	25A0650-1	650	447
	25A0700-1	700	482
	25A0750-1	750	516
	25A0800-1	800	550
	25A0850-1	850	585
	25A0900-1	900	619
	25A0950-1	950	654
	25A1000-1	1.000	688
	25A1050-1	1.050	722
	25A1100-1	1.100	757
	25A1150-1	1.150	791
	25A1200-1	1.200	826
	25A1250-1	1.250	860
	25A1300-1	1.300	894
	25A1350-1	1.350	929
	25A1400-1	1.400	963
	25A1450-1	1.450	998
	25A1500-1	1.500	1.032
	25A1600-1	1.600	1.101
	25A1700-1	1.700	1.170
	25A1800-1	1.800	1.238
	25A1900-1	1.900	1.307
	25A2000-1	2.000	1.376

AF40 ECO Plus

Bars one row, 40x40 mm
Grid (A) 40, hole diameter 20 mm

	Nr.	B	Ĝ
	40A0120-1	120	221
	40A0160-1	160	294
	40A0200-1	200	368
	40A0240-1	240	441
	40A0280-1	280	515
	40A0320-1	320	588
	40A0360-1	360	662
	40A0400-1	400	735
	40A0440-1	440	809
	40A0480-1	480	882
	40A0520-1	520	956
	40A0560-1	560	1.029
	40A0600-1	600	1.103
	40A0640-1	640	1.176
	40A0680-1	680	1.250
	40A0720-1	720	1.323
	40A0760-1	760	1.397
	40A0800-1	800	1.470
	40A0840-1	840	1.544
	40A0880-1	880	1.617
	40A0920-1	920	1.691
	40A0960-1	960	1.765
	40A1000-1	1.000	1.838
	40A1040-1	1.040	1.911
	40A1080-1	1.080	1.985
	40A1160-1	1.160	2.132
	40A1200-1	1.200	2.206
	40A1400-1	1.400	2.573
	40A1600-1	1.600	2.941
	40A1800-1	1.800	3.308
	40A2000-1	2.000	3.676
	40A2400-1	2.400	4.411
	40A2800-1	2.800	5.146

AF50 ECO-Plus

Bars one row, 50x50 mm
Grid (A) 50, hole diameter 25 mm

	Nr.	B	Ĝ
	50A0050-1	50	165
	50A0100-1	100	330
	50A0150-1	150	495
	50A0200-1	200	660
	50A0250-1	250	825
	50A0300-1	300	990
	50A0350-1	350	1.155
	50A0400-1	400	1.320
	50A0450-1	450	1.485
	50A0500-1	500	1.650
	50A0600-1	600	1.980
	50A0700-1	700	2.310
	50A0800-1	800	2.640
	50A0900-1	900	2.970
	50A1000-1	1.000	3.300
	50A1100-1	1.100	3.630
	50A1200-1	1.200	3.960
	50A1300-1	1.300	4.300
	50A1400-1	1.400	4.620
	50A1500-1	1.500	4.950
	50A1600-1	1.600	5.280
	50A1700-1	1.700	5.610
	50A1800-1	1.800	5.940
	50A1900-1	1.900	6.270
	50A2000-1	2.000	6.600
	50A2500-1	2.500	8.250
	50A3000-1	3.000	9.900



ALUFIX preferred range

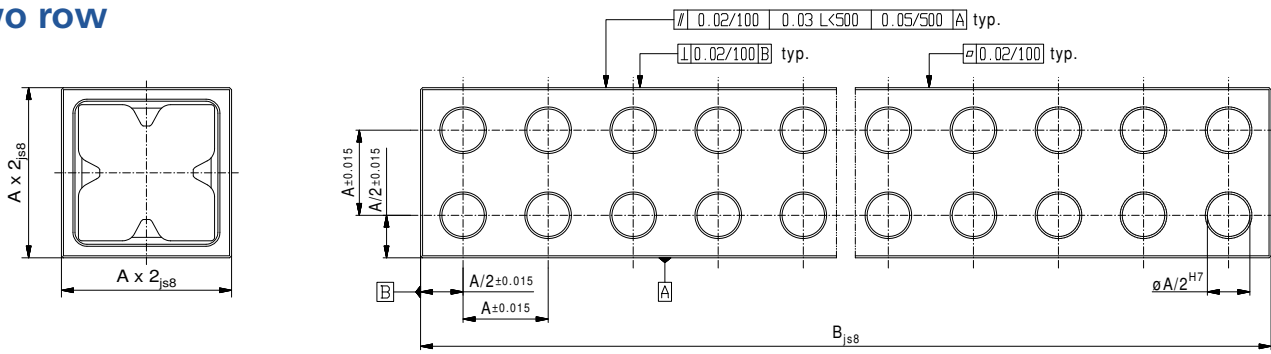
Green: Item is available immediately.

C: Classic version, E: Eco version, CE: Classic or Eco

■: color "black"

ALUFIX Bars ECO Plus

two row



AF25 ECO Plus

Bars two row, 50x50mm
Grid (A) 25, hole diameter 12,5mm

Nr.	B	g
25B0050-1	50	108
25B0100-1	100	215
25B0150-1	150	323
25B0200-1	200	430
25B0250-1	250	538
25B0300-1	300	645
25B0350-1	350	753
25B0400-1	400	860
25B0450-1	450	968
25B0500-1	500	1.075
25B0550-1	550	1.183
25B0600-1	600	1.290
25B0650-1	650	1.398
25B0700-1	700	1.505
25B0750-1	750	1.613
25B0800-1	800	1.720
25B0850-1	850	1.828
25B0900-1	900	1.935
25B0950-1	950	2.043
25B1000-1	1.000	2.150
25B1050-1	1.050	2.258
25B1100-1	1.100	2.365
25B1150-1	1.150	2.473
25B1200-1	1.200	2.580
25B1250-1	1.250	2.688
25B1300-1	1.300	2.795
25B1350-1	1.350	2.903
25B1400-1	1.400	3.010
25B1450-1	1.450	3.118
25B1500-1	1.500	3.225
25B1600-1	1.600	3.440
25B1700-1	1.700	3.655
25B1800-1	1.800	3.870
25B1900-1	1.900	4.085
25B2000-1	2.000	4.300

AF40 ECO Plus

Bars two row, 80x80mm
Grid (A) 40, hole diameter 20mm

Nr.	B	g
40B0080-1	80	398
40B0120-1	120	622
40B0160-1	160	844
40B0200-1	200	1.068
40B0240-1	240	1.300
40B0280-1	280	1.500
40B0320-1	320	1.740
40B0360-1	360	1.964
40B0400-1	400	2.186
40B0440-1	440	2.408
40B0480-1	480	2.580
40B0520-1	520	2.800
40B0560-1	560	3.086
40B0600-1	600	3.240
40B0640-1	640	3.600
40B0680-1	680	3.740
40B0720-1	720	3.980
40B0760-1	760	4.200
40B0800-1	800	4.420
40B0840-1	840	4.700
40B0880-1	880	4.860
40B0920-1	920	5.200
40B0960-1	960	5.280
40B1000-1	1.000	5.500
40B1040-1	1.040	5.700
40B1080-1	1.080	6.000
40B1120-1	1.120	6.200
40B1200-1	1.200	6.600
40B1240-1	1.240	7.000
40B1280-1	1.280	7.100
40B1320-1	1.320	7.400
40B1400-1	1.400	7.700
40B1520-1	1.520	8.360
40B1600-1	1.600	8.800
40B1680-1	1.680	9.240
40B1760-1	1.760	9.680
40B1840-1	1.840	10.120
40B1920-1	1.920	10.680
40B2000-1	2.000	10.800

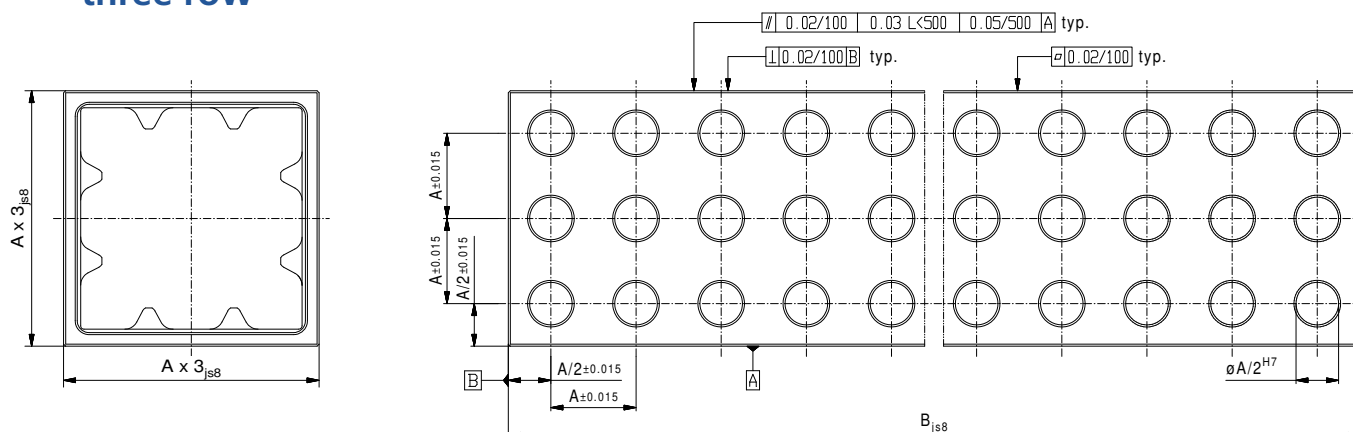
AF50 ECO-Plus

Bars two row, 100x100mm
Grid (A) 50, hole diameter 25mm

Nr.	B	g
50B0100-1	100	839
50B0150-1	150	1.258
50B0200-1	200	1.678
50B0250-1	250	2.097
50B0300-1	300	2.516
50B0350-1	350	2.936
50B0400-1	400	3.355
50B0450-1	450	3.775
50B0500-1	500	4.200
50B0600-1	600	5.033
50B0700-1	700	5.872
50B0800-1	800	6.710
50B0900-1	900	7.549
50B1000-1	1000	8.388
50B1100-1	1100	9.420
50B1200-1	1200	10.066
50B1300-1	1300	10.904
50B1400-1	1.400	11.743
50B1500-1	1.500	12.582
50B1600-1	1.600	13.421
50B1700-1	1.700	14.260
50B1800-1	1.800	15.098
50B1900-1	1.900	15.937
50B2000-1	2.000	16.776

ALUFIX Bar ECO Plus

three row



AF40 ECO Plus

Bars three row, 120x120 mm
Grid (A) 40, hole diameter 20 mm

Nr.	B	g
40C0120-1	120	1050
40C0160-1	160	1404
40C0200-1	200	1755
40C0240-1	240	2106
40C0280-1	280	2457
40C0320-1	320	2808
40C0360-1	360	3159
40C0400-1	400	3.510
40C0440-1	440	3.861
40C0480-1	480	4.212
40C0520-1	520	4.563
40C0560-1	560	4.914
40C0600-1	600	5.265
40C0640-1	640	5.616
40C0680-1	680	5.967
40C0720-1	720	6.318
40C0760-1	760	6.669
40C0800-1	800	7.400
40C0840-1	840	7.560
40C0880-1	880	7.722
40C0920-1	920	8.220
40C0960-1	960	8.424
40C1000-1	1.000	9.000
40C1040-1	1.040	9.236
40C1080-1	1.080	9.477
40C1160-1	1.160	10.179
40C1200-1	1.200	10.530
40C1280-1	1.280	11.232
40C1360-1	1.360	11.934
40C1400-1	1.400	12.285
40C1480-1	1.480	12.987
40C1560-1	1.560	13.689
40C1600-1	1.600	14.040
40C1680-1	1.680	14.742
40C1760-1	1760	15.800
40C1800-1	1800	16.160
40C1880-1	1880	16.497
40C2000-1	2000	17.550

AF50 ECO-Plus

Bars three row, 150x150 mm
Grid (A) 50, hole diameter 25 mm

Nr.	B	g
50C0100-1	100	1.389
50C0150-1	150	2.083
50C0200-1	200	2.777
50C0250-1	250	3.472
50C0300-1	300	4.166
50C0350-1	350	4.860
50C0400-1	400	5.554
50C0450-1	450	6.249
50C0500-1	500	7.080
50C0600-1	600	8.332
50C0700-1	700	9.720
50C0800-1	800	11.109
50C0900-1	900	12.497
50C1000-1	1.000	13.886
50C1100-1	1.100	15.275
50C1200-1	1.200	16.663
50C1300-1	1.300	18.052
50C1400-1	1.400	19.440
50C1500-1	1.500	20.829
50C1600-1	1.600	22.218
50C1700-1	1.700	23.606
50C1800-1	1.800	24.995
50C1900-1	1.900	26.383
50C2000-1	2.000	27.772



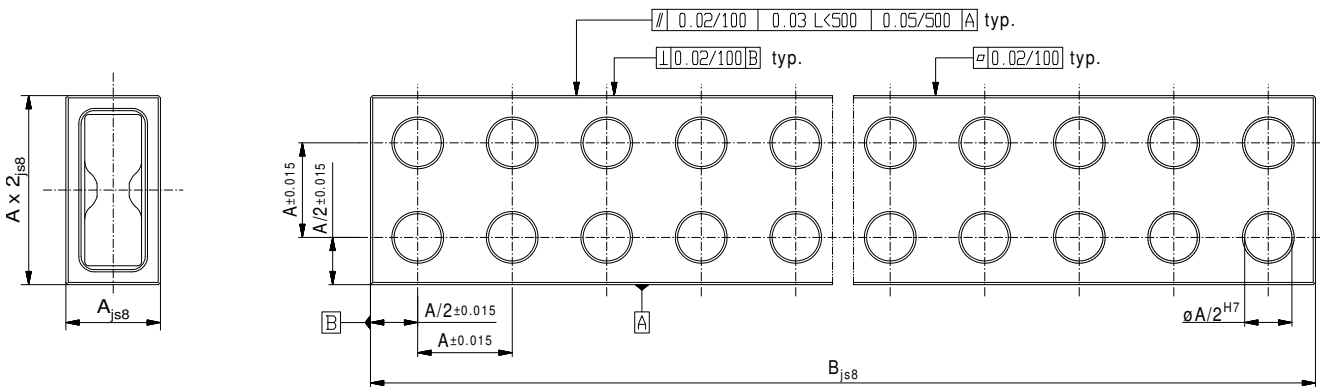
ALUFIX preferred range

Green: Item is available immediately.

C: Classic version, E: Eco version, CE: Classic or Eco

■: color "black"

ALUFIX Bar ECO Plus rectangular 1 x 2 rows



AF25 ECO Plus

Bars rectangular 25x50 mm
Grid (A) 25, hole diameter 12,5 mm

Nr.	B	g
25D0050-1	50	68
25D0100-1	100	136
25D0150-1	150	204
25D0200-1	200	272
25D0250-1	250	340
25D0300-1	300	408
25D0350-1	350	476
25D0400-1	400	544
25D0450-1	450	612
25D0500-1	500	680
25D0550-1	550	748
25D0600-1	600	816
25D0650-1	650	884
25D0700-1	700	952
25D0750-1	750	1.020
25D0800-1	800	1.088
25D0850-1	850	1.156
25D0900-1	900	1.224
25D0950-1	950	1.292
25D1000-1	1.000	1.360
25D1050-1	1.050	1.428
25D1100-1	1.100	1.496
25D1150-1	1.150	1.564
25D1200-1	1.200	1.632
25D1250-1	1.250	1.700
25D1300-1	1.300	1.768
25D1350-1	1.350	1.836
25D1400-1	1.400	1.904
25D1450-1	1.450	1.972
25D1500-1	1.500	2.040
25D1550-1	1.550	2.108
25D1600-1	1.600	2.176
25D1650-1	1.650	2.244
25D1700-1	1.700	2.312
25D1750-1	1.750	2.380
25D1800-1	1.800	2.448
25D1850-1	1.850	2.516
25D1900-1	1.900	2.584
25D2000-1	2.000	2.720

AF40 ECO Plus

Bars rectangular 40x80 mm
Grid (A) 40, hole diameter 20 mm

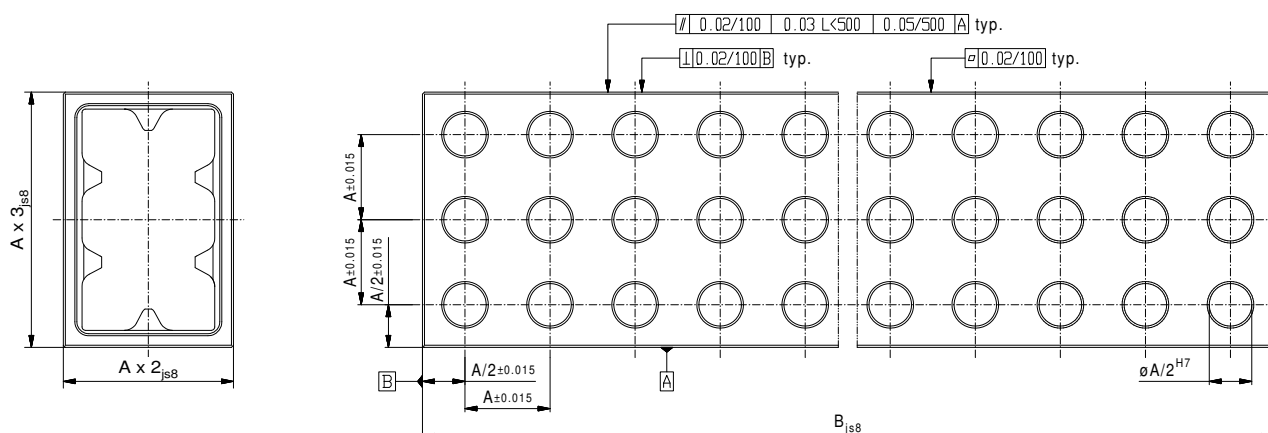
Nr.	B	g
40D0080-1	80	274
40D0120-1	120	412
40D0160-1	160	553
40D0200-1	200	700
40D0240-1	240	900
40D0280-1	280	1.050
40D0320-1	320	1.200
40D0360-1	360	1.350
40D0400-1	400	1.500
40D0440-1	440	1.650
40D0480-1	480	1.800
40D0520-1	520	1.920
40D0560-1	560	2.100
40D0600-1	600	2.250
40D0640-1	640	2.400
40D0680-1	680	2.550
40D0720-1	720	2.700
40D0760-1	760	2.850
40D0800-1	800	3.000
40D0840-1	840	3.150
40D0880-1	880	3.300
40D0920-1	920	3.450
40D0960-1	960	3.600
40D1000-1	1.000	3.750
40D1040-1	1.040	3.900
40D1080-1	1.080	4.050
40D1120-1	1.120	4.200
40D1160-1	1.160	4.350
40D1200-1	1.200	4.500
40D1240-1	1.240	4.650
40D1280-1	1.280	4.800
40D1320-1	1.320	4.950
40D1360-1	1.360	5.100
40D1400-1	1.400	5.250
40D1440-1	1.440	5.400
40D1480-1	1.480	5.550
40D1520-1	1.520	5.700
40D1560-1	1.560	5.850
40D1600-1	1.600	6.000

AF40 ECO Plus

Bars rectangular 40x80 mm
Grid (A) 40, hole diameter 20 mm

Nr.	B	g
40D1640-1	1.640	6.150
40D1680-1	1.680	6.300
40D1720-1	1.720	6.450
40D1760-1	1.760	6.600
40D1800-1	1.800	6.750
40D1840-1	1.840	6.900
40D1880-1	1.880	7.050
40D1920-1	1.920	7.200
40D1960-1	1.960	7.350
40D2000-1	2.000	7.500
40D2040-1	2.040	7.650
40D2080-1	2.080	7.800
40D2120-1	2.120	7.950
40D2160-1	2.160	8.100
40D2200-1	2.200	8.250
40D2240-1	2.240	8.380
40D2280-1	2.280	8.600
40D2320-1	2.320	8.700
40D2360-1	2.360	8.850
40D2400-1	2.400	9.000
40D2440-1	2.440	9.150
40D2480-1	2.480	9.300
40D2520-1	2.520	9.450
40D2560-1	2.560	9.600
40D2600-1	2.600	9.750
40D2640-1	2.640	9.900
40D2680-1	2.680	10.050
40D2720-1	2.720	10.200
40D2760-1	2.760	10.350
40D2800-1	2.800	10.500
40D2840-1	2.840	10.650
40D2880-1	2.880	10.800
40D2920-1	2.920	10.950
40D2960-1	2.960	11.100
40D3000-1	3.000	11.250

ALUFIX Bar ECO Plus rectangular 2x3 rows



AF40 ECO Plus Bars rectangular 80x120 mm, Grid (A) 40, hole diameter 20 mm

Nr.	B	\bar{G}
40E0120-1	120	820
40E0160-1	160	1.100
40E0200-1	200	1.380
40E0240-1	240	1.670
40E0280-1	280	1.950
40E0320-1	320	2.250
40E0360-1	360	2.550
40E0400-1	400	2.850
40E0600-1	600	4.300
40E0800-1	800	5.755
40E1000-1	1.000	7.200
40E1200-1	1.200	8.646
40E1600-1	1.600	11.570
40E2000-1	2.000	14.460
40E2400-1	2.400	17.400
40E3000-1	3.000	2.1750
40E3600-1	3.600	26.000
40E4000-1	4.000	29.000



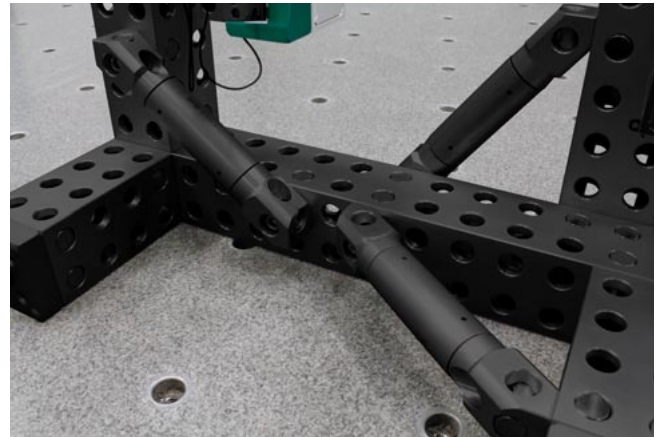
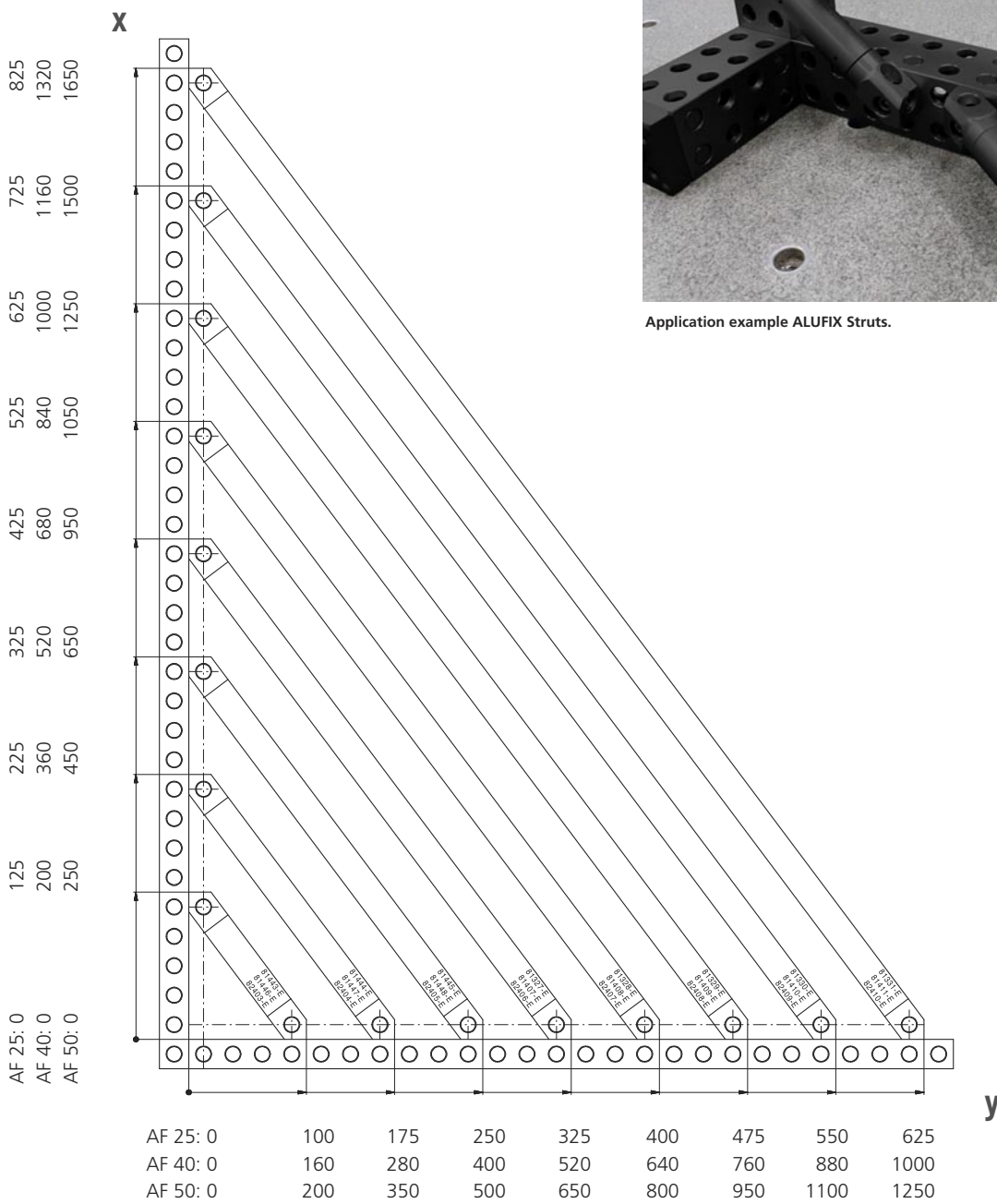


Application example: Fixture for a truck cabin with Alufix Light Classic bars

ALUFIX Struts

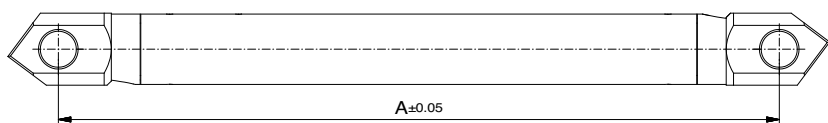
For increased stability through triangular bracing

x-y-coordinates for struts AF25 / AF40 / AF50



Application example ALUFIX Struts.

Struts
for Classic and Eco



AF25 Classic
Struts, 25x25
Grid 25, hole diameter 12,5 mm

AF40 Classic
Struts, 40x40
Grid 40, hole diameter 20 mm

AF50 Classic
Struts, 50x50
Grid 50, hole diameter 25 mm

Nr.	A	AF	⌀
81443-1	125	25	168
81444-1	250	25	285
81445-1	375	25	402
81327-1	500	25	518
81328-1	625	25	641
81329-1	750	25	752
81330-1	875	25	872
81331-1	1.000	25	979

Nr.	A	AF	⌀
81446-1	200	40	700
81447-1	400	40	1.226
81448-1	600	40	1.400
81407-1	800	40	2.258
81408-1	1.000	40	2.240
81409-1	1.200	40	3.161
81410-1	1.400	40	3.470
81411-1	1.600	40	4.170

Nr.	A	AF	⌀
82403-1	250	50	1.424
82404-1	500	50	2.534
82405-1	750	50	3.637
82406-1	1.000	50	5.696
82407-1	1.250	50	7.120
82408-1	1.500	50	8.544
82409-1	1.750	50	9.968
82410-1	2.000	50	11.392

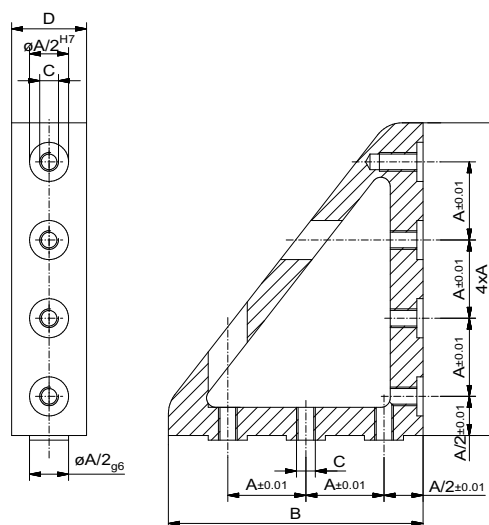
Profile angle brackets
for Classic and Eco

	Nr.	A (AF)	B	C	D	⌀
E	120511-E1	25	81,5	M6	24	194
E	120514-E1	25	121,5	M6	24	319
E	120512-E1	40	81,5	M10	39	315
E	120515-E1	40	121,5	M10	39	518
	120513-E1	50	81,5	M12	49	396
	120516-E1	50	122,5	M12	49	651

Profile angle brackets are also available in special lengths of up to 3.000mm.

For profile angle brackets, suitable sleeves (without collar, short) are shown on page 100.

Profile angle brackets are also available on request in special widths



C·E ALUFIX preferred range
Green: Item is available immediately.
C: Classic version, E: Eco version, CE: Classic or Eco
■: color "black"

ALUFIX

Quick Change Couplings

For easy exchange of contact points

Quick change couplings comprise of a top and bottom section, which are aligned accurately together via ball seats. Locking is done with a quick lock via a lever.

The total height is exactly in Alufix grid.

Hinges connect top and bottom sections if required and provide a foldback function. The modular design enables combination possibilities as shown on the right.

Material: High quality aluminum

ALUFIX quick-change couplings are made of high-strength aluminum.



Quick change coupling for folding back, hinge is mounted at the rear.



Quick change coupling to fold sideways to the left, hinge is mounted on the left.



Quick change coupling to fold sideways to the right, hinge is mounted on the right.



Quick change coupling with two folding options. One hinge on the left and one at the rear.









Quick change coupling with three folding options. One hinge on the left, one on the right and one at the rear.

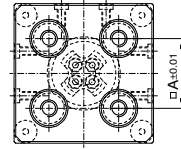
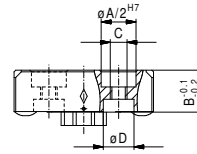
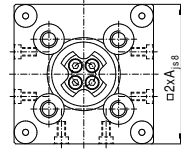


Quick change coupling, Top and bottom sections separately, standard version.





Quick change coupling top section with hinge bores, complete

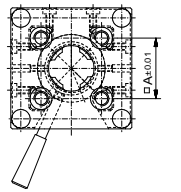
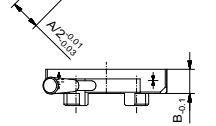
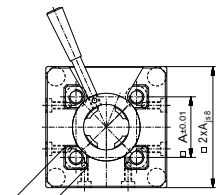
	Nr.	A (AF)	B	C	D	
	282471-1	25	15	M6	11	101
	282472-1	40	24	M10	18	415
	282473-1	50	30	M12	20	810
	283320-1	40/25	24	M6	11	415
	283330-1	50/25	30	M6	11	810

Quick change coupling for keyless chuck page 91.







Quick change coupling bottom section with hinge bores, complete

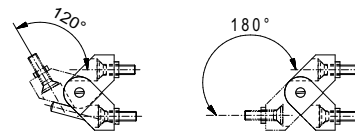
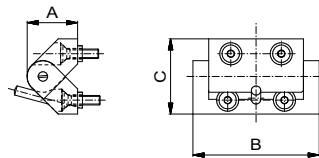
	Nr.	A (AF)	B	
	282474-1	25	10	75
	282475-1	40	16	305
	282476-1	50	20	550




Hinge for quick change coupling, complete

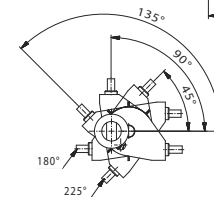
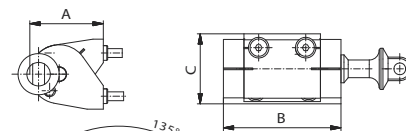
	Nr.	AF	A	B	C	
	282386-1	25	16	40	23,8	18
	282387-1	40	25,6	64	38	91
	282388-1	50	32	80	47,6	140


Cylindrical pin limits opening angle to 120°



Hinge for quick change coupling, complete with pin

	Nr.	AF	B	C	
	286856-1	25	25	40	8
	286857-1	40	36,6	64	174
	286858-1	50	43	80	160



C·E ALUFIX preferred range
 Green: Item is available immediately.
 C: Classic version, E: Eco version, CE: Classic or Eco
: color "black"

ALUFIX

Adjustment elements

Accurate offset positioning in every axis where required



Application example:

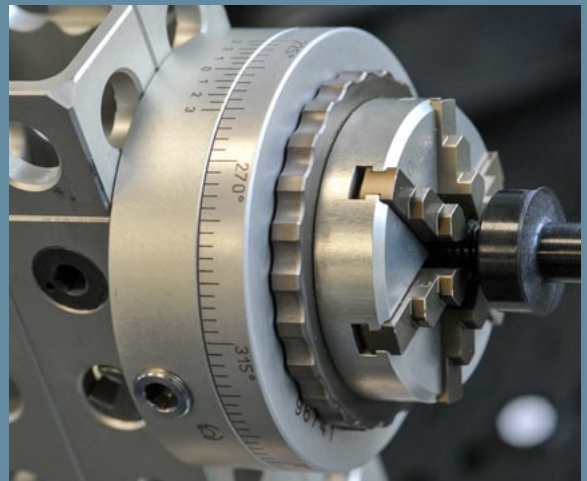
The angle of the center point is guaranteed by a specially machined contour block. The position in x, y and z is defined by the shimblock, the upper part of which is adjusted with shims in steps of 0.05 mm. Finally, the Shimblock is locked in order to achieve a permanent and stable position.

Adjusting elements enable contact points to be accurately aligned to a workpiece independent of the system grid.

Individual contact points or entire assemblies can be positioned exactly to the desired coordinates.

Rotating, swivelling, tilting, linear displacement: There are special adjustment elements for every task, which can be combined with one another as ALUFIX system components..

Application example with rotary plate



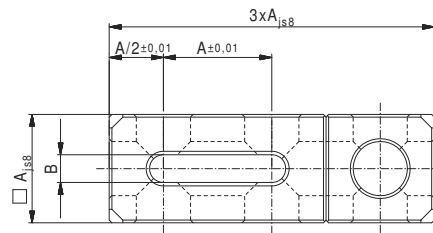
The rotary plate enables defined rotation of the elements attached to it - accurate and reproducible thanks to locking screws and scales with verniers.

The adjustment takes place, depending on the selected model, in steps or infinitely.

In the picture above, the workpiece is mounted with a 6-jaw keyless chuck.

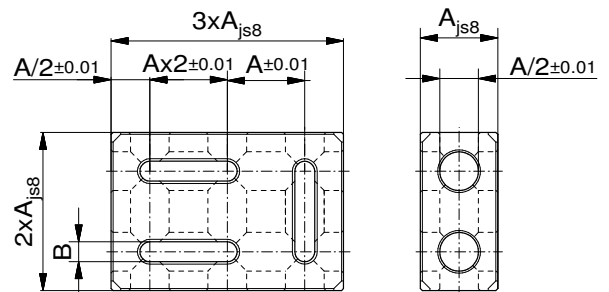
Bar 1D for quick connectors for offset positioning in 1 axis

Nr.	A (AF)	B	$\frac{L}{mm}$
20114-1	16	4,1	20
C 23233-1	25	6,8	80
C 23279-1	40	10,8	320
28040-1	50	13,7	625



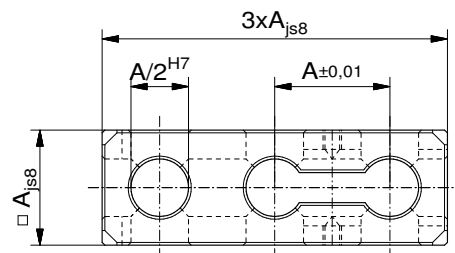
Base plate 2D for quick connectors for offset positioning in 2 axis

Nr.	A (AF)	B	$\frac{L}{mm}$
20397-1	16	4,1	40
C 23232-1	25	6,8	160
C 23280-1	40	10,8	1.090
28342-1	50	13,7	1.266



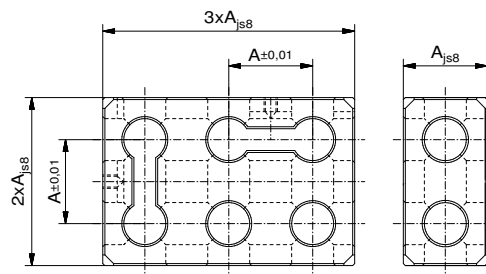
Bar 1D for screw connectors for offset positioning in 1 axis

Nr.	A (AF)	$\frac{L}{mm}$
81021-1	25	81
81022-1	40	347
82764-1	50	800



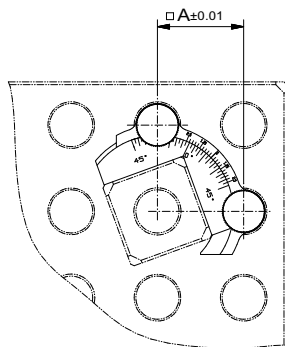
C·E ALUFIX preferred range
 Green: Item is available immediately.
 C: Classic version, E: Eco version, CE: Classic or Eco
 ■: color "black"

Connecting elements for adjustable bars and base plates are on page 103 / 105.
 Other versions on request.



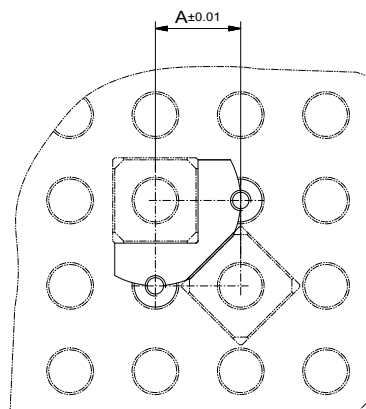
Base plate 2D for screw connectors
for offset positioning in 2 axis

Nr.	A (AF)	
81023-1	25	162
81024-1	40	707
82765-1	50	1.400



Heel block 45°-90°
adjustable angle with scale and nonius

Nr.	A (AF)	
81607	16	4
81390	25	13
81577	40	53
82768	50	69




Heel block 45°/90°
fixed set up angle 45° or 90°

Nr.	A (AF)	
23667-1	16	3
21426-1	25	10
21190-1	40	42
28042-1	50	54



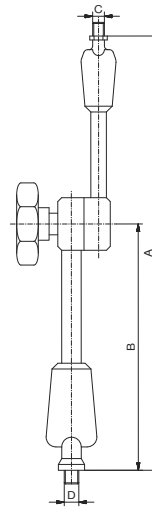
Swivel arm AF25

with joint and central hydraulic clamp function

Nr.	A	B	C	D	max. load	
85411-1	130	70	M6	M6	30 N	135
82121-1	205	115	M6	M8	40 N	282
82122-1	285	175	M6	M8	70 N	687




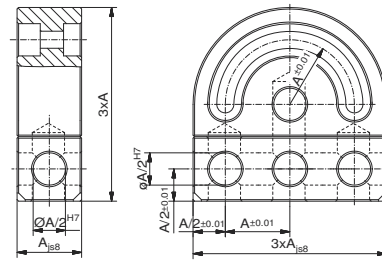
Only available in black
 Connection elements for swivel arms on page 108.



Swivel plate

swivel range $\pm 90^\circ$, pivot point in grid

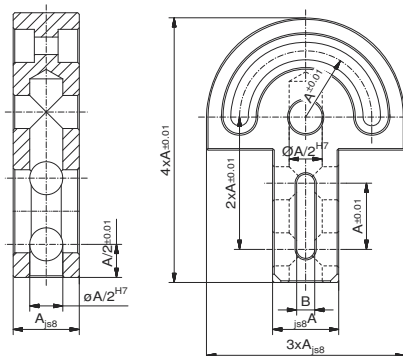
Nr.	A (AF)	
24578-1	16	56
24318-1	25	216
24579-1	40	891
28041-1	50	1.700

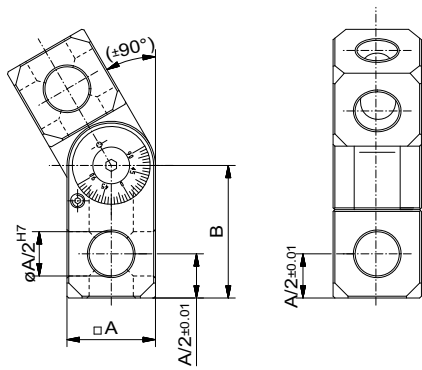


Swivel plate with slot

swivel range $\pm 90^\circ$, pivot point independent of grid

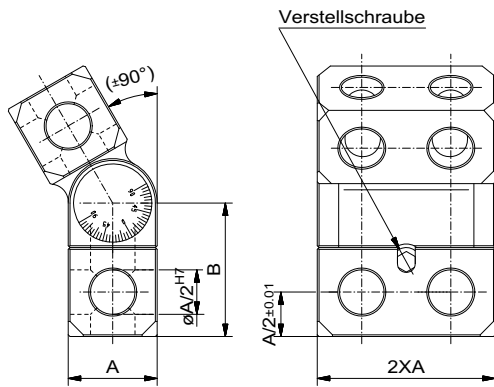
Nr.	A (AF)	B	
30667-1	25	6,8	195





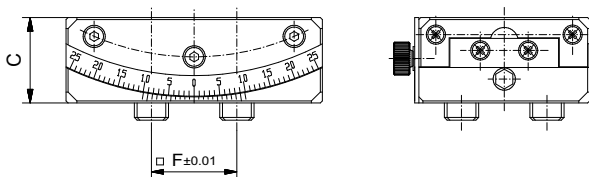
Knuckle
adjustable range $\pm 90^\circ$, with fine scale
and clamp function

Nr.	A (AF)	B	⊗
81668-1	16	24	28
81326-1	25	37,5	108
81462-1	40	60	446
82767-1	50	75	860



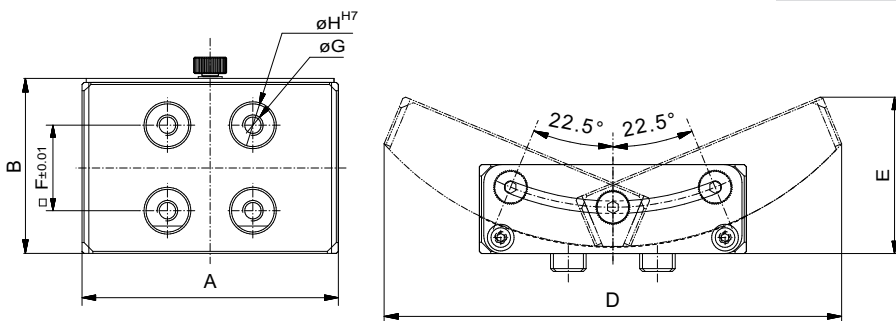
Double Knuckle
adjustable range $\pm 90^\circ$, with fine scale
and clamp function

Nr.	A (AF)	B	⊗
81811-1	16	24	65
81028-1	25	37,5	242
81812-1	40	60	1.004
82621-1	50	75	2.442



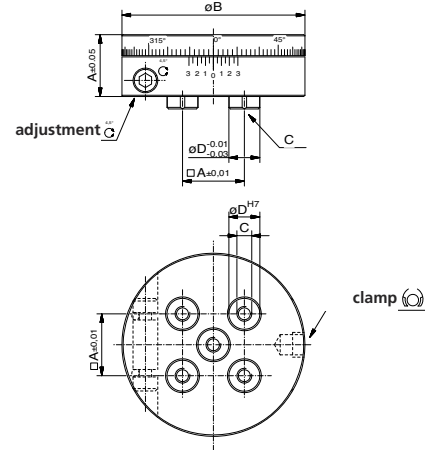
Rocker
with infinite adjustment and clamp function

Nr.	A	B	C	D	E	F (AF)	G	H	⊗
82972-1	75	51	25	128,5	44	25	M6	12,5	242
283778-1	120	82	40	206	70	40	M8	20	900



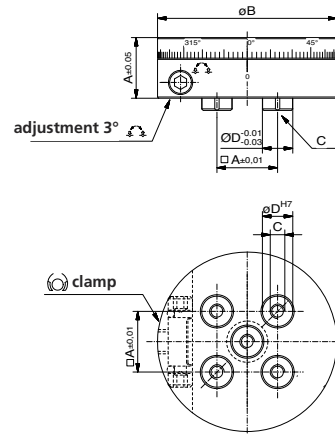
Rotary plate with infinite adjustment and clamp function

Nr.	A	B	C	D	
96741-1	25	74	M6	12,5	340
280183-1	40	120	M10	20	770



Rotary plate with ratchet adjustment in 3° steps and clamp function

Nr.	A	B	C	D	
96742-1	25	74	M6	12,5	340
283780-1	40	120	M10	20	770

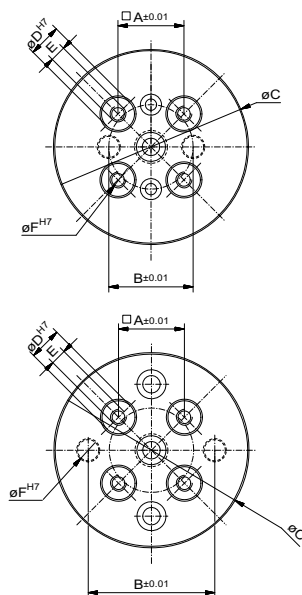


Adapter plate for keyless chuck D50

Nr.	A	B	C	D	E	F	
56162-1	25	32	74	12,5	M6	8	123

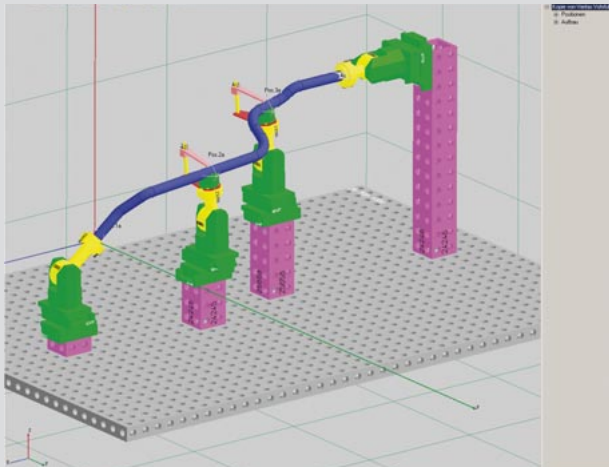
for keyless chuck D80

Nr.	A	B	C	D	E	F	
56161-1	25	48	74	12,5	M6	8	123



Adapter plates also available including suitable connection elements
 ø50 – 97893-1
 ø80 – 97892-1

ALUFIX rotary swing unit



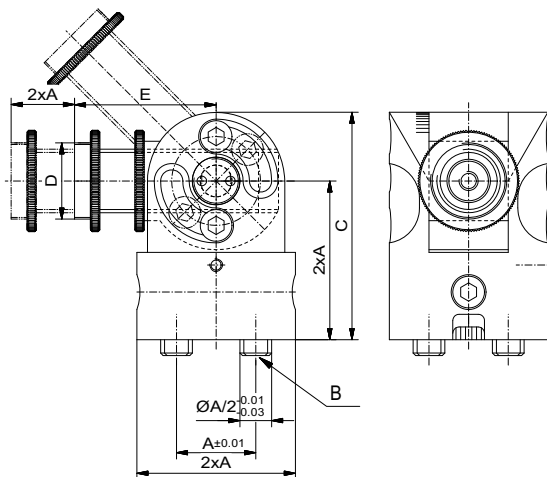
Measuring fixture for hose.
The positions and angles required are easily calculated with the help of Alufix Expert software (page 140).
Fixtures like this are implemented very quickly.



Application example:
With the rotary swing unit, the tip of a center can be adjusted to any defined point of an imaginary hemisphere.

Using a cross roller slide under the unit the center point of this hemisphere can be finely adjusted in x and y,

The quick-change coupling mounted between bar and cross slide enables easy removal or exchange.

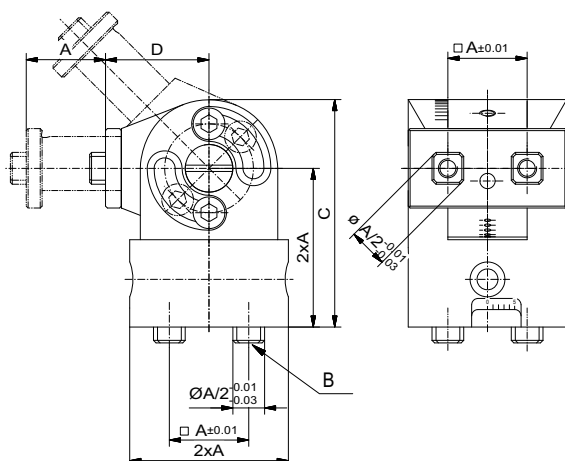


Rotary swing unit with thread

Nr.	A (AF)	B	C	D	E	⊗
93063-1	25	M6	72	M24x1	44,6	342
99794-1	40	M10	115	M32x1	69	750



Rotary swing unit 99794-1 for Alufix 40 with worm gear for fine adjustment in both rotating axes



Rotary swing unit with fine adjustable nubbed column

Nr.	A (AF)	B	C	D	⊗
93660-1	25	M6	72	32,6	370
99807-1	40	M10	115	50	750



Rotary swing unit 99807-1 for Alufix 40 with worm gear for fine adjustment in both rotating axes

ALUFIX Jacks

Alufix jacks or columns are for height adjustment of fixture elements.

Depending on the version, load capacities of up to 1.000 daN can be achieved with precise setting using a scale and vernier.



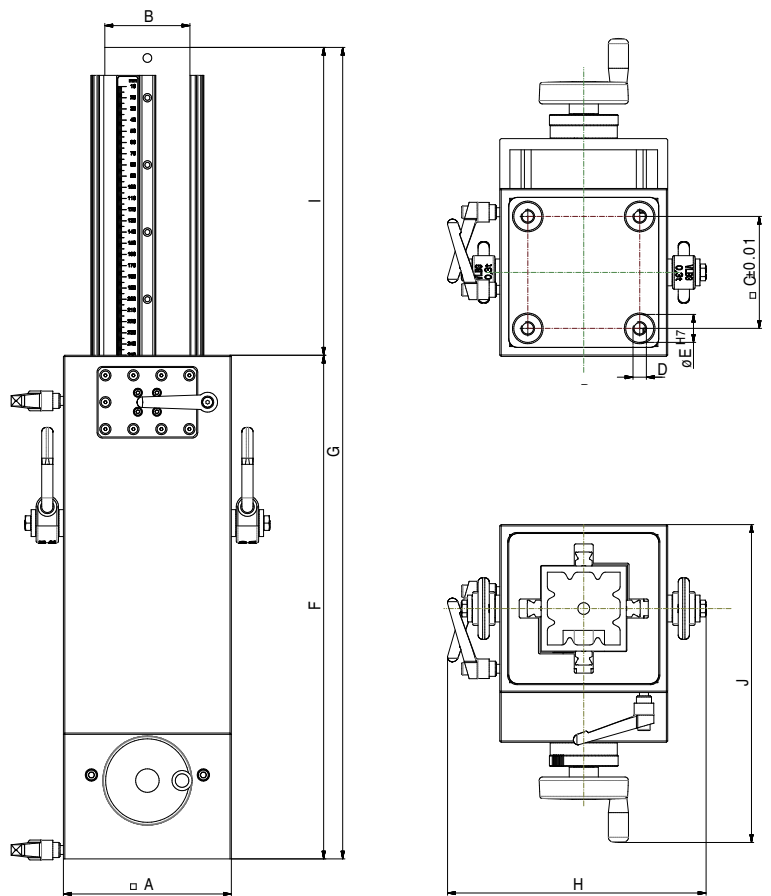
Application example on the right: Jacks mounted with cross roller slides, both in heavy duty design, for positioning hook clamp fixtures in three axes. All mounted on foot plates with grid for positioning on base plate or measuring surface.

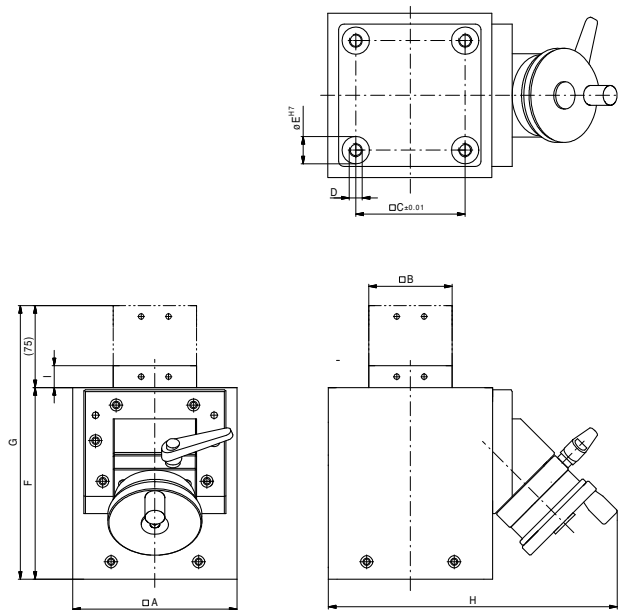


Jack 1000, Heavy Duty Height adjustable using crank handle Load capacity 1.000daN

Nr.	A	B	C	D	E	F	G	H	I	J	
98230-1	150	76	100	M12	25	450	700	250	250	288	21.000

Footplates and top blocks für jacks on pages 35-37



**Jack 500**

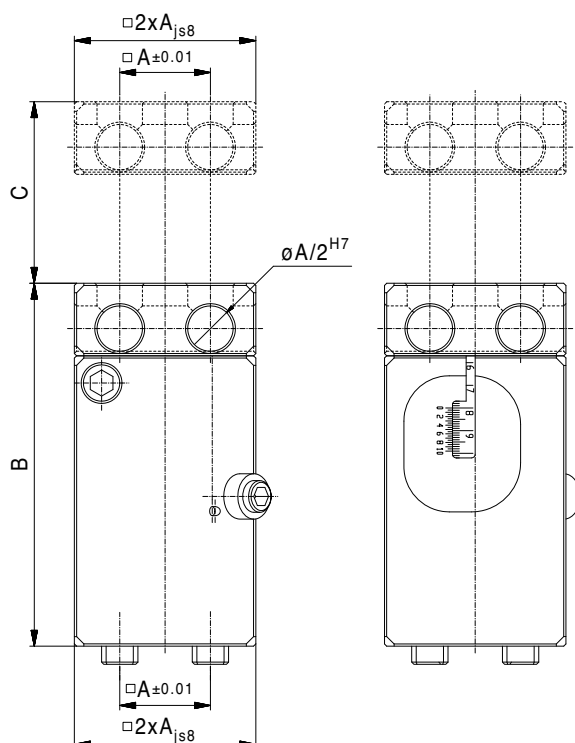
Height adjustable using crank handle

Load capacity 500 daN

Nr.	A	B	C	D	E	F	G	H	I	
92949-1	150	76	100	M12	25	175	250	265	20	10.115

**Rack gear jack**

with fine adjustment



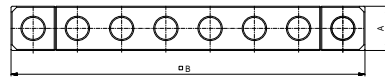
Nr.	A (AF)	B	C	max. daN ↓	
82939-1	25	75	25	30	486
90538-1	40	160	80	45	2.660
82821-1	50	200	100	60	5.523



Base plate for jack

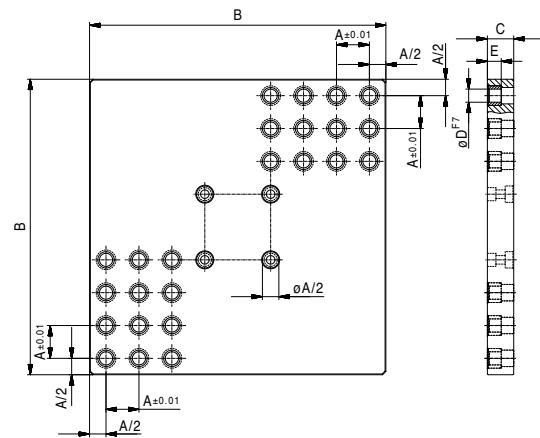
Grid AF50, including connectors

Nr.	A	B	
98221-1	50	400	13.050



Base plate for jack

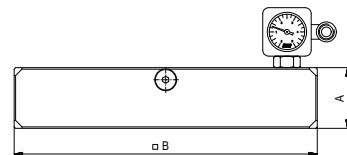
Nr.	A	B	C	D	E	
337271-1	50	450	40	$\varnothing 20F7$	21	21.500



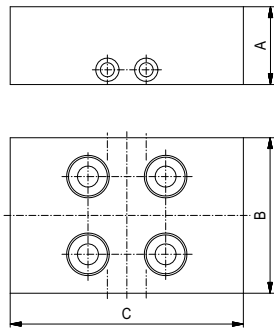
Base plate for jack

with hovercraft and magnetic function, including connectors

Nr.	A	B	
281196-1	67	300	18.000

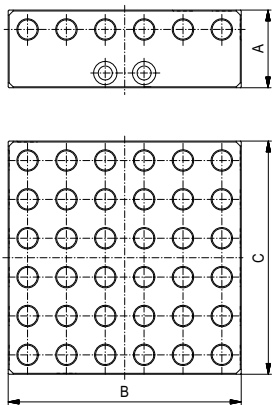


Individually manufactured base plates on request.



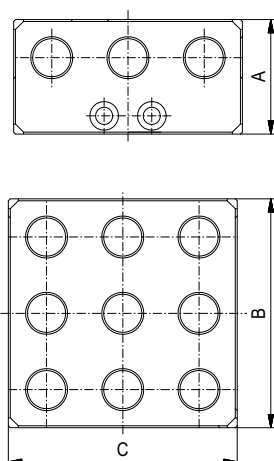
Top block for Jack
with AF50 holes and connectors

Nr.	A	B	C	
98217-1	50	100	150	1.924



Top block for Jack
with AF25 grid and connectors

Nr.	A	B	C	
98218-1	50	150	150	1.823



Top block for Jack
with AF40 grid and connectors

Nr.	A	B	C	
98219-1	60	120	120	2.150

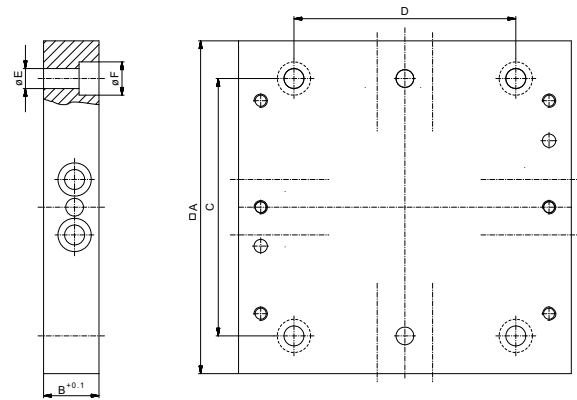


Top block for jack 92949

Nr.	A	B	C	D	E	F	
289486-1	150	25	116	100	9	15	1.200

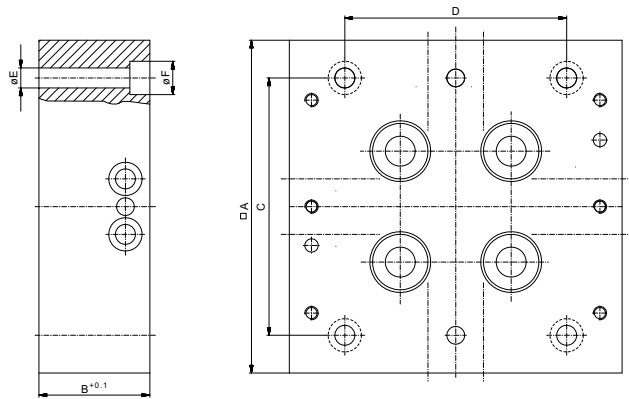


Top blocks are not drilled but can be supplied with customized grid on request




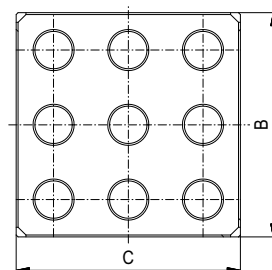
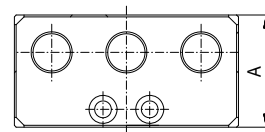
Top block for jack 92949 with AF50 holes

Nr.	A	B	C	D	E	F	
289487-1	150	50	116	100	9	15	2.100



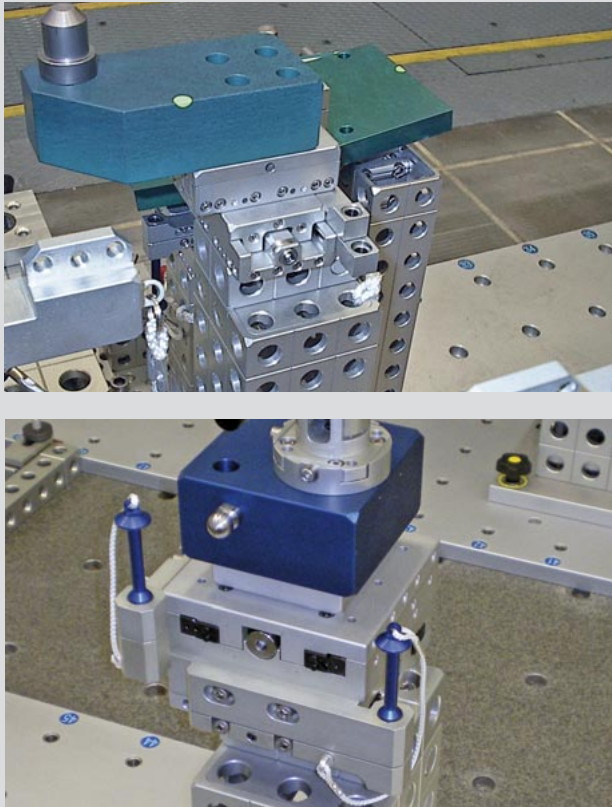
Top block for Jack with AF50 grid and connectors

Nr.	A	B	C	
98220-1	75	150	150	4.100

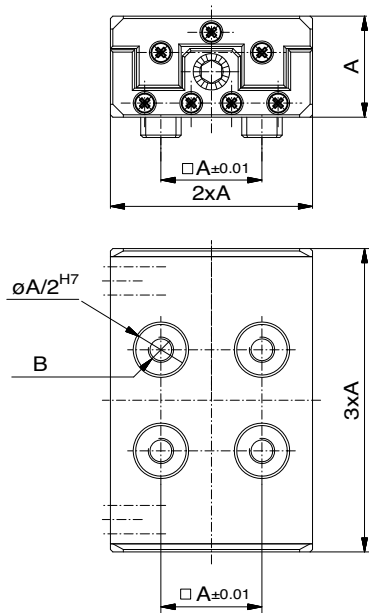


All Top Blocks can be used on Jack 1000 and Jack 500.

Roller and guiding slides



Above: The cross roller slide enables infinite adjustment of the center in the x and y axes - precise and reproducible using stop screws and scales with vernier.



Roller slide linear adjustment in 1 axis with lead screw

Nr.	A (AF)	B	max. N ↓	Shift	
82453-1	16	M4	200	±9	89
C 82172-1	25	M6	500	±13,5	242
C 82173-1	40	M10	1500	±22	970
C 82398-1	50	M12	2500	±27	1.910

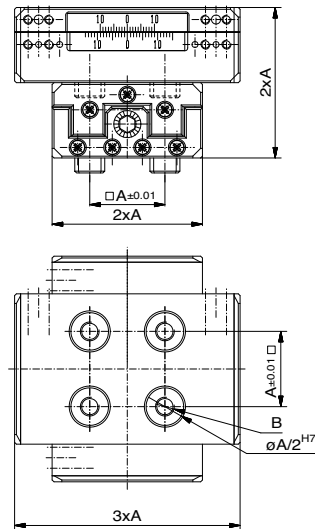


C·E ALUFIX preferred range
 Green: Item is available immediately.
 C: Classic version, E: Eco version, CE: Classic or Eco
 ■: color "black"

Cross roller slide

linear adjustment in 2 axes with lead screw

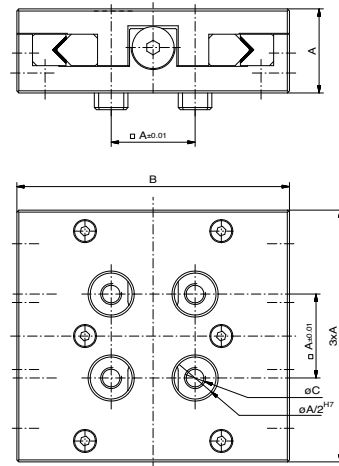
Nr.	A (AF)	B	max. N ↓	Shift	
82461-1	16	M4	200	±9	178
82462-1	25	M6	500	±13,5	484
82463-1	40	M10	1500	±22	1.940
82399-1	50	M12	2500	±27	3.820



Roller slide heavy duty

linear adjustment in 1 axis with lead screw

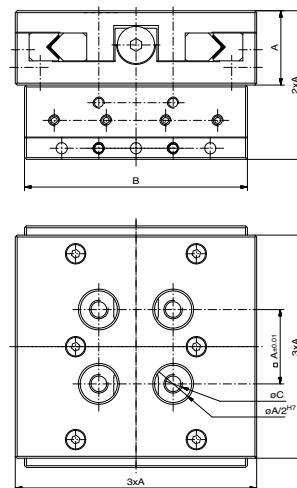
Nr.	A(AF)	B	C	Shift	max. N ↓	
280495-1	25	79	M6	+/- 13	1500	450
280496-1	40	130	M10	+/- 21	4500	2.000
280497-1	50	158	M12	+/- 26	7500	3.500

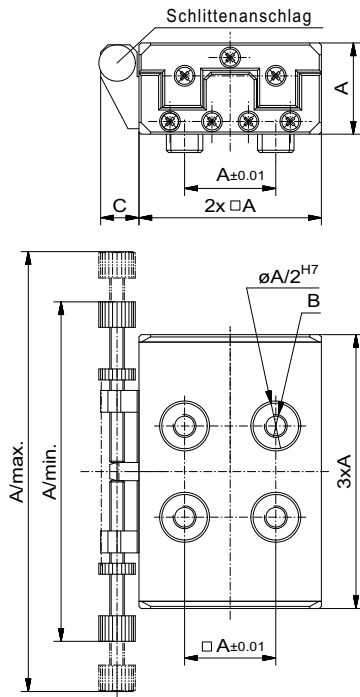


Cross roller slide heavy duty

linear adjustment in 2 axes with lead screw

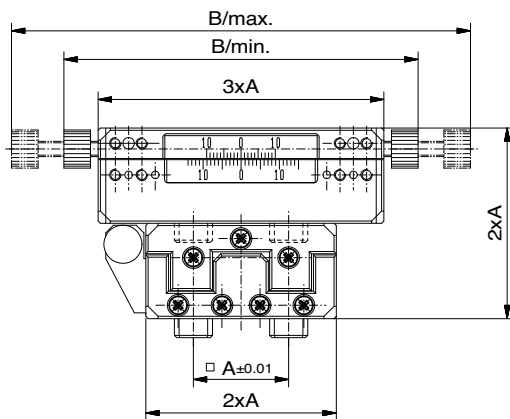
Nr.	A(AF)	B	C	Shift	max. N ↓	
280498-1	25	79	M6	+/- 13	1500	900
280499-1	40	130	M10	+/- 21	4500	4.000
280500-1	50	158	M12	+/- 26	7500	7.000





Guiding slide
linear adjustment in 1 axis, floating,
with stop screw

Nr.	A (AF)	B	C	Shift	A/min	A/max	max. N ↓	
82015-1	16	M4	7	± 8,5	59	77	200	70
 	82002-1	25	M6	10,5 ± 13,5	93	120,5	500	250
 	82016-1	40	M10	16,8 ± 22	146,8	192	1500	1.024
	82441-1	50	M12	21 ± 26,5	168	242	2500	2.000



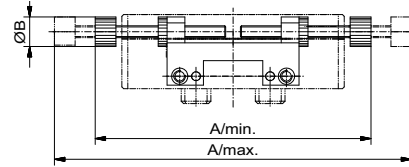
Cross guiding slide
linear adjustment in 2 axes, floating,
with stop screw

Nr.	A (AF)	Shift	B/min	B/max	max. N ↓	
82436-1	16	± 8,5	59	77	200	150
 	82437-1	± 13,5	93	120,5	500	520
 	82438-1	± 22	146,8	192	1500	2.100
	82439-1	± 26,5	168	242	2500	4.000



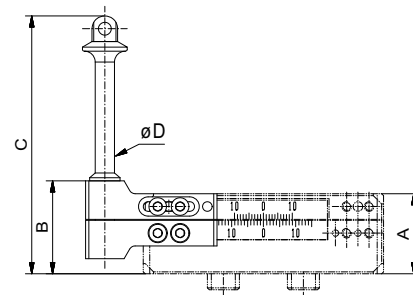
Slide stop for guiding or roller slides

Nr.	A (AF)	A/min.	A/max.	B	
82411-1	16	59	77	6,4	98
82412-1	25	93	120,5	10	115
82413-1	40	146,8	192	16	131
82414-1	50	186	242	19	140



Positioning guide and pin to fix heavy duty (HD) roller? slides in „0“ position

Nr.	A (AF)	B	C	øD	Type	
83120-1	16	18,5	52,5	4,5	left	-
84323-1	16	18,5	52,5	4,5	right	-
82711-1	25	29	80,5	6	left	50
84321-1	25	29	80,5	6	right	50
82833-1	40	47	119	8	left	180
84320-1	40	47	119	8	right	180
83083-1	50	58	135	12	left	294
84322-1	50	58	135	12	right	294



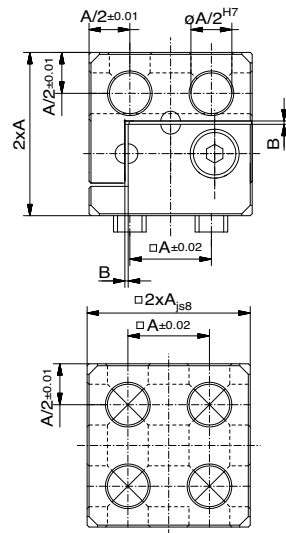
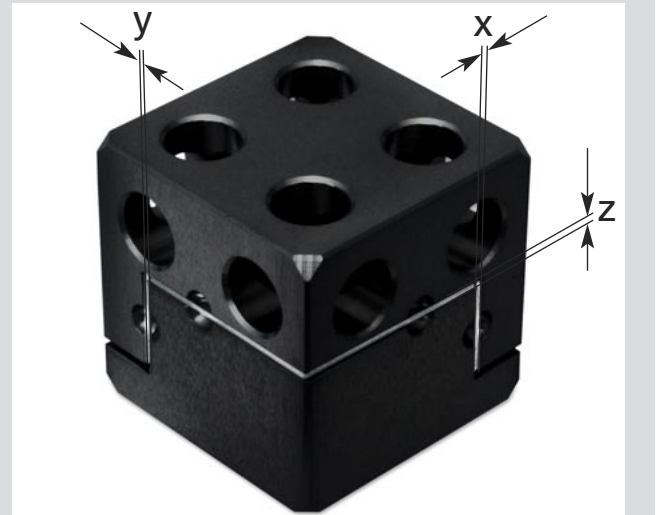
ALUFIX preferred range
 Green: Item is available immediately.
 C: Classic version, E: Eco version, CE: Classic or Eco
: color "black"

ALUFIX shim blocks

Adjustment in x,y,z takes place by inserting or removing shim foils or shims. After adjustment settings are fixed using pins.

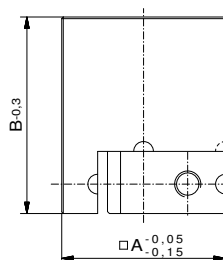
Values shown in the chart for range of adjustment are maximal values for one axis. Values in brackets show adjustment range when using more than one axis simultaneously.

ALUFIX shim blocks are available in a mirrored version on request.



3D Shim block AF
for fine adjustment in 3 axes x,y,z, using shim foils (page 44).

Nr.	A (AF)	Shift B	Ⓜ
89177-1	25	x,y,z: +/- 1,0 (0,7)	270
89178-1	40	x,y,z: +/- 1,5 (1,1)	700
89179-1	50	x,y,z: +/- 2,0 (1,4)	2.200




Contour block for 3D shim block
Preforms without surface protection, Alufix 25 / 40 / 50

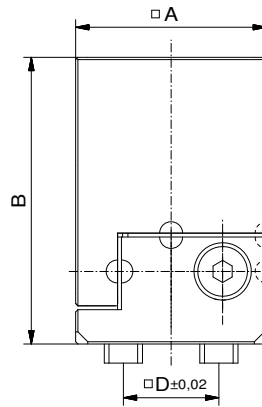
Nr.	AF	A x A x B	Ⓜ
34768	25	50x50x65	356
34769	25	50x50x90	536
34770	25	75x75x65	866
34771	40	80x80x104	1.879
34772	40	80x80x144	2.227
34773	40	120x120x104	4.871
34774	50	100x100x130	2.926
34775	50	100x100x180	5.833
34776	50	150x150x130	6.900

C·E ALUFIX preferred range
Green: Item is available immediately.
C: Classic version, E: Eco version, CE: Classic or Eco
■: color "black"


3D Shim block with integrated contour block for fine adjustment in 3 axes x,y,z using shim foils (page 50).

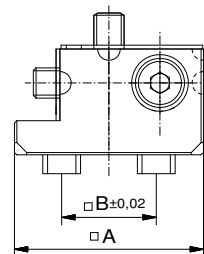
Nr.	A (AF)	Type	A x A x B	Shift	
91834-1	25	left	50x50x70	x,y,z: +/- 1,0 (0,7)	473
91835-1	40	left	80x80x120	x,y,z: +/- 1,6 (1,1)	2.074
91836-1	50	left	100x100x150	x,y,z: +/- 2,0 (1,4)	4.275
280766-1	25	right	50x50x70	x,y,z: +/- 1,0 (0,7)	473
280767-1	40	right	80x80x120	x,y,z: +/- 1,6 (1,1)	2.074
280768-1	50	right	100x100x150	x,y,z: +/- 2,0 (1,4)	4.275

Contour block without surface protection.



3D Shim block base, side mounting complete with shims and screws

Nr.	B (AF)	Type	A x A	
92165-1	25	left	50x50	203
92166-1	40	left	80x80	778
92167-1	50	left	100x100	1.485
98546-1	25	right	50x50	203
280672-1	40	right	80x80	778
280769-1	50	right	100x100	1.485



The angle of the center point is guaranteed by a specially machined contour block. The position in x, y and z is defined by the shimbloc, the upper part of which is adjusted with shims in steps of 0.05 mm. Finally, the Shimblock is locked in order to achieve a permanent and stable position.

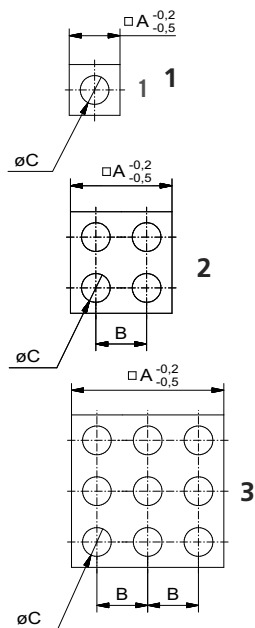
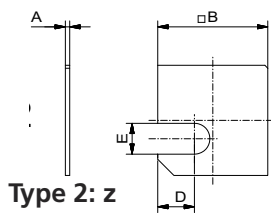
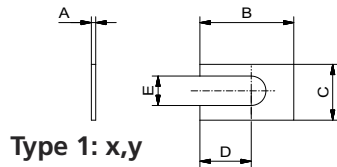
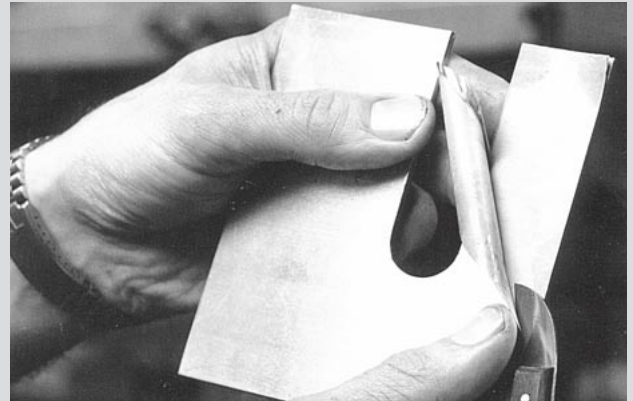
ALUFIX shim foil

Peelable shim foil in various thicknesses
 These shim foils are used in conjunction with fixed shims to adjust shim blocks.

Shims comprise of 0,05mm thick laminated alu-foils. The easy process of peeling with a knife reduces the foil to the required thickness.

The advantages:

- Tolerances are evened out, making remachining jobs such as milling, grinding etc. unnecessary
- Reduces setting up times
- Reduces amount of machining required



Shimfoil type 1 or 2
 peelable, in 0,05mm layers,
 for setting of shim blocks

Nr.	AF	Type	A	B	C	D	E	⌀
33013	25	2	1,0	37,5	-	12,5	10	1,5
33014	25	1	1,0	32	19	20,5	10	2,5
33261	40	2	1,6	60,5	-	20,5	20	6
33260	40	1	1,6	50	30	30	14	9
33632	50	2	2,0	75	-	25	25	12
33633	50	1	2,0	60	38	35	18	19

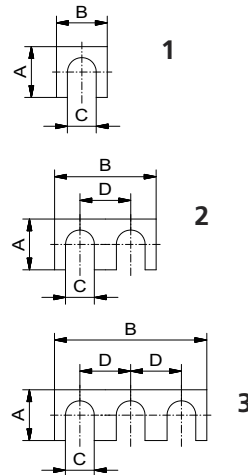
Shimfoil closed
 peelable, 2mm thick, in 0,05mm layers

Nr.	AF	Type	A	B	C	⌀
27716	16	1	15	16	8,5	1
27717	16	2	31	16	8,5	4
27718	16	3	47	16	8,5	1
27719	25	1	24	25	13	5
27720	25	2	49	25	13	10
27721	25	3	74	25	13	20
27722	40	1	39	40	20,5	6
27723	40	2	79	40	20,5	26
27724	40	3	119	40	20,5	60
29315	50	1	49	50	25,2	10
29316	50	2	99	50	25,5	41
29317	50	3	149	50	25,5	95

Shimfoil open

peelable, 2 mm thick, in 0,05 mm layers

Nr.	AF	Type	A	B	C	D	$\frac{g}{h}$
25526	16	1	15	15	8,5	-	1
25527	16	2	15	31	8,5	16	1
25528	16	3	15	47	8,5	16	2
25529	25	1	24	24	13	-	2
25530	25	2	24	49	13	25	4
25531	25	3	24	74	13	25	10
25535	25	2	49	49	13	25	8
25532	40	1	39	39	20,5	-	8
25533	40	2	39	79	20,5	40	10
25534	40	3	39	119	20,5	40	16
27963	50	1	49	49	25,5	-	8
27964	50	2	49	99	25,5	50	16
27965	50	3	49	149	25,5	50	25



Shim (with fixed thickness)

for setting of shim blocks in x,y axis

AF25, Type 1

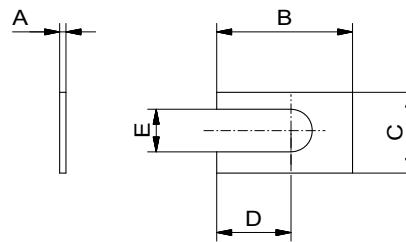
B=32, C=19, D=20,5, E=10

Nr.	A
128005	0,05
122010	0,1
122020	0,2
122030	0,3
122040	0,4
122050	0,5
122070	0,7
122080	0,8
122100	1,0
122150	1,5
122200	2,0

AF40, Type 1

B=50, C=30, D=30, E=14

Nr.	A
124005	0,05
124010	0,1
124020	0,2
124030	0,3
124040	0,4
124050	0,5
124070	0,7
124080	0,8
124100	1,0
124150	1,5
124200	2,0



Shim (with fixed thickness)

for setting of shim blocks in z axis

AF 25, Type 2

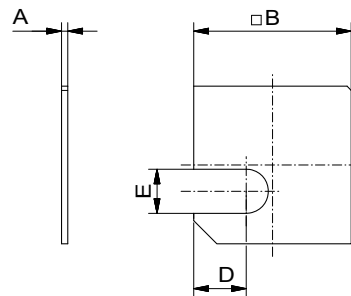
B=37,5 C=37,5 D=12,5 E=10

Nr.	A
129005	0,05
123010	0,1
123020	0,2
123030	0,3
123040	0,4
123050	0,5
123070	0,7
123080	0,8
123100	1,0
123150	1,5
123200	2,0

AF 40, Type 2

B=60,5 C=60,5 D=20,5 E=20

Nr.	A
125005	0,05
125010	0,1
125020	0,2
125030	0,3
125040	0,4
125050	0,5
125070	0,7
125080	0,8
125100	1,0
125150	1,5
125200	2,0



TopPos Modular System

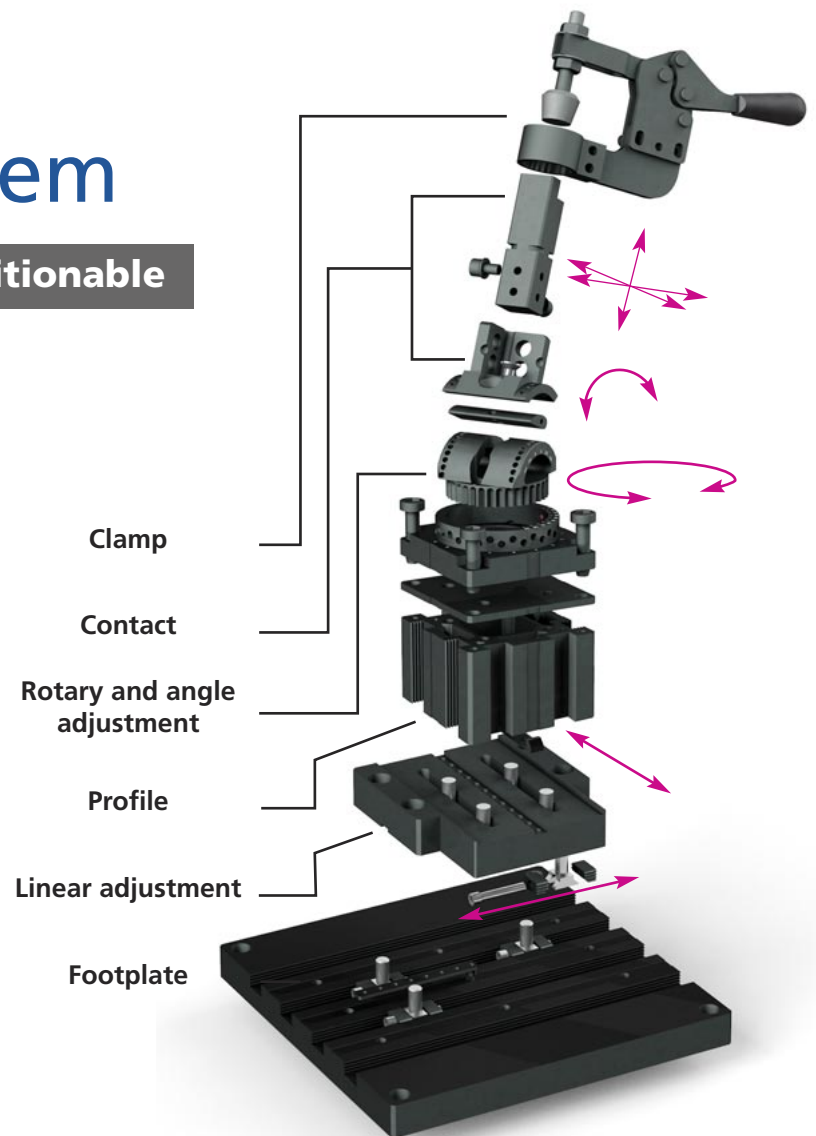
Repeatable and freely positionable

Novel positioning system for work-piece contact points.

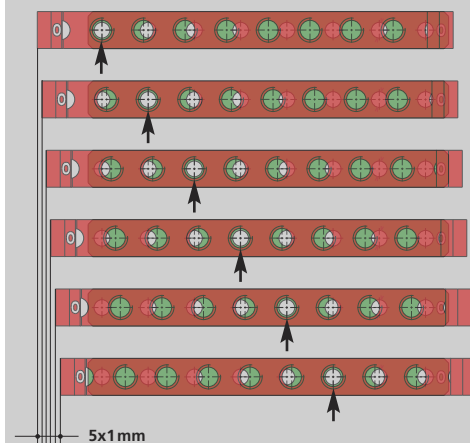
Accurate and repeatable without dedicated, machined contours.

100% catalogue items for fast fixture building and adaptation.

- New design with TopPos elements:
- Replaces up to 90% of individual contour blocks with a few standard elements
- Positioning in grid of 1mm or 0,5° respectively = max. 0,5mm/0,25° deviation (optional 0,5mm grid possible)
- Precise alignment with 0,05mm shims, +/- 2mm range
- Linear components have 10mm, rotary components have 10° steps
- Actual grid achieved by a combination using differential steps (plus or minus 1)
- Profile size 80x80 (50x50 on request)
- Repeatable, reuseable

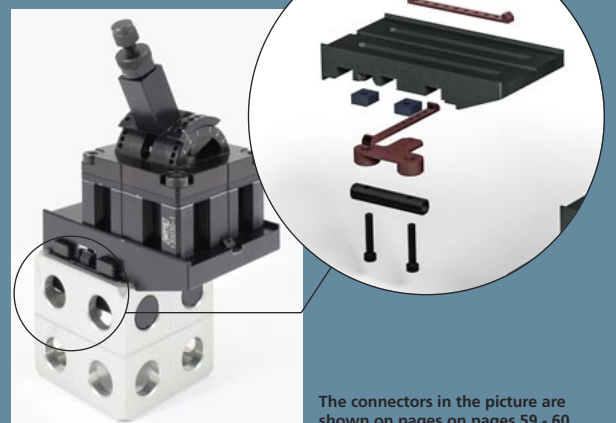


TopPos grid setting



Movement of top set strip (in red) from one position to the next (arrow) corresponds up to 9x1 mm step

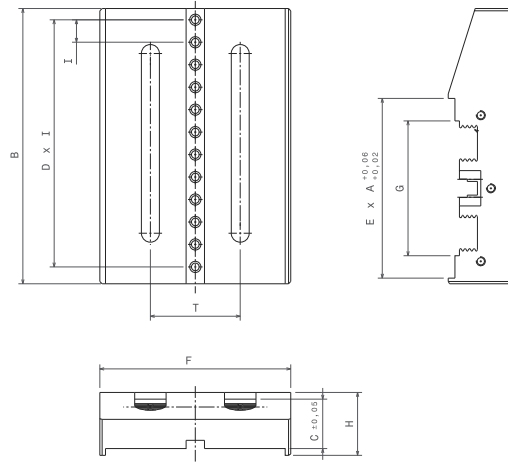
Set up directly on Alufix



The connectors in the picture are shown on pages on pages 59 - 60

Adapter cross plate ALUFIX
use with ALUFIX 40 bar and TopPos profile

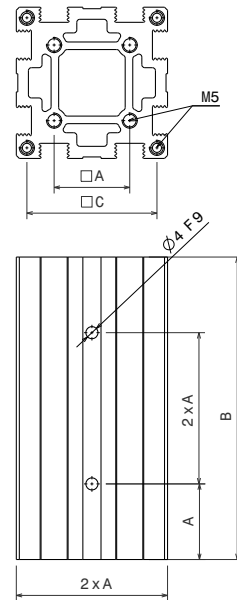
Nr.	A	B	C	D	E	F	G	H	I	T	
135003-1	40	122,5	22	10	2	85	60	28	10	40	398
135004-1	40	162,5	22	15	3	85	100	28	10	40	502



Profiles

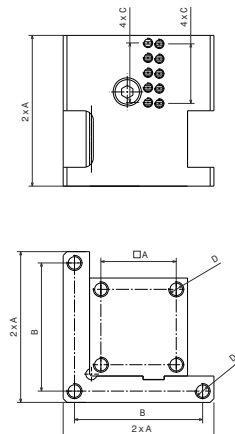
Nr.	A	B	C	
130010-1	40	10	68	70
130020-1	40	20	68	140
130030-1	40	30	68	210

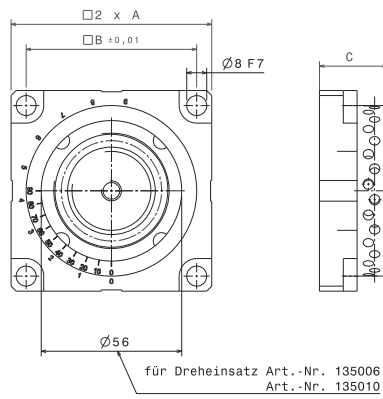
- Cross section 80x80
- Serrated slots, advantage: Rigid profile due to low slot depth
- 4 core holes for M8 spaced at 40 mm
- 4 outer core holes for M6/M8 for face end connection
- Material EN-6005
- Other lengths on request



Lift-Element

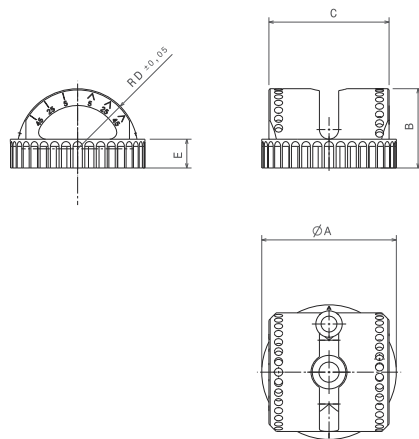
Nr.	A	B	C	D	
293664-1	40	68	7,9	M8	-





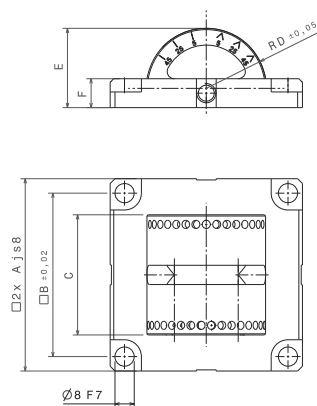
Base for Swivel turn insert

Nr.	A	B	C	
135005-1	40	68	27	-



Rotating insert for Swivel turn unit

Nr.	A	B	C	D	E	
135006-1	56	33	50	25	12	114



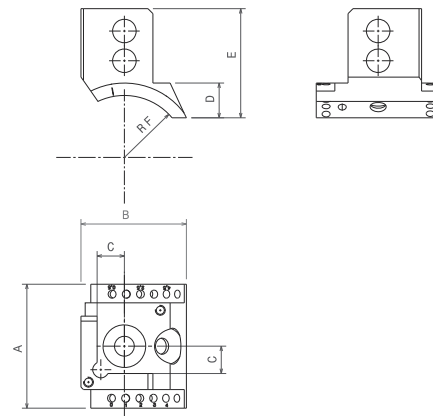
Face adapter for Swivel tops

Nr.	A	B	C	D	E	F	
135009-1	40	68	50	25	33	12	-



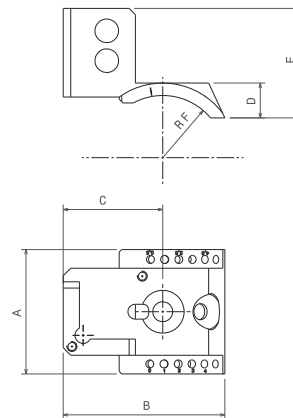
Swivel top with shim angle for Swivel turn unit

Nr.	A	B	C	D	E	F	
135008-1	50	42,5	12	14	44	25	48



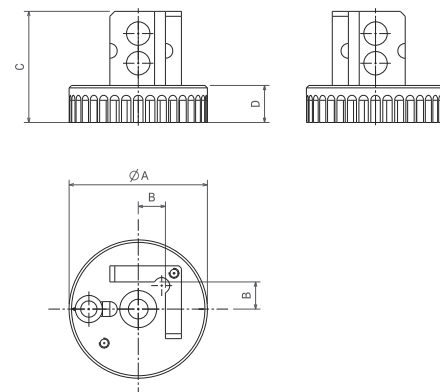
Swivel top with offset shim angle for Swivel turn unit

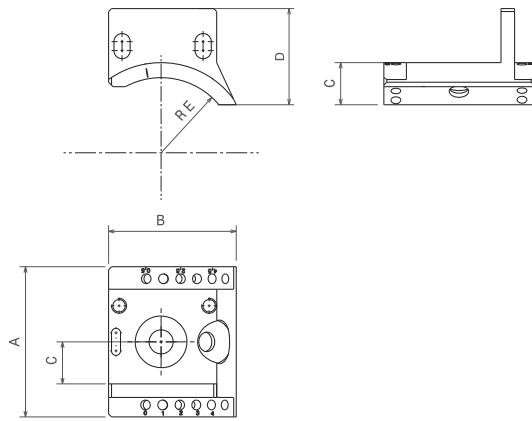
Nr.	A	B	C	D	E	F	
135084-1	50	65	40	14	44	25	58



Rotating insert with shim angle

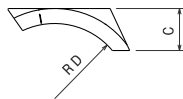
Nr.	A	B	C	D	
135010-1	56	12	45	15	110





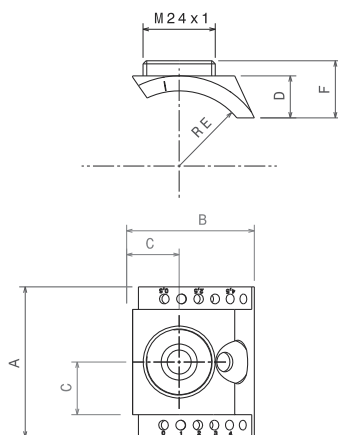
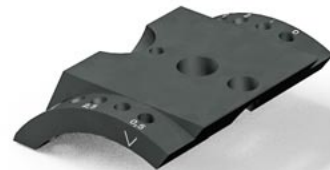
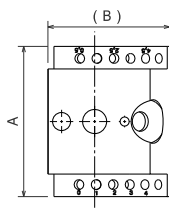
Swivel top for shim block horizontal

Nr.	A	B	C	D	E	Type	g
135019-1	50	42,5	14	32	25	left	38
135058-1	50	42,5	14	32	25	right	38



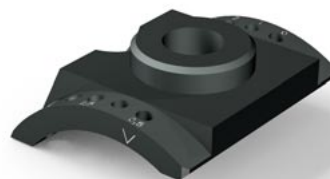
Swivel top for combined contact

Nr.	A	B	C	D	g
135134-1	50	40,53	14	25	28



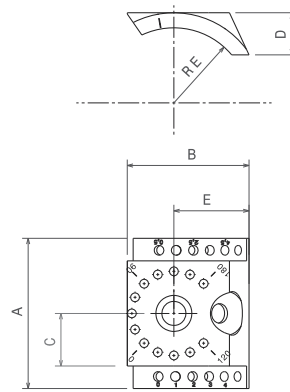
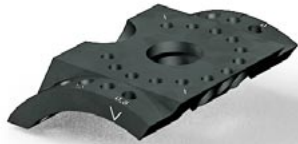
Swivel top with stud M24

Nr.	A	B	C	D	E	F	g
135069-1	50	42,5	17,5	14	25	19	32




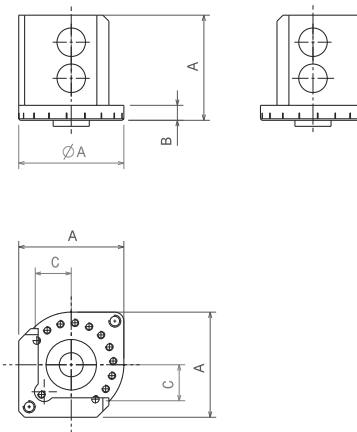
Swivel top
for Rotary shim block

Nr.	A	B	C	D	E	
135063-1	50	40,5	17,5	14	25	28



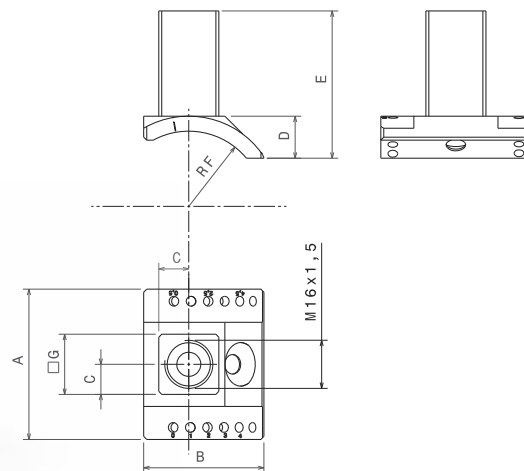
Rotary shim block
for Swivel top 135063

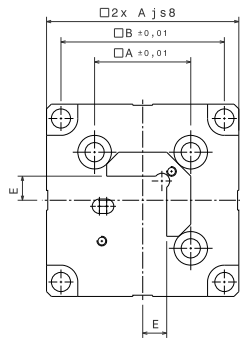
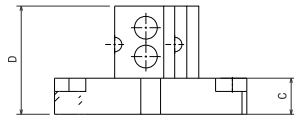
Nr.	A	B	C	
135064-1	35	5	12	32



Swivel top
for Meisterbock screw

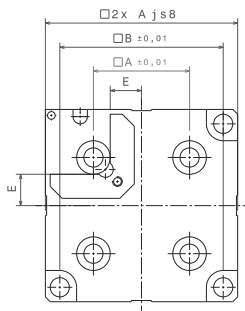
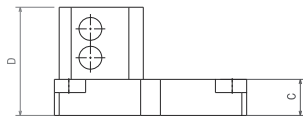
Nr.	A	B	C	D	E	F	G	
135007-1	50	40	10	14	49	25	20	44





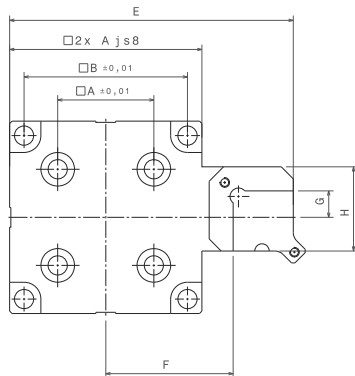
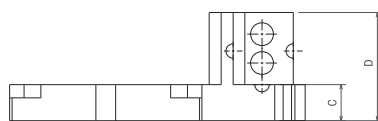
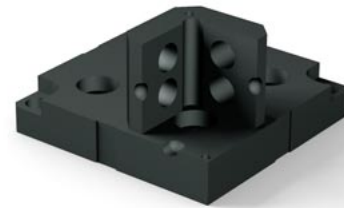
Face adapter with shim angle centric

Nr.	A	B	C	D	E	
135012-1	40	68	15	45	10	272



Face adapter with shim angle excentric

Nr.	A	B	C	D	E	
135011-1	40	68	15	45	13	278



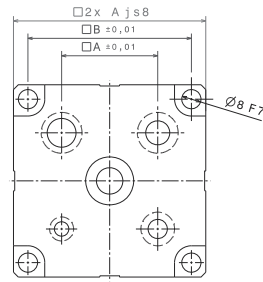
Face adapter with shim angle offset

Nr.	A	B	C	D	E	F	G	H	
135054-1	40	68	15	45	118	53	17	35	332




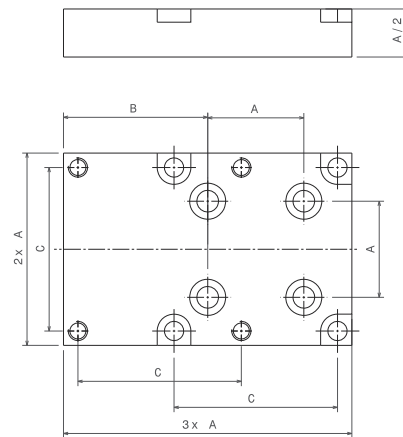
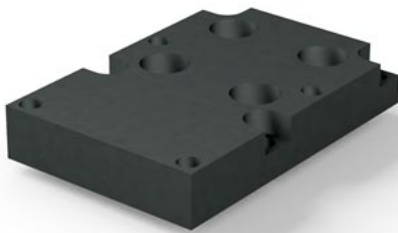
Face adapter
for centering pin

Nr.	A	B	C	
135013-1	40	68	15	222




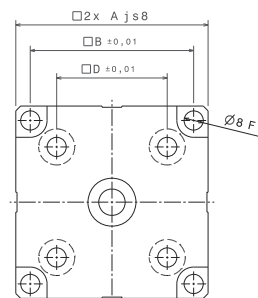
Offset plate
for ALUFIX 40

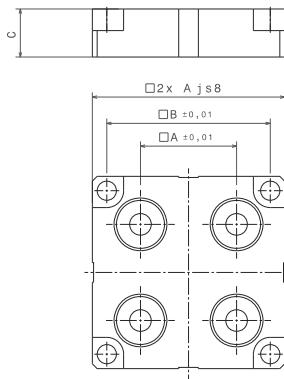
Nr.	A	B	C	
135076-1	40	68	15	222



Face adapter
for hook clamps

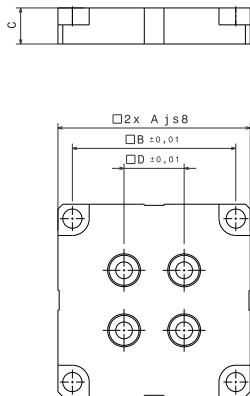
Nr.	A	B	C	D	
135050-1	40	68	15	46	222





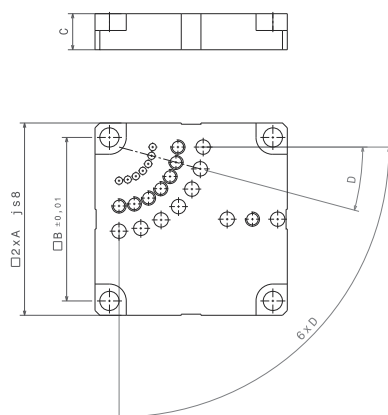
Face adapter
for ALUFIX 40

Nr.	A	B	C	
135015-1	40	68	20	284



Face adapter
for ALUFIX 25

Nr.	A	B	C	D	
135016-1	40	68	15	25	234




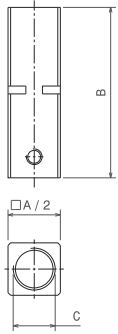
Face adapter
for combined contact

Nr.	A	B	C	D	
135133-1	40	68	15	15	220




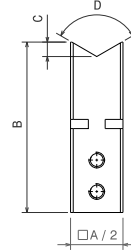
Shim block
for Meisterbock screw

Nr.	A	B	C	
135049-1	40	65	M16 x 1,5	66




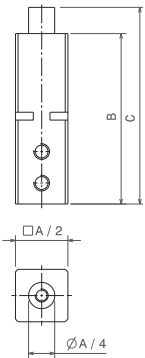
Shim block
with V

Nr.	A	B	C	D	
135122-1	40	65	5,5	120°	75



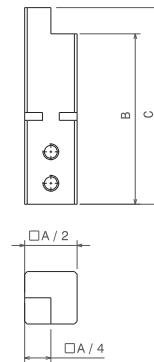
Shim block
ø10, centric

Nr.	A	B	C	
135068-1	40	65	75	68




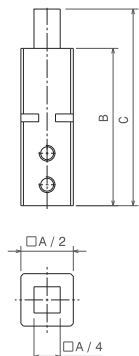
Shim block
10 x 10, excentric

Nr.	A	B	C	
135024-1	40	65	75	70



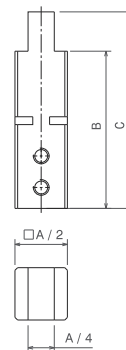
Shim block
10 X 10, centric

Nr.	A	B	C	
135067-1	40	60	75	70




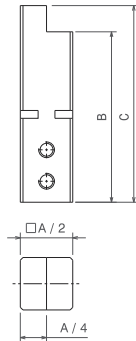
Shim block
10 X 20, centric

Nr.	A	B	C	
135066-1	40	60	75	74




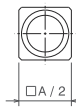
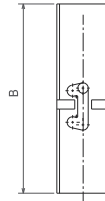
Shim block
10x20 excentric

Nr.	A	B	C	
135025-1	40	65	M16 x 1,5	66




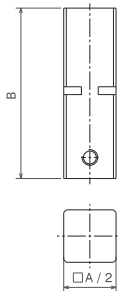
Shim block
for retractable pin

Nr.	A	B	
135108-1	40	72	48




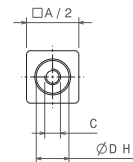
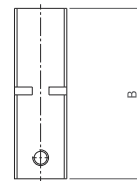
Shim block
20x20

Nr.	A	B	C	
135023-1	40	65	75	68




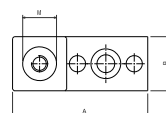
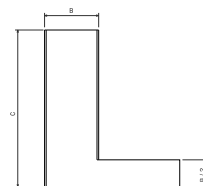
Shim block
with ALUFIX 25 hole

Nr.	A	B	C	D	
135046-1	40	65	5,5	120°	75



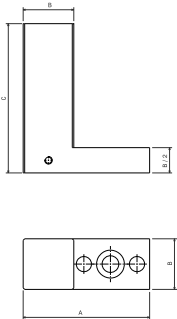
Combined contact
with ALUFIX 25 hole

Nr.	A	B	C	M	
300308-1	40	60	75	AF 25	74



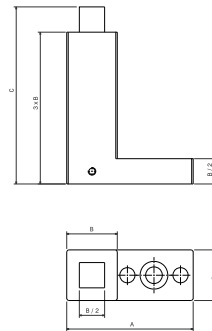
Combined contact
20x20

Nr.	A	B	C	
300306-1	50	20	70	85



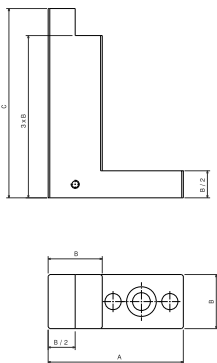
Combined contact
10x10 centric

Nr.	A	B	C	
135149-1	50	20	70	80



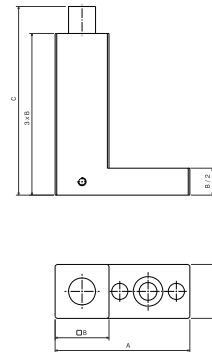
Combined contact
10x20 excentric

Nr.	A	B	C	
135148-1	50	20	70	80



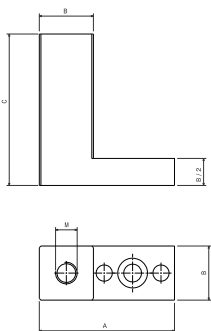
Combined contact
Ø 10 centric

Nr.	A	B	C	
135147-1	50	20	70	80



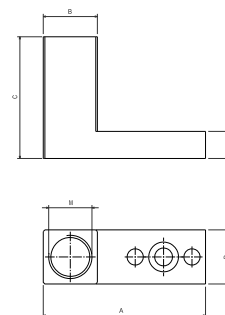
Combined contact
for Meisterbock screw

Nr.	A	B	C	M	
300303-1	50	20	56	M8x1	82

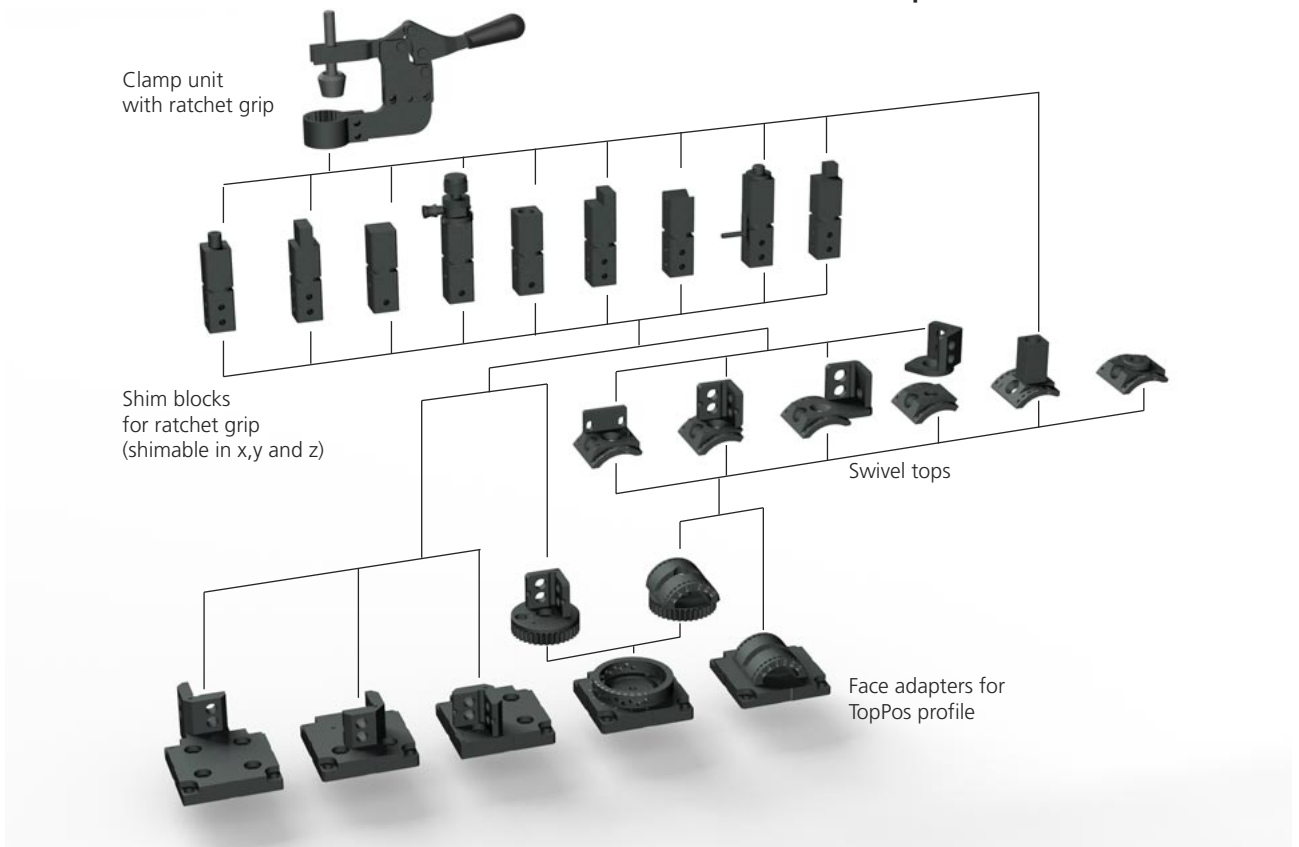


Combined contact
for Meisterbock screw

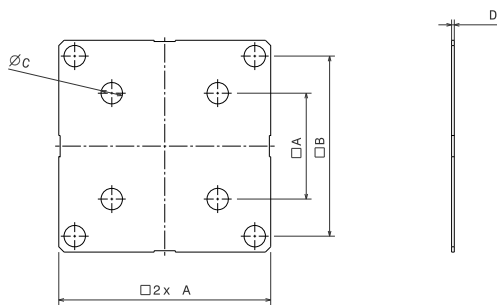
Nr.	A	B	C	M	
300304-1	50	20	45	M16x1,5	65



Variations for contact points



Spacer plate for TopPos profiles



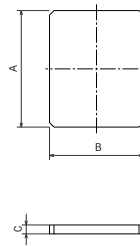
Nr.	A	B	C	D	$\varnothing c$
135059-1	40	68	8,1	1	16
135060-1	40	68	8,1	2	30
135061-1	40	68	8,1	4	60
135062-1	40	68	8,1	7	110



Spacer base

with fixed thickness, for TopPos Shimblock

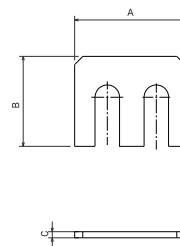
Nr.	A	B	C	\bar{g}
135086	26	21	0,05	1
135087	26	21	0,1	1,1
135088	26	21	0,2	2,2
135089	26	21	0,3	3,3
135090	26	21	0,4	4,4
135091	26	21	0,5	5,5
135092	26	21	0,7	7,7
135093	26	21	0,8	8,8
135094	26	21	1,0	11
135095	26	21	1,5	16,5
135096	26	21	2,0	22



Spacer side

with fixed thickness, for TopPos Shimblock

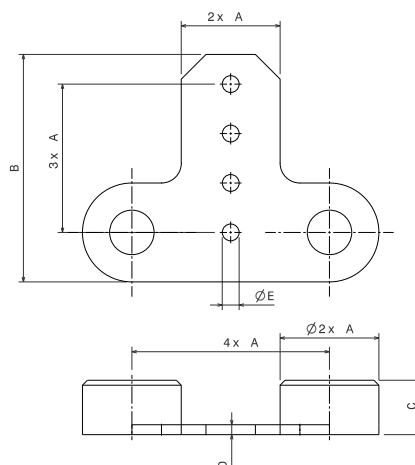
Nr.	A	B	C	\bar{g}
135097	24	22	0,05	1
135098	24	22	0,1	1,1
135099	24	22	0,2	2,2
135100	24	22	0,3	3,3
135101	24	22	0,4	4,4
135102	24	22	0,5	5,5
135103	24	22	0,7	7,7
135104	24	22	0,8	8,8
135105	24	22	1,0	11
135106	24	22	1,5	16,5

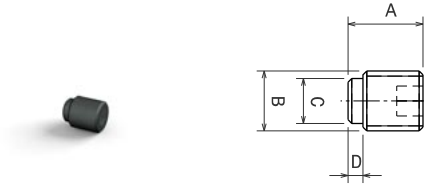


Set strip for ALUFIX 40

for mounting on ALUFIX grid, spacing=10 mm

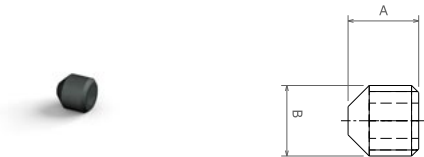
Nr.	A	B	C	D	E	\bar{g}
135028-1	10	46	11	2	3,4	10



**Threaded pin**

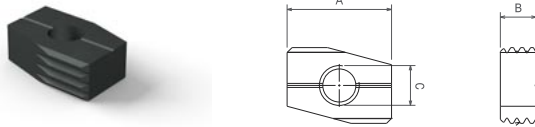
DIN 915, for positioning in grid strips

Nr.	A	B	C	D	g
17924-S1	8	M5	3,5	2,75	1

**Threaded pin**

DIN 914, for rotating inserts

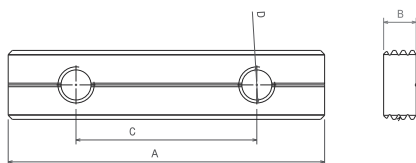
Nr.	A	B	g
10798-S1	5	M5	1

**Slot nut
rhomboid**

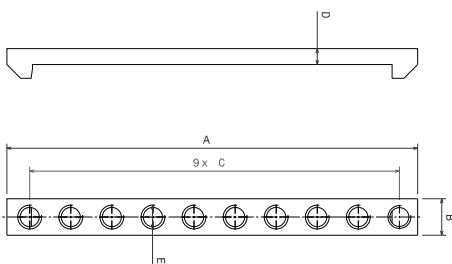
Nr.	A	B	C	g
135030-1	21	7,2	M8	4

**Slot nut
single**

Nr.	A	B	C	g
135029-1	20	7,2	M8	4

**Slot nut
double**

Nr.	A	B	C	D	g
135031-1	70	7,2	40	M8	18

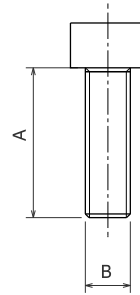
**Set strip
80 mm, spacing =9 mm**

Nr.	A	B	C	D	E	g
135027-1	90	8	9	3,5	M5	6



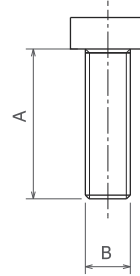
Socket head screw DIN 912

Nr.	A	B	
10526-S1	30	M4	3
11377-S1	10	M6	2
10630-S1	16	M6	3
10494-S1	20	M6	4



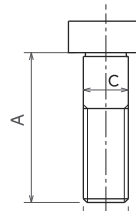
Socket head screw DIN 7984

Nr.	A	B	
13021-S1	12	M8	5
11359-S1	20	M8	8
10004-S1	25	M8	10



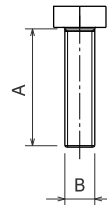
Fitting screw similar DIN 7984

Nr.	A	B	C	
135113-1	25	M8	8 ^{h7}	12
135114-1	20	M8	8 ^{h7}	10



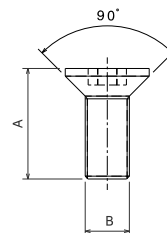
Hex screw DIN 933

Nr.	A	B	
12875-S1	16	M4	2



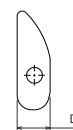
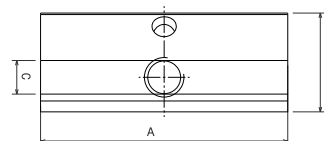
Countersunk screw DIN 7991

Nr.	A	B	
12371-S1	16	M6	2
10576-S1	20	M8	3



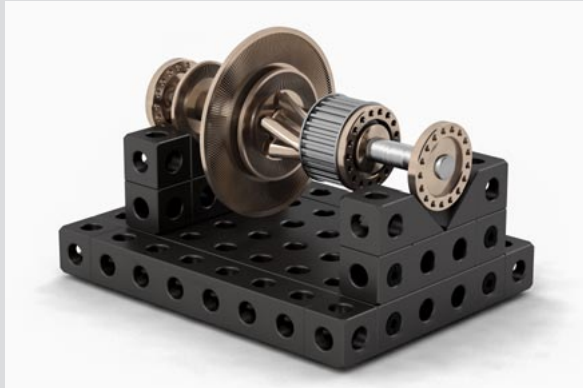
Crosspiece double for Swivel turn unit

Nr.	A	B	C	D	
135039-1	50	20	6,8	6,7	14



ALUFIX Classic V pieces and delta blocks

These elements are used primarily for mounting cylindrical parts



Application example for V 90°



Application example for delta block 120°



Application example for rotated delta blocks 90°

Knife Vs for small parts, Vs with various angles and in different versions for large part diameters

2 delta blocks mounted next to each other also create a V, and by spacing them can be used more flexibly and also for large diameters.

By rotating them 90° it is also possible to mount conical or wedge shaped parts.

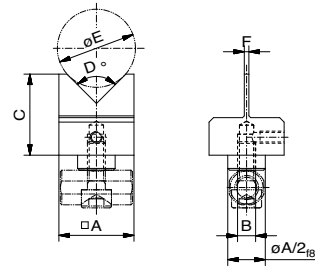
Application example for V with winder tape



The tape is used with Vs or delta blocks together with winders and deflectors (page 94)

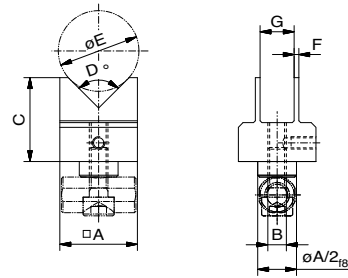
V piece 90° single

Nr.	A(AF)	B	C	D	E	F	G
80923-1	16	M4	17,5	90°	max. $\varnothing 17$	1	9
82230-1	25	M6	27	90°	max. $\varnothing 26$	1,5	32



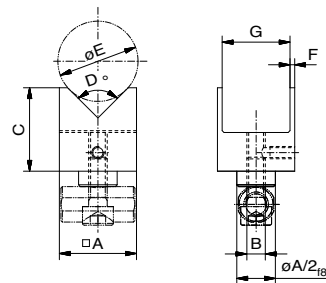
V piece 90° double, V narrow

Nr.	A(AF)	B	C	D	E	F	G
80921-1	16	M4	17,5	90°	max. $\varnothing 17$	1	7
82232-1	25	M6	27	90°	max. $\varnothing 26$	1,5	11

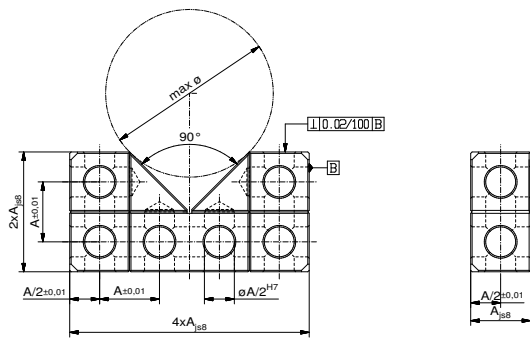


V piece 90° double, V wide

Nr.	A(AF)	B	C	D	E	F	G
80922-1	16	M4	17,5	90°	max. $\varnothing 17$	1	14
82231-1	25	M6	27	90°	max. $\varnothing 26$	1,5	22

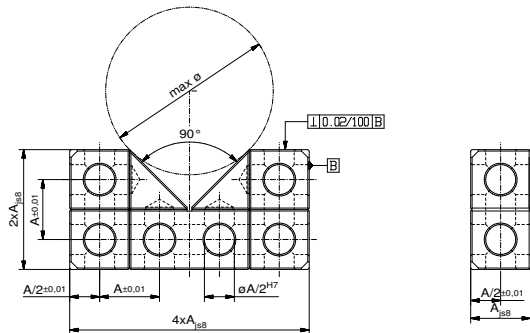


V piece:
Application with optional
stop see page 78.



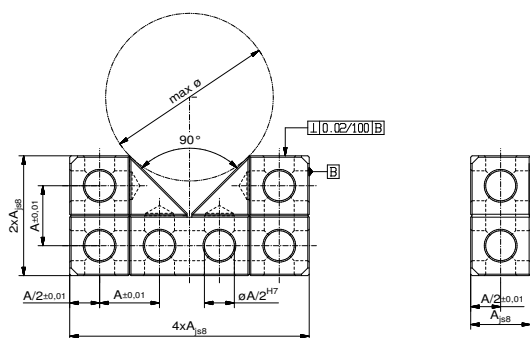
V block 90° standard version

Nr.	A (AF)	max. ø	g
21991-1	16	45	51
21992-1	25	70	185
21272-1	40	113	189
28173-1	50	142	1.362



V block 90° with hard metal surface

Nr.	A (AF)	max. ø	g
80975-1	25	70	251
81511-1	40	113	1.115
82785-1	50	142	1.326



V block 90° with magnetic surface

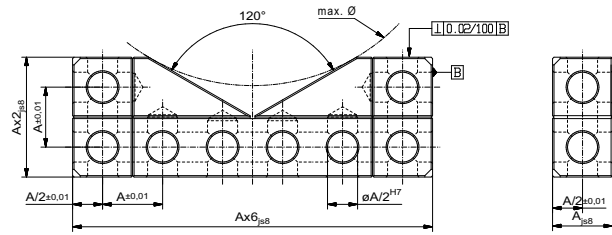
Nr.	A (AF)	max. ø	g
81508-1	25	70	203
81513-1	40	113	1.115
82784-1	50	142	1.326



C·E ALUFIX preferred range
 Green: Item is available immediately.
 C: Classic version, E: Eco version, CE: Classic or Eco
 ■: color "black"

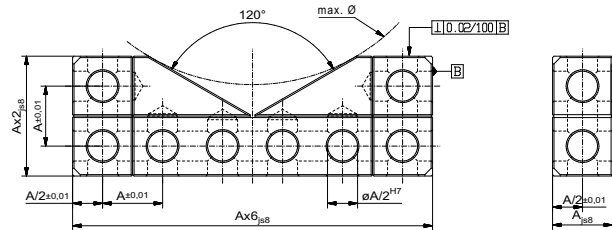
V block 120° standard version

Nr.	A (AF)	max. ϕ	$\frac{g}{mm}$
21988-1	16	110	78
21987-1	25	170	299
21277-1	40	275	1.218
28175-1	50	345	2.395



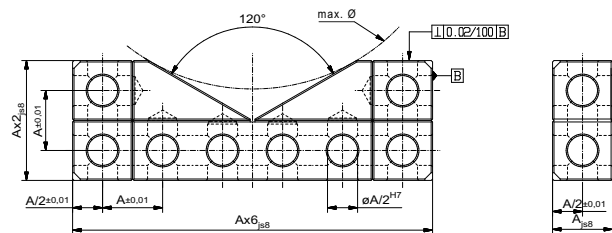
V block 120° with hard metal surface

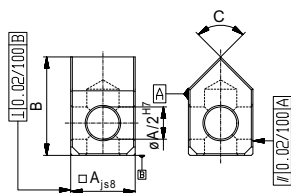
Nr.	A (AF)	max. ϕ	$\frac{g}{mm}$
80976-1	25	170	382
81512-1	40	275	1.577
82786-1	50	345	2.350



V block 120° with magnetic surface

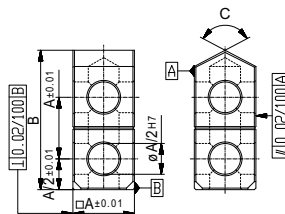
Nr.	A (AF)	max. ϕ	$\frac{g}{mm}$
81509-1	25	170	316
81514-1	40	275	1.577
82787-1	50	345	2.350





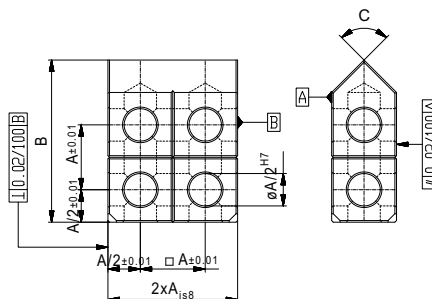
Delta block form 1
90° or 120°

Nr.	A (AF)	B	C	g
22234-1	16	24	90°	10
22235-1	25	37,5	90°	35
22236-1	40	60	90°	145
28043-1	50	75	90°	173
22240-1	16	20	120°	8
22241-1	25	31,25	120°	31
22242-1	40	50	120°	126
28046-1	50	62,5	120°	173



Delta block form 2
90° or 120°

Nr.	A (AF)	B	C	g
22176-1	16	40	90°	16
C 22177-1	25	62,5	90°	61
22178-1	40	100	90°	253
28044-1	50	125	90°	750
22252-1	16	36	120°	15
22253-1	25	56,25	120°	57
22254-1	40	90	120°	234
28047-1	50	112,5	120°	453



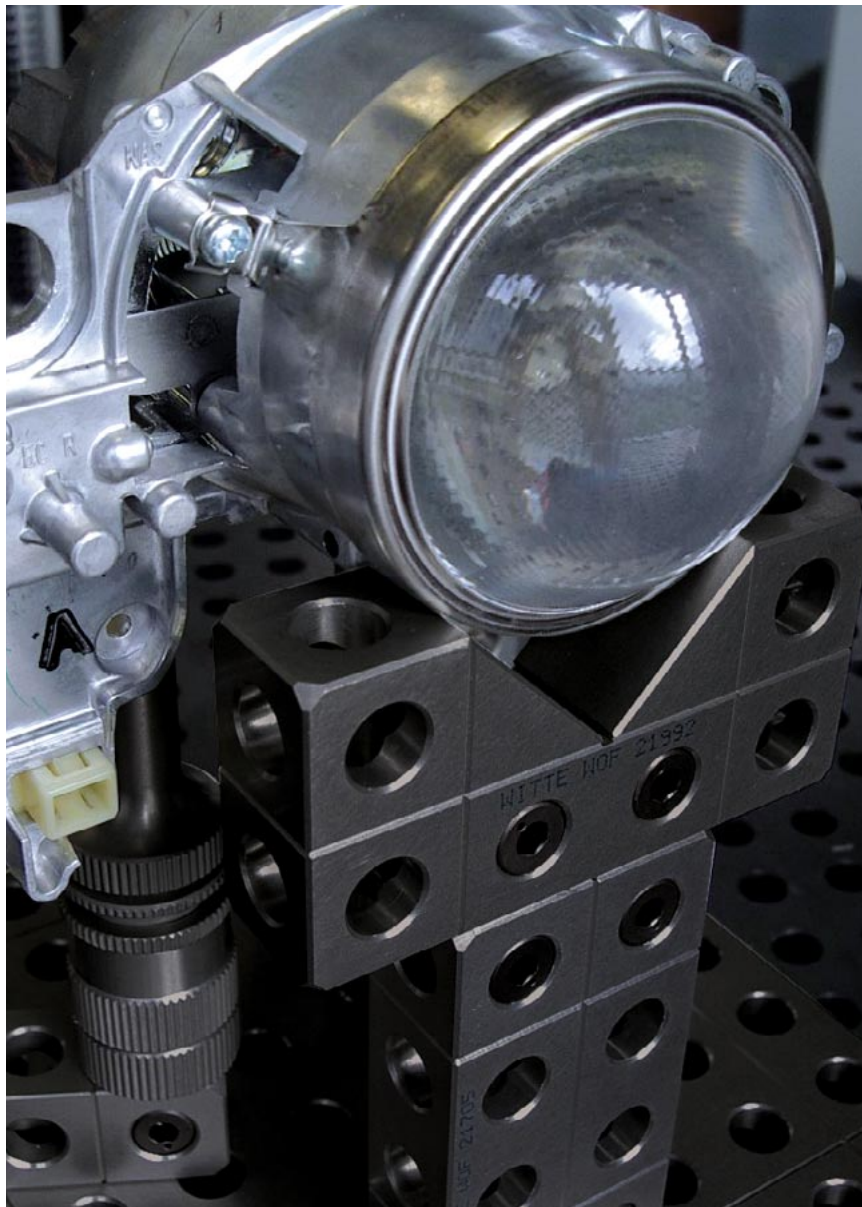
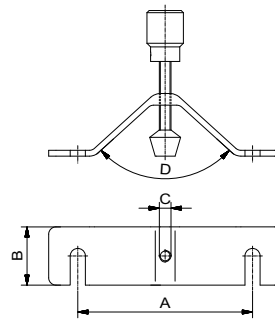
Delta block form 3
90° or 120°

Nr.	A (AF)	B	C	g
22173-1	16	40	90°	18
C 22174-1	25	62,5	90°	123
22175-1	40	100	90°	506
28045-1	50	125	90°	981
22255-1	16	36	120°	30
22256-1	25	56,25	120°	114
22257-1	40	90	120°	468
28048-1	50	112,5	120°	1.173

C·E ALUFIX preferred range
 Green: Item is available immediately.
 C: Classic version, E: Eco version, CE: Classic or Eco
 ■: color "black"

Clamp bracket for V-block

Nr.	System	A	B	C	D	H
288281-1	AF 16	48	16	M4	90°	70
288282-1	AF 16	80	16	M4	120°	90
285344-1	AF 25	75	25	M6	90°	80
285345-1	AF 25	125	25	M6	120°	100
285346-1	AF 40	120	40	M8	90°	210
285347-1	AF 40	200	40	M8	120°	270

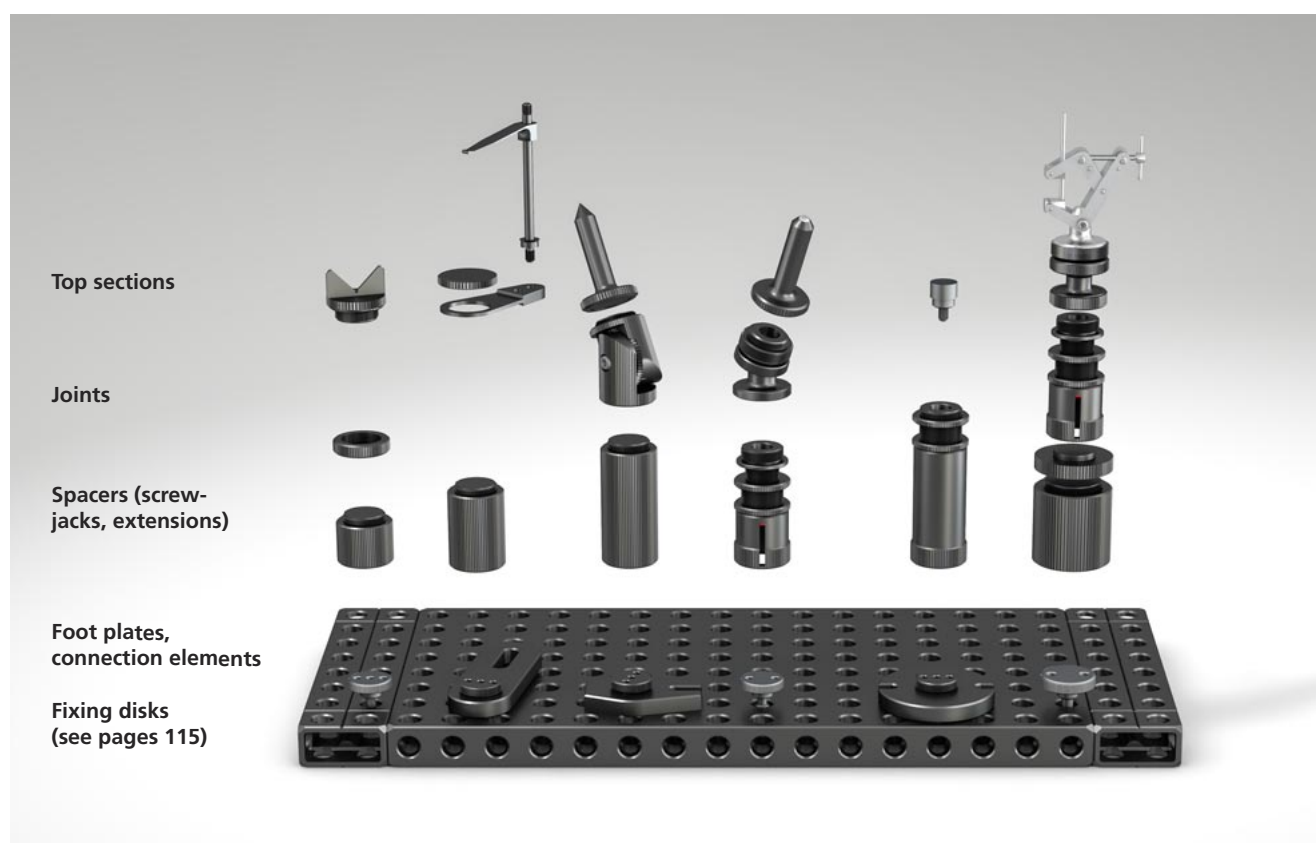


Application example for V 90°.

ALUFIX Classic

Screw jacks and top sections

Connection variety between part, frame and base plate



ALUFIX top sections provide the contact point between a part and an ALUFIX frame or base plate.

Using footplates, screw jacks, extensions and joints offset, variable and reliable positioning of numerous top section elements is achievable.

Material and surface characteristics for top sections

Fixed and spring loaded centres, true line studs, rotating top sections:
High tensile aluminium
Hard slide coated

Centres with ball:

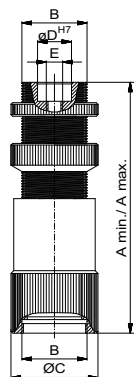
- Base in high tensile aluminium
- balls hardened and polished

Remaining top sections:

- High tensile aluminium, anodized

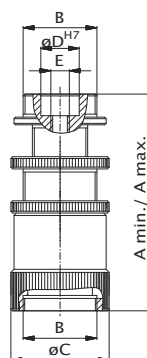
Screw-jack with precision thread and check nut

Nr.	A/min	A/max	B	C	D	E	g
90614-1	38	50	M24x1	32	8	M4	65
C 82139-1	38	50	M24x1	32	12,5	M6	65
C 82033-1	70	105	M24x1	32	12,5	M6	120
82085-1	110	170	M32x1	42	20	M10	330



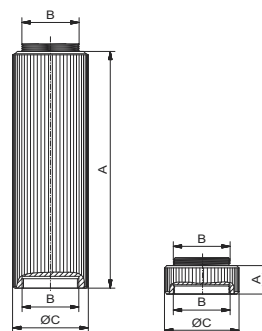
Screw-jack with anti-turn lock D32 and D42

Nr.	A/min	A/max	B	C	D	E	g
285201-1	50	70	M24x1	32	12,5	M6	78
285202-1	70	105	M24x1	32	12,5	M6	120
285203-1	105	170	M32x1	42	20	M10	310

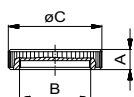


Screw-jack extension

Nr.	A	B	C	g
C 20628-1	6	M24x1	32	12
C 23286-1	12	M24x1	32	25
C 123461-1	15	M24x1	32	32
22856-1	100	M24x1	32	210
123462-1	15	M32x1	42	34
21658-1	100	M32x1	42	225

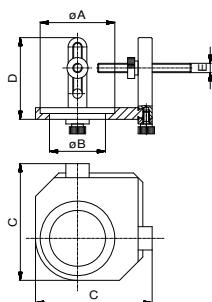


C·E ALUFIX preferred range
 Green: Item is available immediately.
 C: Classic version, E: Eco version, CE: Classic or Eco
 ■: color "black"



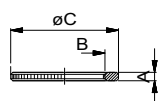
Cap for screw-jack aluminium or plastic

	Nr.	Material	A	B	C	
C	21667-1	Alu	6,5	M24x1	32	10
	21669-1	Alu	8,5	M32x1	42	18
	21666	POM	6,5	M24x1	32	4
	21668	POM	8,5	M32x1	42	9



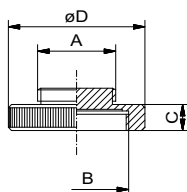
xy-Stop for screw-jack

	Nr.	A	B	C	D	E	
	285204-1	32	24	50	35	M4	32
	285205-1	42	32	65	46	M5	68



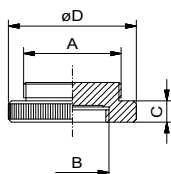
Ring for screw jack for use with top sections

	Nr.	A	B	C	
	25683-1	2,5	M24x1	32	2



Cross over male/female

	Nr.	A	B	C	D	
	21659-1	M24x1	M32x1	8	42	21



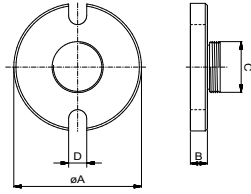
Cross over male/female

	Nr.	A	B	C	D	
	21227-1	M32x1	M24x1	7	42	32

C·E ALUFIX preferred range
 Green: Item is available immediately.
 C: Classic version, E: Eco version, CE: Classic or Eco
 ■: color "black"

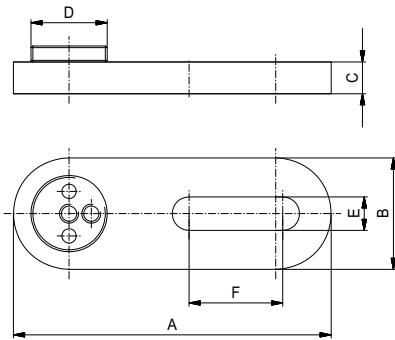
Universal plate for connection independant of grid

Nr.	A	B	C	D	
21670-1	60	8	M24x1	8,5	65
21671-1	75	8	M32x1	8,5	106



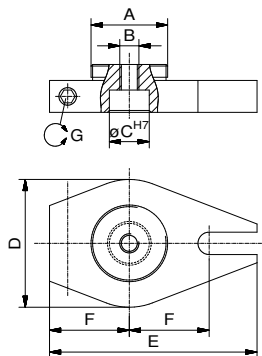
Clamping plate

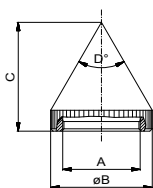
Nr.	A	B	C	D	E	F	
85232-1	100	35	10	M24x1	10,5	29,5	85



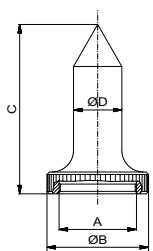
Footplate with pivot pin

Nr.	A	B	C	D	E	F	G	
285208-1	M24x1	M6	12,5	40	65	25	6°	50
285209-1	M32x1	M10	20	65	105	40	4°	131

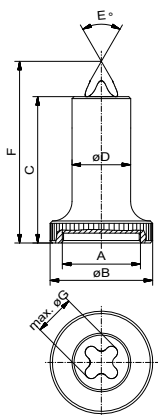


Center
short

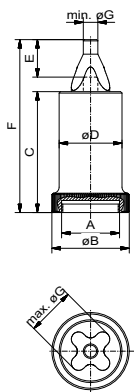
Nr.	A	B	C	D	g
21644	M24x1	32	35	60	30
21645	M32x1	42	45	60	66

Center
long

Nr.	A	B	C	D	g
23638	M12x0,5	16	27,5	8	4
C 21646	M24x1	32	50	12,5	25
21648	M24x1	32	75	12,5	33
21647	M32x1	42	70	20	67
21649	M32x1	42	120	20	106

Autocenter
spring loaded, star shaped

Nr.	A	B	C	D	E	F	min. ø	max. ø	g
95532-1	M24x1	32	50	18	60	61	1	12,5	40

Autocenter
spring loaded, star chaped, with cylindrical pin

Nr.	A	B	C	D	E	F	min. ø	max. ø	g
94543-1	M24x1	32	50	26	15,5	71,5	6	20	120
95531-1	M32x1	42	50	36	15,5	71,5	16	28	130



ALUFIX preferred range

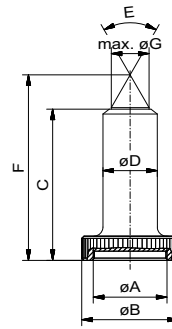
Green: Item is available immediately.

C: Classic version, E: Eco version, CE: Classic or Eco

■: color "black"

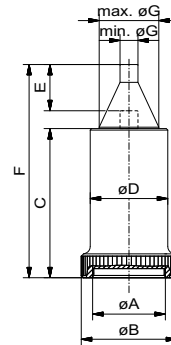
Autocenter
spring loaded

Nr.	A	B	C	D	E	F	min. ϕ	max. ϕ	$\frac{g}{g}$
81212-1	M24x1	32	50	18	60	61	1	12,5	40



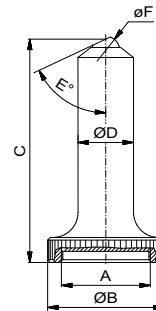
Autocenter
spring loaded, with cylindrical pin

Nr.	A	B	C	D	E	F	min. ϕ	max. ϕ	$\frac{g}{g}$
82252-1	M24x1	32	50	26	15,5	71,5	6	20	60



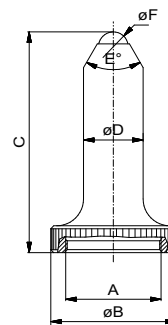
True line stud

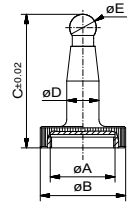
Nr.	A	B	C	D	E	F	$\frac{g}{g}$
80590-1	M24x1	32	32,6	15	65	10	30
80661-1	M24x1	32	77,6	15	65	10	45
80591-1	M32x1	42	37,6	20	65	10	36
80666-1	M32x1	42	122,6	20	65	10	83



Center
with ball

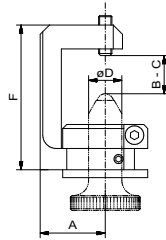
Nr.	A	B	C	D	E	F	$\frac{g}{g}$
90545-1	M24x1	32	34	15	60	10	27
80584-1	M24x1	32	52	12,5	60	6	21
80585-1	M24x1	32	53	12,5	60	8	22
80586-1	M32x1	42	72	20	60	6	60
80587-1	M32x1	42	73	20	60	8	57
80588-1	M32x1	42	74	20	60	10	63
80589-1	M32x1	42	75	20	60	12	60





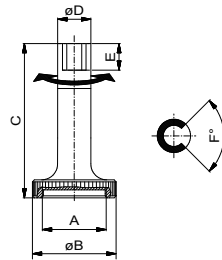
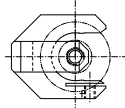
Centering element with reference ball

Nr.	A	B	C	D	E	
82142-1	M24x1	32	50	12	10	27



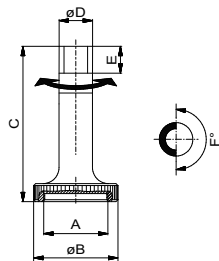
C clamp adjustable, without center with ball

Nr.	A	B	C	D	F	
81111-1	28	0	15	12,5	52	123



Stop and support 90° swivel top, fixing screw

Nr.	A	B	C	D	E	F	
81113-1	M24x1	32	58	12,5	10	90	26

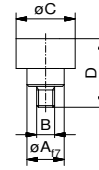


Stop and support 180° swivel top, fixing screw

Nr.	A	B	C	D	E	F	
81112-1	M24x1	32	58	12,5	10	180	27

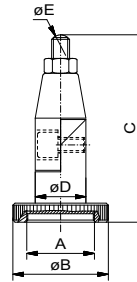
Support pin
for screw jack

Nr.	System	A	B	C	D	
428146-1	25	12,5	M6	19,8	23	31



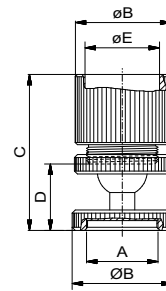
Center
with ball and joint

Nr.	A	B	C	D	E	
82174-1	M24x1	32	57-67	17	6	37




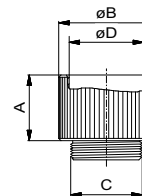
Magnetic holder
with ball joint

Nr.	A	B	C	D	E	
80941-1	M24x1	32	52,3	22,2	25	85



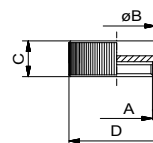
Magnetic holder
without ball joint

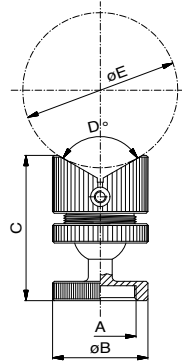
Nr.	A	B	C	D	
80948-1	22	32	M24x1	25	60



Moulding cap
for use with compound resin

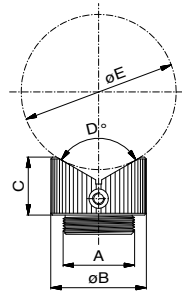
Nr.	A	B	C	D	
22005-1	M24x1	26	12	32	11





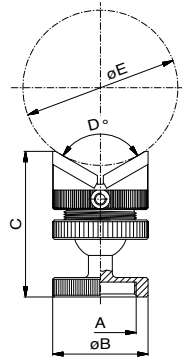
**V block 120°
with ball joint**

Nr.	A	B	C	D	E	
C 80733-1	M24x1	32	49	120	max. 52	58



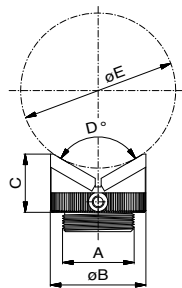
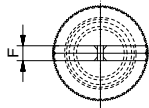
**V block 120°
without ball joint**

Nr.	A	B	C	D	E	
22286-1	M24x1	32	19,4	120	max. 52	34



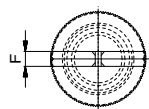
**Knife V 120°
with ball joint**

Nr.	A	B	C	D	E	F	
80927-1	M24x1	32	49	120	max. 56	5	42




**Knife V 120°
without ball joint**

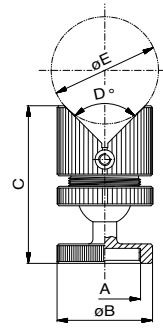
Nr.	A	B	C	D	E	F	
22631-1	M24x1	32	19,5	120	max. 56	5	19



C·E ALUFIX preferred range
 Green: Item is available immediately.
 C: Classic version, E: Eco version, CE: Classic or Eco
 ■: color "black"

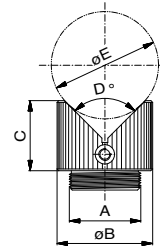
**V block 90°
with ball joint**

Nr.	A	B	C	D	E	
80725-1	M24x1	32	53	90	max. 36	61




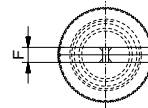
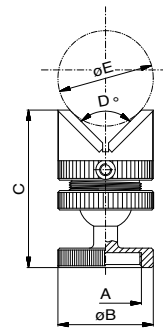
**V block 90°
without ball joint**

Nr.	A	B	C	D	E	
22285-1	M24x1	32	23,5	90	max. 36	30



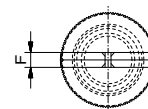
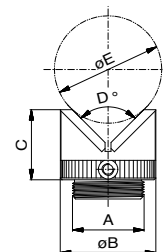
**Knife V 90°
with ball joint**

Nr.	A	B	C	D	E	F	
80926-1	M24x1	32	53	90	max. 32	5	42



**Knife V 90°
without ball joint**

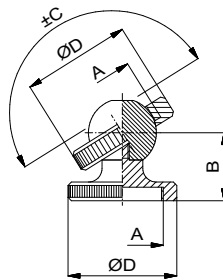
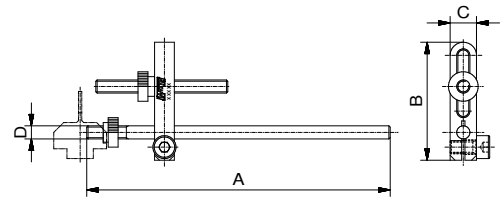
Nr.	A	B	C	D	E	F	
22555-1	M24x1	32	23,5	90	max. 32	5	19



Stop M4 for V-piece

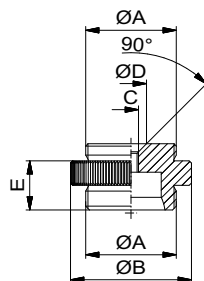


Nr.	A	B	C	D	Ø
285200-1	92	36	8	M4	12



Ball joint

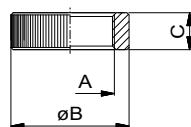
Nr.	A	B	C	D	Ø
80947-1	M24x1	22	55°	32	24
81588-1	M12x0,5	10	55°	16	6



Crossover male/male, for ball joint

Nr.	A	B	C	D	E	Ø
22647-1	M24x1	32	M4	8,2	13	21
24241-1	M12x0,5	16	-	-	5	12

M4 thread can be connected with studs from FX range as location pin

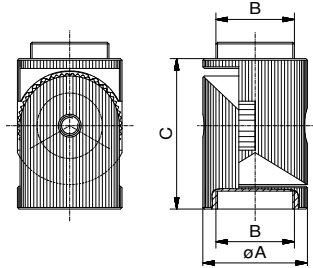


Spacer M24x1

Nr.	A	B	C	Ø
22644-1	M24x1	ø32	10	10

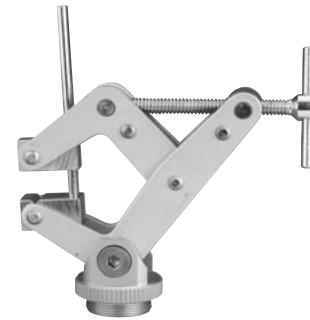
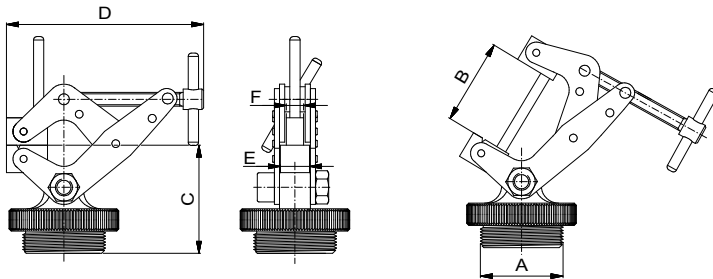
Joint for Screw-jacks with knurled serrations grid 6° or 4°

Nr.	A	B	C	Grid	g
285206-1	32	M24x1	40	4°	94
285207-1	42	M32x1	60	6°	232



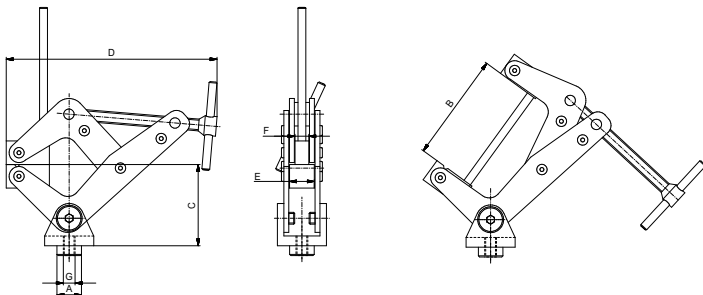
Screw clamp with joint, connection thread M24x1

Nr.	A	B	C	D	E	F	g
80949	M24x1	25	32	57,5	8,5	5	51
81270	M24x1	55	47,5	105	12,6	7	152



Screw clamp with joint, ALUFIX 25

Nr.	A	B	C	D	E	F	G	g
80924-1	12,5	55	41,3	105	12,6	7	M6	147



ALUFIX Classic Clamping elements

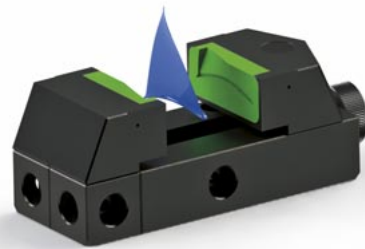
Secure workpiece clamping and accurate contact to support and contact surfaces



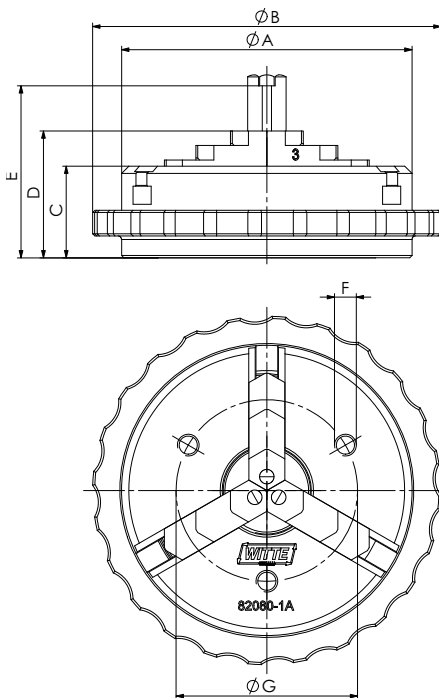
3-jaw manual chuck in new design with offset pins



Application example Universal Vice (page 89)



Vise with forming jaws - Page 87



3 Jaw Keyless Chuck for measuring applications

	Nr.	A	B	C	D	E	F	G	
	82220-1A	50	60	17,3	23,4	28,2	M4	30	-
	82080-1A	80	96	25,3	35	47,4	M6	50	-
	82125-1A	125	146	38,4	53,1	68,5	M8	80	-
	82200-1A	200	236	55,3	79,1	104,1	M10	120	-

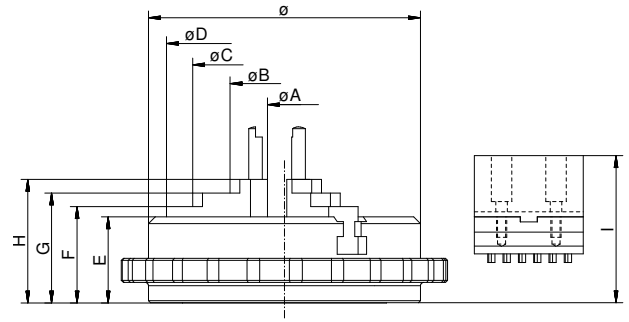
Concentricity base to part:
Repeatable accuracy max. 0,1mm, absolute accuracy 0,3mm



C-E ALUFIX preferred range
 Green: Item is available immediately.
 C: Classic version, E: Eco version, CE: Classic or Eco
 ■: color "black"

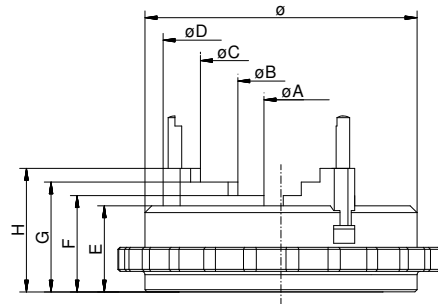
Further Dimensions 3 jaw keyless chuck

ϕ	A	B	C	D	E	F	G	H	I
50	1-34	13-46	27-60	41-74	17,3	18,4	21	23,4	30,3
80	1-46	21-66	43-88	65-108	25,3	27	31	35	44,8
125	1,5-72	38-108	72-142	106-176	38,4	41,1	47,1	53,1	69
200	2-116	58-172	112-226	166-280	55,3	63,1	71,1	79,1	103,3



3 jaw keyless chuck with reversed jaws

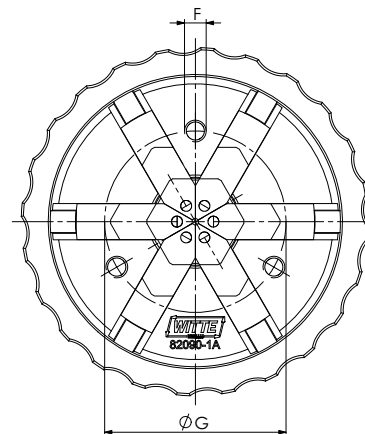
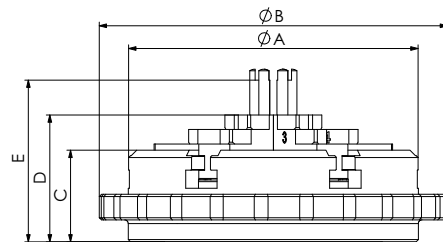
ϕ	A	B	C	D	E	F	G	H	I
50	1-34	13-46	27-60	41-74	17,3	18,4	21	23,4	30,3
80	1-46	21-66	43-88	65-108	25,3	27	31	35	44,8
125	1,5-72	38-108	72-142	106-176	38,4	41,1	47,1	53,1	69
200	2-116	58-172	112-226	166-280	55,3	63,1	71,1	79,1	103,3

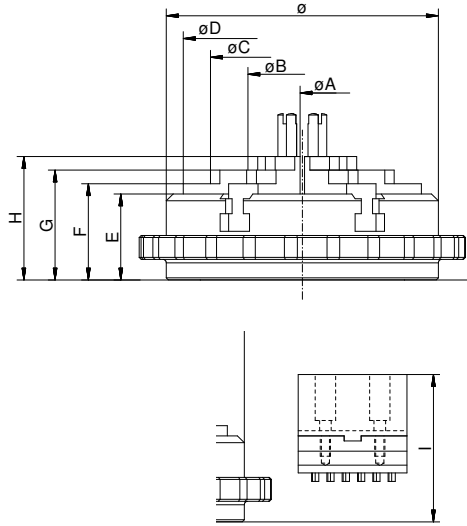


6 Jaw Keyless Chuck for measuring applications

Nr.	A	B	C	D	E	F	G	
82340-1A	50	60	17,3	23,4	28,2	M4	30	
82090-1A	80	96	25,3	35	44,6	M6	50	
82135-1A	125	146	38,4	53,1	68,5	M8	80	
82210-1A	200	236	55,3	79,1	104,1	M10	140	

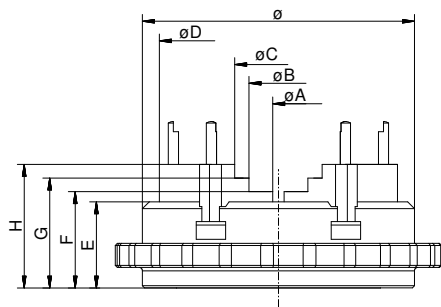
Concentricity base to part:
Repeatable accuracy max. 0,1mm, absolute accuracy 0,3mm





Further Dimensions
6 jaw keyless chuck

ϕ	A	B	C	D	E	F	G	H	I
50	1,5-29	18-45	30-57	42-69	17,3	18,4	21	23,4	30,3
80	2-44	27-69	47-89	66-108	25,3	27	31	35	44,8
125	3-71	44-112	76-144	108-176	38,4	41,1	47,1	53,1	69
200	5-113	59-167	113-221	169-277	55,3	63,1	71,1	79,1	103,3



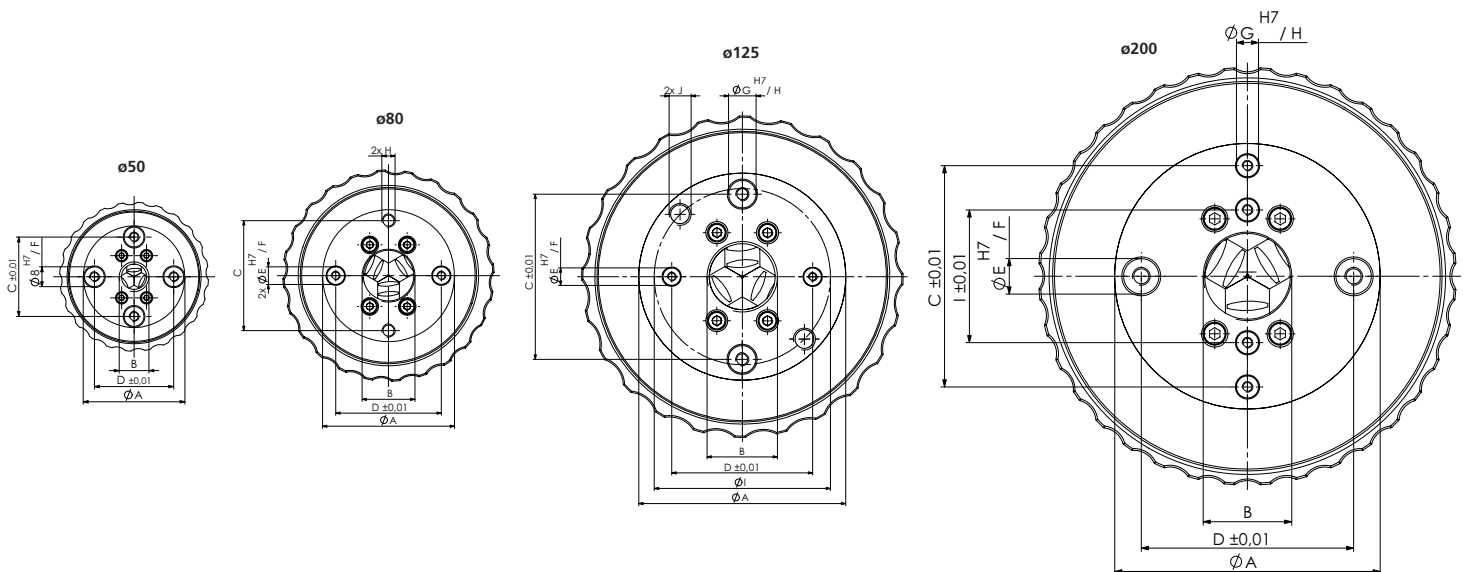
6 jaw keyless chuck with reversed jaws

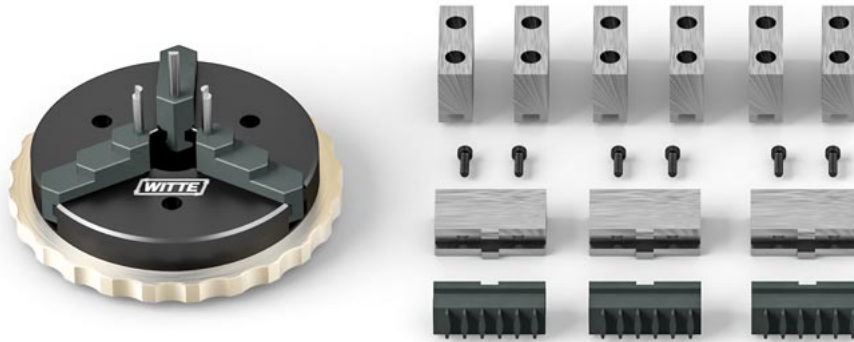
ϕ	A	B	C	D	E	F	G	H	I
50	10-30	22-42	34-54	50-70	17,3	18,4	21	23,4	30,3
80	18-43	36-61	56-81	81-106	25,3	27	31	35	44,8
125	27-68	59-100	91-132	131-172	38,4	41,1	47,1	53,1	69
200	43-110	99-166	153-220	207-274	55,3	63,1	71,1	79,1	103,3

Further Dimensions
3 and 6 jaw keyless chucks, view from underneath

ϕ	A	B	C	D	E	F	G	H	I	J	AF
50	41	M12x0,5	32	32	8	M4	-	-	-	-	16
80	60	M 24x1	50	48	8	M4	-	M6	-	-	16/25
125	94	M32x1	75	64	8	M4	12,5	M6	80	M10	16/25/40
200	150	M50x1,5	125	120	20	M10	12,5	M6	75	-	25/40

Fixing disks for mounting keyless chucks are shown on page 107.

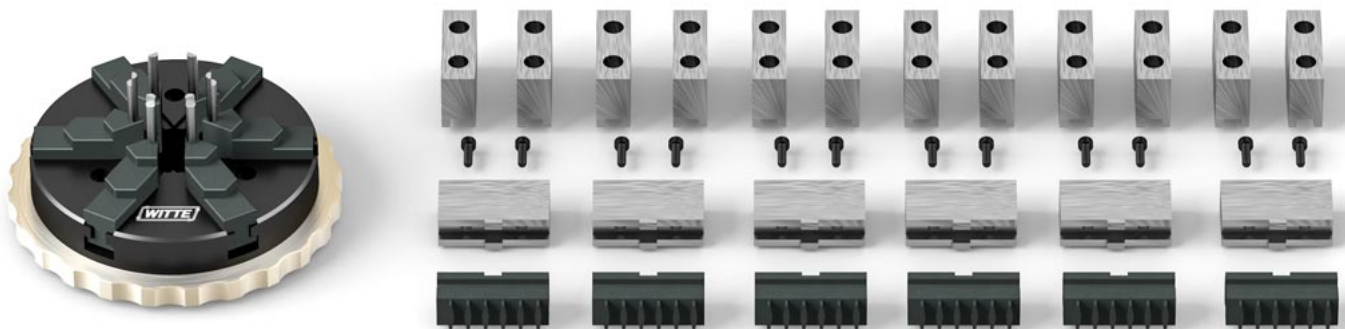




Basic Set 3 jaw Keyless chuck

19-pcs., 1 x chuck with reversible jaws,
1 x Base jaw set, 9 x Top jaws, 6 x Screws

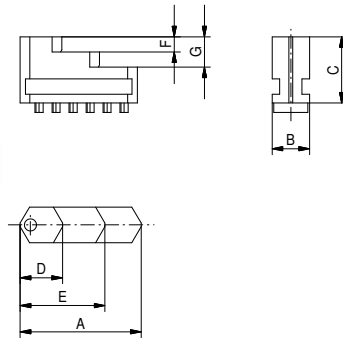
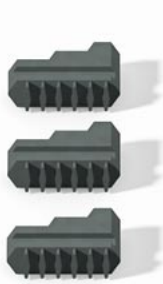
Nr.	ø	comprising of:	g
82373-1A	50	1x82220-1A, 1x82351, 9x26288, 6x11434-S1	138
82376-1A	80	1x82080-1A, 1x82356, 9x26289, 6x11435-S1	523
82378-1A	125	1x82125-1A, 1x82360, 9x26290, 6x10437	1.946
82380-1A	200	1x82200-1A, 1x82364, 9x26291, 6x10631	7.300



Basic Set 6 jaw Keyless chuck

37-pcs., 1 x chuck with reversible jaws,
1 x Base jaw set, 18 x Top jaws, 12 x Screws

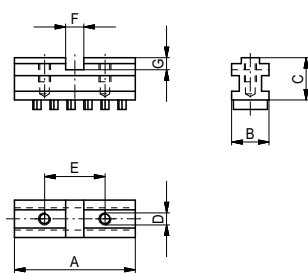
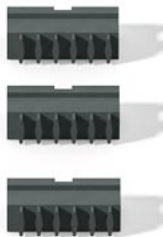
Nr.	ø	comprising of:	g
82374-1A	50	1x82340-1A, 1x82354, 18x26288, 12x11434-S1	173
82377-1A	80	1x82090-1A, 1x82358, 18x26289, 12x11435-S1	690
82379-1A	125	1x82135-1A, 1x82362, 18x26290, 12x10437-S1	2.595
82381-1A	200	1x82210-1A, 1x82366, 18x26291, 12x10631-S1	9.830



Reversible jaws set for 3 jaw chuck, hard anodized, incl. 3 fixing pins

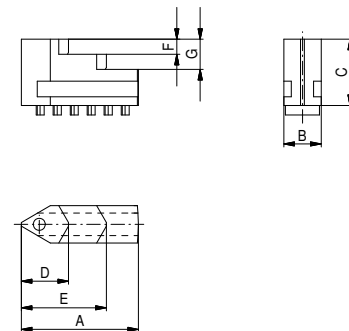
Nr.	for \varnothing	A	B	C	D	E	F	G	$\frac{G}{A}$
82350-A	50	20	5,9	10,7	7	14	2,5	5	10
82355-A	80	32	9,9	17,5	11	22	4,0	8	30
82359-A	125	52	15,9	27,1	17	34	6,0	12	20
82363-A	200	82	24,9	44,1	27	54	8,0	16	370

Also fit in 6 jaw chucks.



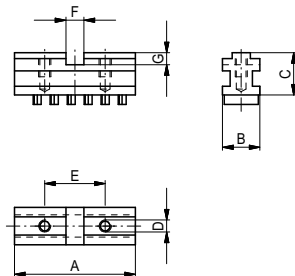
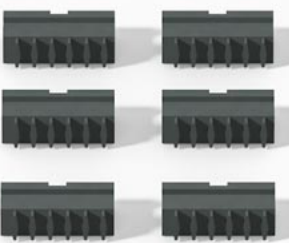
Base jaws set for 3 jaw chuck, hard anodized

Nr.	for \varnothing	A	B	C	D	E	F	G	$\frac{G}{A}$
82351	50	20	5,9	6,6	M2	10	3	2	10
82356	80	32	9,9	10,9	M3	16	5	3	20
82360	125	52	15,9	17,5	M5	24	8	5	160
82364	200	82	24,9	28,5	M8	40	12	8	380



Reversible jaws set for 6 jaw chuck, hard anodized, incl. 6 fixing pins

Nr.	for \varnothing	A	B	C	D	E	F	G	$\frac{G}{A}$
82353-A	50	20	5,9	10,7	8	14	2,5	5	20
82357-A	80	32	9,9	17,5	12,5	22,5	4	8	60
82361-A	125	52	15,9	27,1	20	36	6	12	240
82365-A	200	82	24,9	44	27	54	8	16	1.000



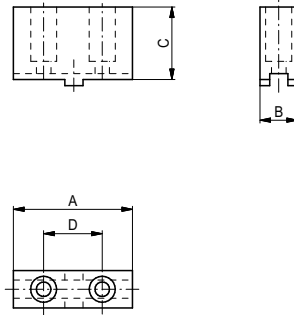
Base jaws set for 6 jaw chuck, hard anodized

Nr.	for \varnothing	A	B	C	D	E	F	G	$\frac{G}{A}$
82354	50	20	5,9	6,6	M2	10	3	2	18
82358	80	32	9,9	10,9	M3	16	5	3	50
82362	125	52	15,9	17,5	M5	24	8	5	190
82366	200	82	24,9	27,5	M8	40	12	8	750

Top jaws single

to use on base jaws, for 3 and 6 jaw keyless chucks

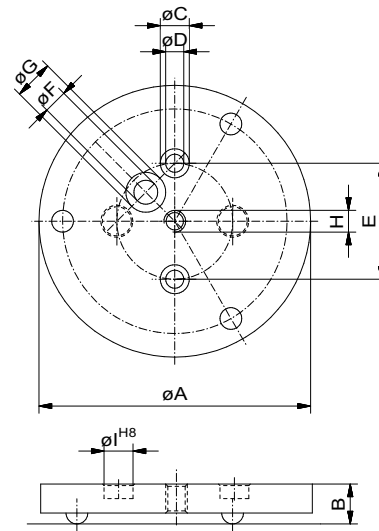
Nr.	for ϕ	A	B	C	D	Material	$\frac{g}{6}$
26288	50	20	5,9	12	10	EN AW-7075	3
26288-10	50	20	5,9	12	10	POM	2
26289	80	32	9,9	18	16	EN AW-7075	13
26289-10	80	32	9,9	18	16	POM	10
26290	125	52	15,9	28	24	EN AW-7075	50
26290-10	125	52	15,9	28	24	POM	43
26291	200	82	24,9	44	40	EN AW-7075	150
26291-10	200	82	24,9	44	40	POM	139



Center plate

for 3 and 6 jaw keyless chucks

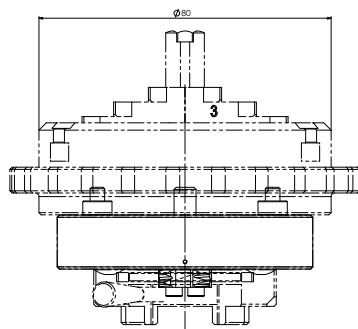
Nr.	for ϕ	A	B	C	D	E	F	G	H	I	$\frac{g}{6}$
82371-1	50	75	11	8	5	32	6,6	11	M6	8	100
82159-1	80	120	13	11	6,6	50	-	-	-	8	317
82344-1	125	187	18	11	6,6	75	-	-	-	8	493
82345-1	200	300	28	18	11	120	-	-	-	12,5	528



Quick change coupling

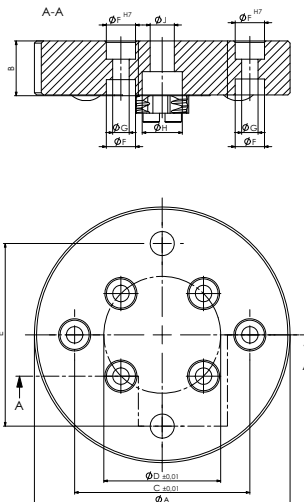
for keyless chucks $\phi 50$ mm and $\phi 80$ mm

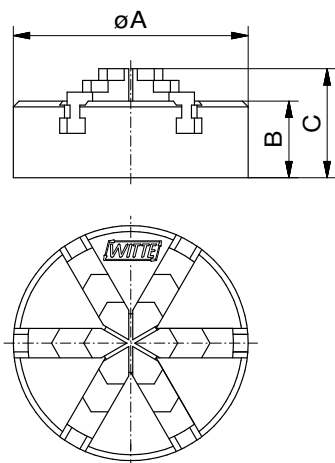
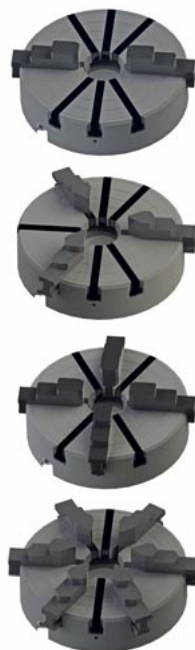
Nr.	ϕA	B	C	ϕD	E	ϕF	ϕG	ϕH	ϕJ	$\frac{g}{6}$
291548-1	70	15	48	32	50	8	4,5	11	6,6	168



The required connection elements are included in supply.

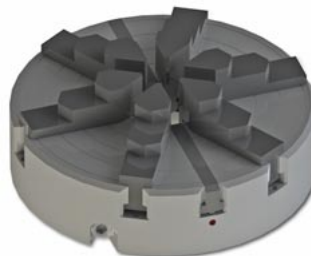
Picture shows coupling with connection elements, plus quick change coupling bottom section (282474 on page 25) and keyless chuck Dia 80 (82080 on page 80) not included in supply.





Keyless chuck
for 2,3,4,6 jaws, $\varnothing 125$, anodized natural

Nr.	A	B	C	
285291-1	125	33	50	1300



6 stepped standard jaws are included in supply.
Base and special jaws are available on request.
Base same as chuck $\varnothing 125$: 82125, 82135.
Suitable Center plate: No. 287192.



Vise set
10-pcs., comprising of:

Nr.	System	Vise	Flat jaw	Pins	V-jaw	V-jaw
		1x	Alu 2x	3x	small 2x	big 2x
81790-1	16	81784-1	24580-1	24604	24586-1	24598-1
81791-1	25	81785-1	24581-1	24605	24587-1	24599-1
81792-1	25	81786-1	24582-1	24605	24588-1	24600-1
81793-1	25	81787-1	24583-1	24605	24589-1	24601-1
81794-1	40	81788-1	24584-1	24606	24590-1	24602-1
81795-1	40	81789-1	24585-1	24606	24591-1	24603-1

Jaws also available per piece
Flat and V jaws are also available in polymer
(POM black).



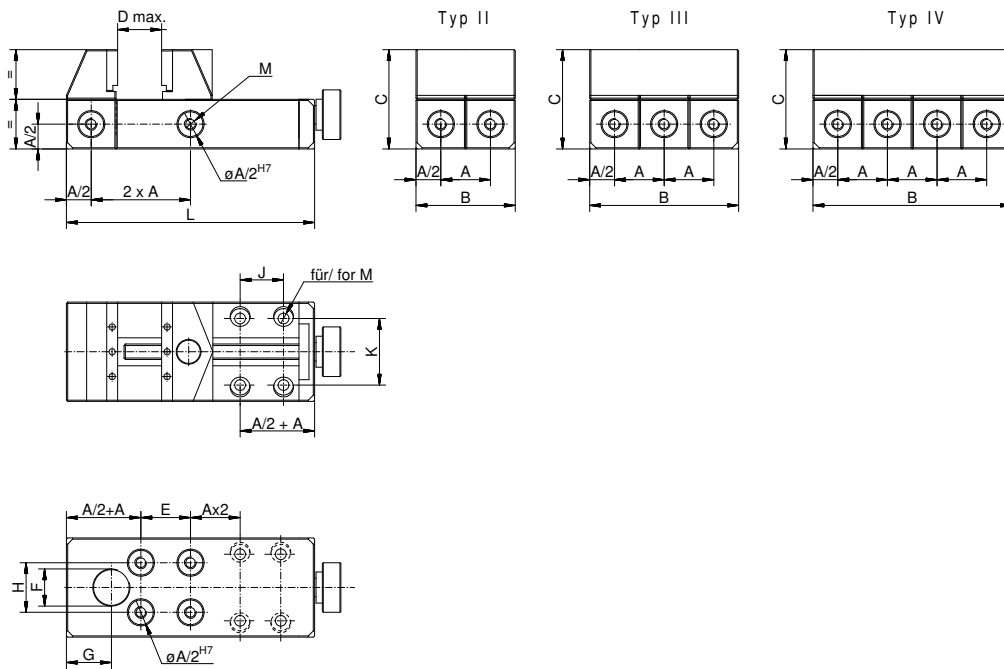
Parallel-vise without pins

Nr.	AF	Typ	L	B	C	D	E	F	G	H	J	K	M	g
81784-1	16	II	80	32	32	40	-	M12x0,5	14,5	16	-	*	M4	135
C 81785-1	25	II	125	50	50	65	-	M24x1	23	25	-	*	M6	750
81786-1	25	III	150	75	50	90	25	M24x1	37,5	50	-	50	M6	905
81787-1	25	IV	175	100	50	115	25	M24x1	62,5	50	-	50	M6	1.410
81788-1	40	III	320	120	80	225	40	M32x1	100	80	-	80	M10	4.620
81789-1	40	IV	360	160	80	265	40	M32x1	100	80	80	80	M10	6.150



Fixing Disks for connection are shown on page 109.

* Connectable to base plates using only screw connectors, connectable to grid base plates using quick connectors.

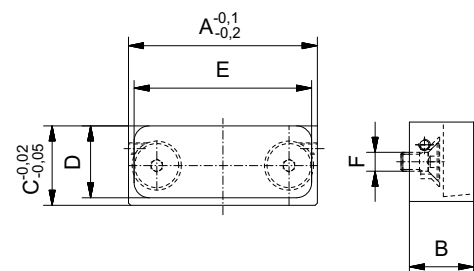


Forming jaw with bushes, for compound resin (page 88)

Nr.	System	A	B	C	D	E	F	g
81831-1	AF 16	32	10	13,5	12	29	M3	10
81832-1	AF 25	50	17	21	19	47	M5	30
81833-1	AF 25	75	17	21	18,5	71	M5	40
81834-1	AF 25	100	17	21	18,5	96	M5	60
81835-1	AF 40	120	34	33,5	30	112	M8	170
81836-1	AF 40	160	34	33,5	30	152	M8	226



Supply includes:
 1 forming jaw,
 2 bushes,
 2 Threaded pins,
 2 countersunk screws.



C·E ALUFIX preferred range
 Green: Item is available immediately.
 C: Classic version, E: Eco version, CE: Classic or Eco
 ■: color "black"



Plasticine compound resin

Knead blue and yellow components in ratio 1:1, blend well until colour throughout is green.

Apply within 15 minutes. The resin hardens to full strength within 3 hours.

Technical details:

Tensile strength 300 kg/cm²

Compression strength: 800 kg/cm²

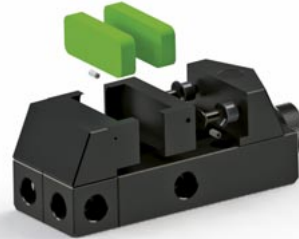
Heat resistance upto +200°C



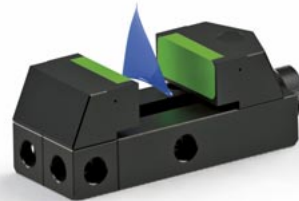
Application example for compound resin in standard moulding cap.

Compound resin for moulding workpieces

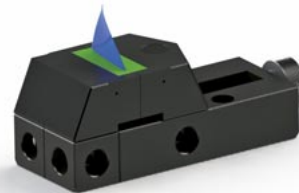
Nr.	Contents g	g
80692	100	120
80685	400	460



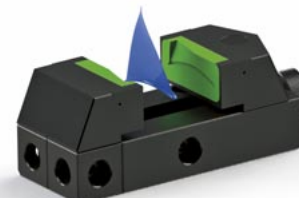
Attaching the forming jaws with plasticine compound



Positioning of workpiece




The forming jaws with the compound resin are pressed together.

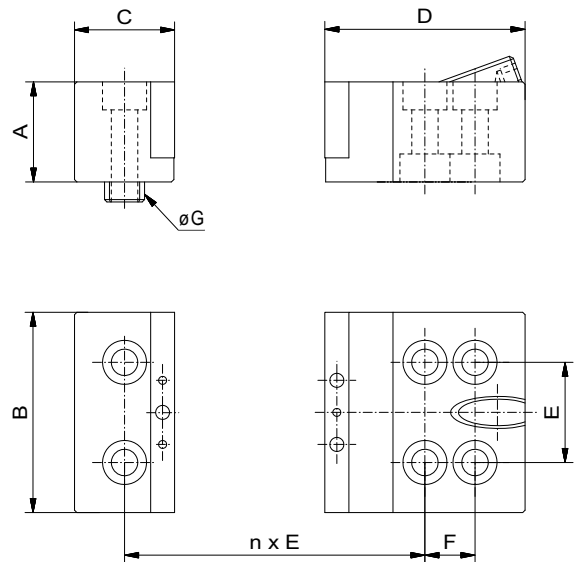
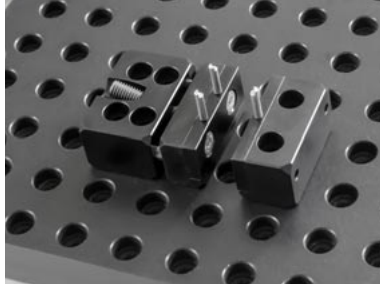


The compound resin adjusts to the contours of the workpiece

Universal Vise


2 pcs., without basic unit for mounting on base plates or grid base plates, Shift $\pm 12,5$ mm

Nr.	System	A	B	C	D	E	F	G	
93498-1	AF25	25	50	25	40	25	12,5	12,5	296
289488-1	AF40	40	80	40	64	40	20	20	878



Pin cushion

with rubberized pins

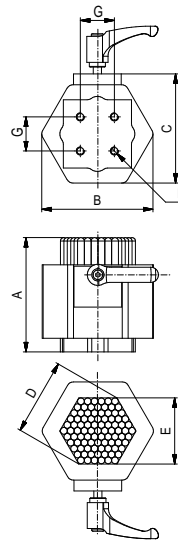
Nr.	A	B	C	D	E	F	G	max. N	
91940-1	84	81,5	80	55	48,5	6	25	150	1.400
98101-1	84	52	55	35	31	6	25	80	1.100



Easy to move pins adjust to shape of workpiece.


Then by using a locking device the resulting imprint is secured into place.

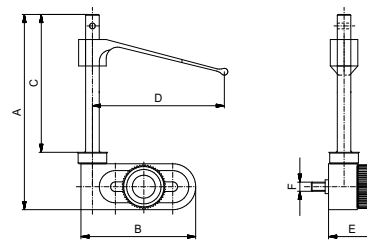
This enables repeatable clamping of workpieces, that can be secured with hold down springs and studs.



Hold-down column clamp

for pin cushion, in set (2 pieces) with hold down columns and springs

Nr.	A	B	C	D	E	F	
91941-1	85	50	60	57,5	20,5	M4	80

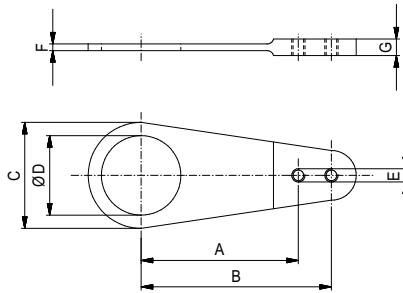
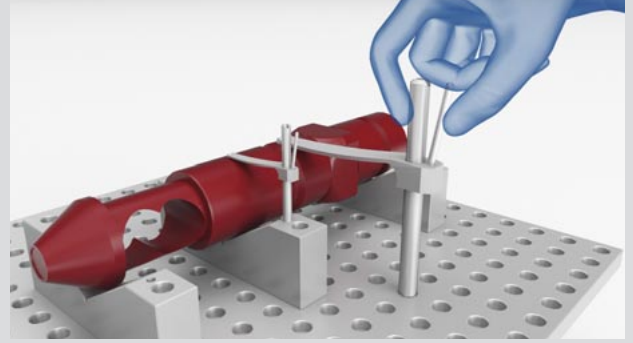


Hold down springs

With hold-down springs, workpieces are clamped in fixtures.

With light pressure from above on the spring it is tensioned and locked.

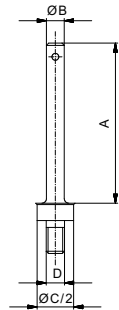
Hold-down springs with release pins offer an easy method to loosen the spring.



Mounted between screw jacks (page 71) and top sections (page 74)

Traverse holder with heel for hold-down stud

Nr.	A	B	C	D	E	F	G	⊗
22267-1	47,5	57,5	32	24	M4	2	5	11
22268-1	47,5	57,5	32	24	M6	2	5	11



Hold down stud with thread

Nr.	A	B	C	D	⊗
20339-1	35	3,9	16	M4	3
22262-1	55	5,9	16	M4	5
C 22263-1	60	5,9	25	M6	8
24885-1	125	5,9	25	M6	15
20100-1	130	9,8	40	M10	38
30126-1	120	11,9	50	M12	56



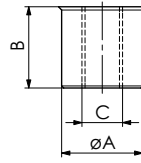
Hold down stud self locking

Nr.	A	B	C	⊗
20338-1	35	3,9	16	3
22259-1	55	5,9	16	5
C 22260-1	60	5,9	25	9

C·E ALUFIX preferred range
 Green: Item is available immediately.
 C: Classic version, E: Eco version, CE: Classic or Eco
 ■: color "black"

Sleeve for Hold down stud

Nr.	System	ϕA	B	C	$\frac{g}{mm}$
451659-1	AF25	12,45	13	M6	-
451662-1	AF40	19,95	20	M10	-
451665-1	AF50	24,95	25	M12	-



Hold down stud for sleeve

Nr.	System	ϕA	B	C	D	$\frac{g}{mm}$
124494 -1	AF25	5,9	150	8	M6	-
124495-1	AF40	9,9	150	13	M10	-
124496-1	AF50	11,9	150	16	M12	-



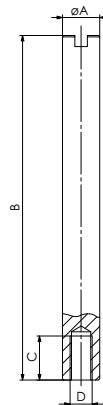
Hold down stud heavy duty

Nr.	ϕA	B	C	D	$\frac{g}{mm}$
293247-1	18	200	16	M12	-

For special applications.
Not compatible with
Alufix modular fixturing system.

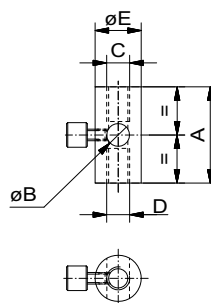
Hold down stud heavy duty

Nr.	ϕA	B	C	D	$\frac{g}{mm}$
124351-1	27	250	32	M16	-
124354-1	41	300	50	M24	-



Cross connector for hold-down stud

Nr.	A (AF)	B	C	D	E	$\frac{g}{mm}$
287053-1	16	$\phi 3,9$	M6	M4	$\phi 12$	3
287054-1	25	$\phi 5,9$	M6	M6	$\phi 12$	6
287055-1	40	$\phi 9,8$	M6	M10	$\phi 20$	28
287056-1	50	$\phi 11,9$	M10	M12	$\phi 20$	55



Application example for cross connector
with hold down column.

Hold down spring with release pin

Nr.	System	øA	B	C	D	
292835-1	AF25	6	57,5	11,5	42,5	-
292837-1	AF40	10	91,9	19,2	64	-
292839-1	AF50	12	115	23	86,5	-

Hold down spring heavy duty with release pin

Nr.	øA	B	C	D	
293248-1	18	168	34,5	124	-
293250-1	27	252	52	171	-
293252-1	41	378	78	197	-

For special applications. Not compatible with Alufix modular fixturing system.

Hold down spring with release pin and slot end

Nr.	System	A	B	C	D	
292880-1	AF25	6	57,5	11,5	42,5	-
292881-1	AF40	10	91,9	19,2	64	-
292882-1	AF50	12	115	23	86,5	-

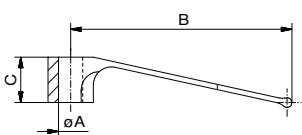
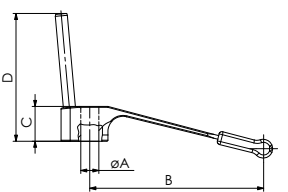
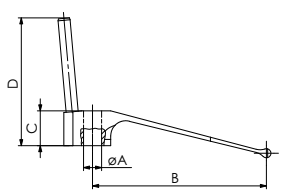
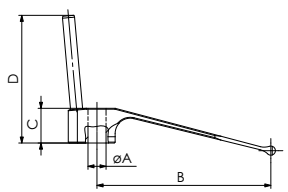
Hold down spring with release pin and plastic cap

Nr.	System	A	B	C	D	
292861-1	AF25	6	57,5	11,5	42,5	-
293678-1	AF40	10	91,9	19,2	64	-
293679-1	AF50	12	115	23	86,5	-

Hold down spring self locking on hold down stud

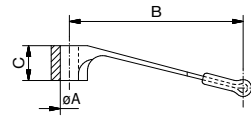
Nr.	System	A	B	C	Clamp force	
20244-1	AF 16	4	36	7,5	8 N	1
20290-1	AF25/16	6	36	7,5	12 N	1
22258-1	AF25/16	6	59	11,5	24,5 N	6
24499-1	AF25	6	105	11,5	12 N	30
22355-1	AF40	10	94	19,2	49 N	60
28058-1	AF50	12	118	23	59 N	50

C·E ALUFIX preferred range
 Green: Item is available immediately.
 C: Classic version, E: Eco version, CE: Classic or Eco
 ■: color "black"



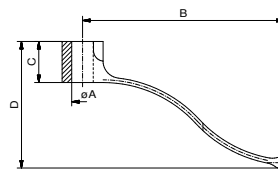
Hold down spring with plastic cap silicone free for sensitive surfaces

Nr.	System	A	B	C	$\frac{g}{mm}$
93442-1	AF25/16	6	104	11,5	9
93443-1	AF25/16	6	57	11,5	6



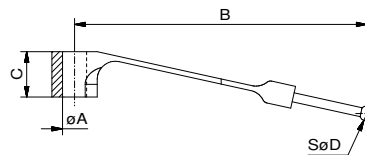
Hold down spring for low clamping

Nr.	System	A	B	C	Clamp force	$\frac{g}{mm}$
34634-1	AF16	4	36,5	23,5	8 N	2
34764-1	AF16	6	36,5	23,5	12 N	1
34765-1	AF25	6	59	37	24,5 N	3
34766-1	AF40	10	94,5	59,5	49 N	27
34767-1	AF50	12	118	74	59 N	50



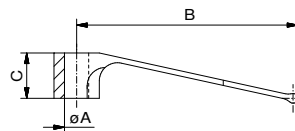
Hold down spring with ball point

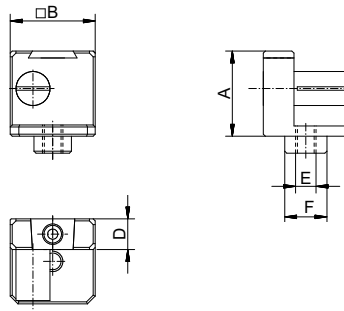
Nr.	System	A	B	C	SøD	$\frac{g}{mm}$
284708-1	AF16	4	48,5	7,5	2,5	2



Hold down spring in black plastic

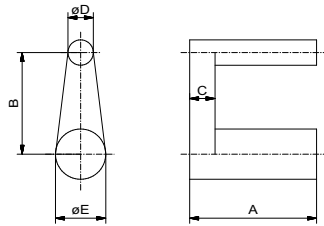
Nr.	System	A	B	C	$\frac{g}{mm}$
53976	AF25/16	6,1	59	11,5	4
53977	AF25/16	6,1	105	11,5	6





Winder

Nr.	System	A	B	AF	D	E	F	⌀
80742-1	AF16	16	16	16	6	M4	8	11
80743-1	AF25	25	25	25	9	M6	12,5	34
80744-1	AF40	40	40	40	14	M8	20	169



Deflector

Nr.	System	A	B	C	D	E	⌀
22274-1	AF16	19	16	3	4	7,9	4
22275-1	AF25	31	25	6	6	12,4	16
22276-1	AF40	50	40	10	10	19,8	66

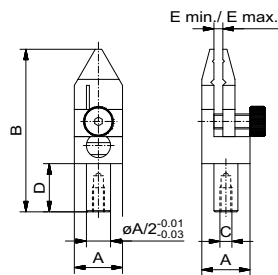


Winder tape
in plastic, 12mm wide

Nr.	System	Length (m)
00041	AF16/25/40	5

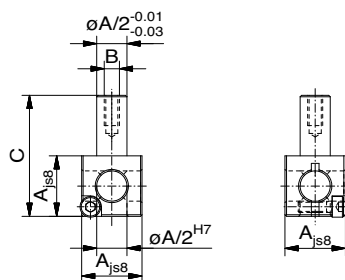


Exchangeable jaws in other versions available on request.



Parallel clamp
with exchangeable jaws

Nr.	A	B	C	D	E min.	E max.	⌀
284585-1	10	34	M2,5	10	0	5	16
284476-1	16	54	M4	16	0	8	20
284134-1	25	65	M6	5	0	12,5	80

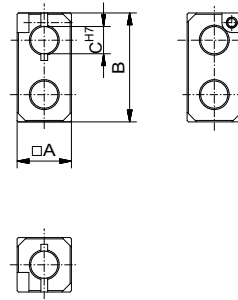


Clampholder
with stud

Nr.	A	B	C	⌀
285043-1	16	M4	32	8
288283-1	25	M6	30	30

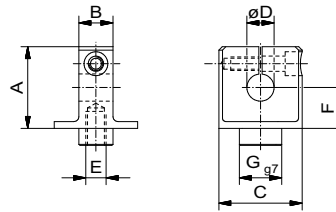
Dial indicator holder ALUFIX 16

Nr.	System	A	B	C	$\frac{g}{mm}$
80128-1	AF 16	16	32	8	14



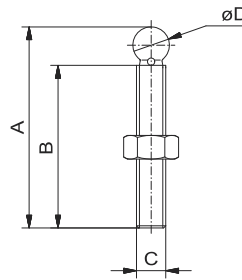
Dial indicator holder

Nr.	System	A	B	C	D	E	F	G	$\frac{g}{mm}$
80755-1	AF25	24	10	24,5	8	6	12	12,5	10
80756-1	AF40	24	11,9	39,5	8	8	12	20	77



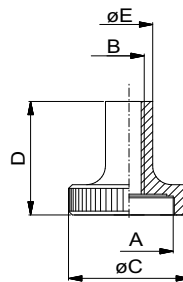
Ball point

Nr.	A	B	C	D	$\frac{g}{mm}$
93518-1	55	38	M8x1	10	20



Support for ball point

Nr.	A	B	C	D	E	$\frac{g}{mm}$
55032-1	M24x1	M8x1	32	30	12,5	76



ALUFIX

Connection elements

For secure and precise connections of all types of ALUFIX elements

ALUFIX Quick connection

A twin bolt is positioned between Alufix elements to be connected. An excentric slot on the lock slides round and grips the head of a twin bolt resulting in a tight connection.



For optimal function, quick connectors must be tightened with the correct torque. You will find tools for this on page 112.

Quick connection for adjustable bars / base plates

A special combi bolt enables offset positioning of bars or 2D base plates with slots – before the lock is tightened.



A variety of elements allows combination of Alufix components whenever two opposite holes, or a hole and a nub are to be connected.

This works also between different system sizes. The connections are also repeatable and easy to release.

ALUFIX Screw connection



A complete screw connection set consisting of: screw, crosspiece, positioning sleeve and crosspiece nut

Screw connections

For lasting tight connections the screw connection has proved to be the best. It is positioned using a sleeve. A socket head screw with crosspiece and crosspiece nut provide the tensile force.

Connecting with couplings

Single couplings

are used to maintain the system grid with fitted bores on the face ends of ECO Plus bars. Elements can then be mounted to the coupling plates using quick or screw connectors.



Surface/face end connection of ECO Plus bars using screw connection



Surface/face end connection of ECO Plus bars using quick connection

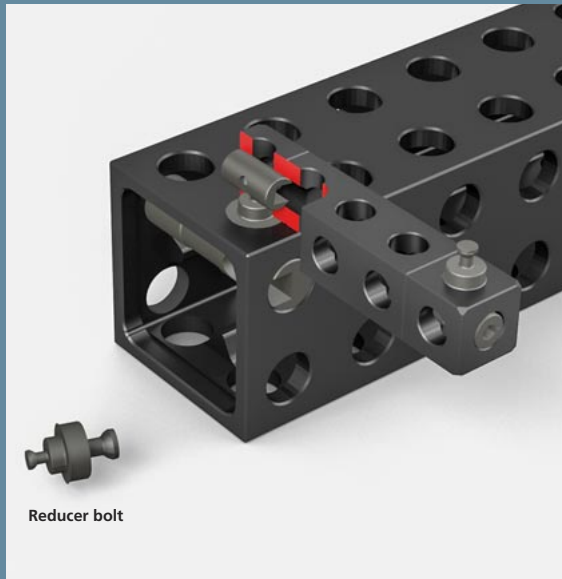
Double couplings

are used to connect ECO Plus bars end to end. They center the bars and have through-holes for screw connectors

End-to-end coupling of ECO Plus bars with screw connection



Connecting different system sizes



Reducer bolt

Alufix elements in different system sizes are connected using

- Reducer sleeves
- Reducer bolts

Connecting with combi bolts

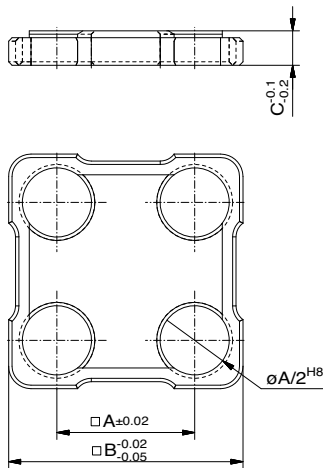
Connection with screw and quick connection

Combi bolts have a quick connect lockbolt on one side and a thread on the other.

This means they can be screwed into a cross-piece nut or directly into a suitable component - this can then be used with quick connections



A slide is quickly connected to the surface of an ECO Plus bar using two combi bolts



Single couplings for face connections.
These couplings are used with screw connectors.

Coupling, single for 1 row Bar ECO Plus

	Nr.	System	A	B	C	⌀
E	23315-E1	AF 25	25	19	5	4
	20794-E1	AF 40	40	32	8	16
	26930-E1	AF 50	50	32	10	29

Coupling, single for 2 row Bar ECO Plus

	Nr.	System	A	B	C	⌀
E	23325-E1	AF 25	25	42	6,25	26
E	20792-E1	AF 40	40	68	10	120
	26727-E1	AF 50	50	84	12,5	228

Coupling, single for 1x2 row Bar ECO Plus

	Nr.	System	A	B	C	⌀
E	55134-E1	AF 25	25	17x42	5	10
E	57211-E1	AF 40	20	32x68	8	50

Coupling, single for 2x3 row Bar ECO Plus

	Nr.	System	A	B	C	⌀D	⌀
	122443-E1	AF 40	40	68x108	10	11	125

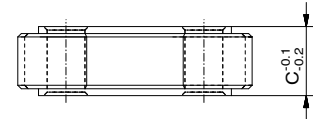
Coupling, single for 3 row Bar ECO Plus

	Nr.	System	A	B	C	⌀
	23613-E1	AF 40	40	108	10	333
	26853-E1	AF 50	50	134	12,5	670

C·E ALUFIX preferred range
 Green: Item is available immediately.
 C: Classic version, E: Eco version, CE: Classic or Eco
 ■: color "black"

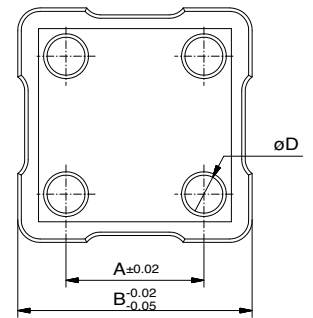
Coupling, double
for 1 row Bar ECO Plus

Nr.	System	A	B	C	øD	Gr.
23320-E1	AF 25	25	19	10	6,6	8
20793-E1	AF 40	40	32	16	11	31
26931-E1	AF 50	50	32	20	13,5	38



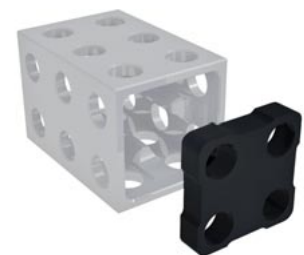
Coupling, double
for 2 row Bar ECO Plus

Nr.	System	A	B	C	øD	Gr.
23330-E1	AF 25	25	42	10	6,6	53
20791-E1	AF 40	40	68	20	11	240
26850-E1	AF 50	50	84	25	13,5	465



Coupling, double
for 1x2 row Bar ECO Plus

Nr.	System	A	B	C	øD	Gr.
55316-E1	AF 25	25	17x42	10	6,6	40
57212-E1	AF 40	40	32x68	20	11	110



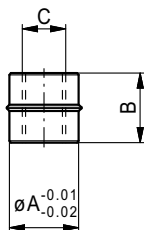
Double couplings for bar-bar connections. These couplings are used with screw connectors.

Coupling, double
for 2x3 row Bar ECO Plus

Nr.	System	A	B	C	øD	Gr.
122400-E1	AF 40	40	68x108	20	11	315

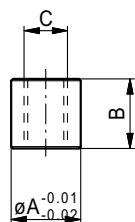
Coupling, double
for 3 row Bar ECO Plus

Nr.	System	A	B	C	øD	Gr.
23616-E1	AF 40	40	108	20	11	682
26851-E1	AF 50	50	134	25	13,5	1.394



Positioning sleeve with collar

Nr.	System	A	B	C	\varnothing
21600-1	AF 16	8	8	M5	1
■ 21385-1	AF25	12,5	12	M8	4
■ 21235-1	AF40	20	18	M14x1,5	9
26732-1	AF50	25	23	M18x1,5	16

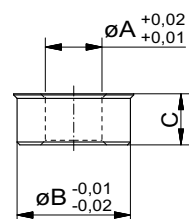


Positioning sleeve without collar

Nr.	System	A	B	C	\varnothing
21599-1	AF 16	8	8	M5	1
■ 21386-1	AF25	12,5	12	M8	2
■ 21278-1	AF40	20	18	M14x1,5	9
26733-1	AF50	25	23	M18 x1,5	16

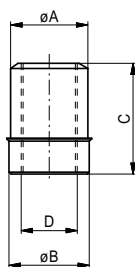
plain, short

Nr.	System	A	B	C	\varnothing
21386-E1	AF25	12,5	7	M8	1
21278-E1	AF40	20	11	M14x1,5	6
26733-E1	AF50	25	13,5	M18x1,5	9



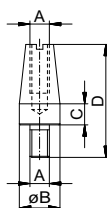
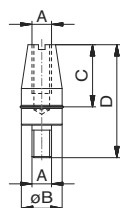
Reducer sleeve with collar

Nr.	System	A	B	C	\varnothing
21990-1	AF25/16	8	12,5	6	1
22129-1	AF40/16	8	20	9	3
21236-1	AF40/25	12,5	20	9	5
26925-1	AF50/25	12,5	25	11	10



Reducer sleeve with collar

Nr.	System	A	B	C	D	\varnothing
20684-1	AF25	12	12,5	18	M8	4
28260-1	AF25	12,5	16	18	M8	9
22934-1	AF25	12,5	22	22	M6	24
55904-1	AF25	12,5	14	22	M8	42



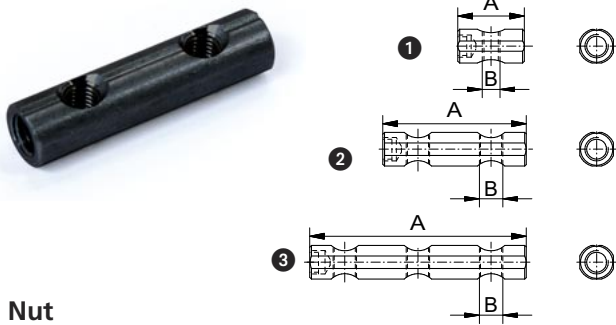
Locating pin

Nr.	System	A	B	C	D	\varnothing
25914-1	AF25	M6	12,5	19,5	35,5	10
22865-1	AF25	M6	12,5	6,5	30	10

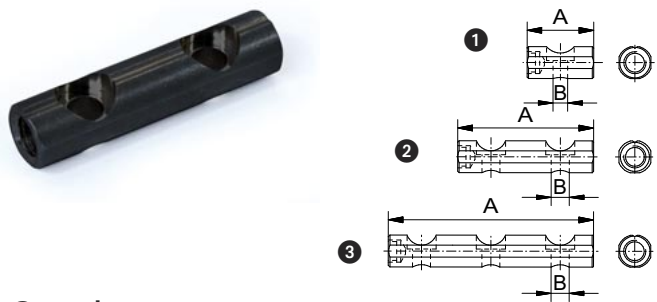
25914:
Version with collar

22865:
Version without collar

C·E ALUFIX preferred range
 Green: Item is available immediately.
 C: Classic version, E: Eco version, CE: Classic or Eco
 ■: color "black"



Nut
for screw connection



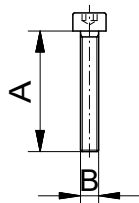
Crosspiece
für for screw connection

Eco		Classic				
Nr.	#	Nr.	System	B	A	g
AF16						
52868-1	1	80620-1	16	M3	16	2
C-E 52869-1	1	80621-1	16	M4	16	2
52870-1	1	52870-1	16	M5	16	2
AF25						
52871-1	1	80533-1	25	M4	25	5
52872-1	1	80532-1	25	M5	25	5
C-E 52276-1	1	80531-1	25	M6	25	5
52873-1	1	82815-1	25	M8	25	5
52874-1	2	81602-1	25	M4	50	10
52875-1	2	81162-1	25	M5	50	10
C-E 52071-1	2	81168-1	25	M6	50	10
AF40						
52877-1	1	80448-1	40	M6	40	24
52878-1	1	80449-1	40	M8	40	24
C-E 31550-1	1	80450-1	40	M10	40	24
52879-1	1	80451-1	40	M12	40	24
52880-1	2	81603-1	40	M6	80	51
52881-1	2	82806-1	40	M8	80	51
C-E 31552-1	2	81363-1	40	M10	80	51
52882-1	2	82807-1	40	M12	80	51
52883-1	3	82011-1	40	M6	120	74
52884-1	3	81921-1	40	M8	120	74
C-E 31554-1	3	81873-1	40	M10	120	74
52885-1	3	82808-1	40	M12	120	74
AF50						
52886-1	1	82814-1	50	M6	50	50
C-E 52887-1	1	82813-1	50	M12	50	50
52888-1	2	82811-1	50	M6	100	100
C-E 31991-1	2	82472-1	50	M12	100	100
52889-1	3	82812-1	50	M6	150	150
C-E 52075-1	3	82471-1	50	M12	150	150

Eco		Classic				
Nr.	#	Nr.	System	B	A	g
AF16						
52890-1	1	21596-1	16	3,3	16	2
C-E 52891-1	1	21597-1	16	4,3	16	2
AF25						
52892-1	1	21395-1	25	4,3	25	5
52893-1	1	21394-1	25	5,3	25	5
C-E 52277-1	1	21393-1	25	6,4	25	5
52894-1	2	23785-1	25	4,3	50	10
52895-1	2	22954-1	25	5,3	50	10
52073-1	2	22997-1	25	6,4	50	10
AF40						
52898-1	1	21229-1	40	6,4	40	24
52899-1	1	21230-1	40	8,5	40	24
C-E 31549-1	1	21231-1	40	10,5	40	24
52900-1	1	21232-1	40	13	40	24
52901-1	2	23786-1	40	6,4	80	51
52902-1	2	25119-1	40	8,5	80	51
C-E 31551-1	2	20796-1	40	10,5	80	51
52903-1	3	25471-1	40	6,4	120	74
52904-1	3	28215-1	40	8,5	120	74
C-E 31553-1	3	24891-1	40	10,5	120	74
AF50						
52905-1	1	27115-1	50	6,4	50	50
C-E 52906-1	1	26730-1	50	13	50	50
52907-1	2	28217-1	50	6,4	100	100
C-E 52908-1	2	26731-1	50	13	100	100
52909-1	3	28218-1	50	6,4	150	150
C-E 52076-1	3	26827-1	50	13	150	150

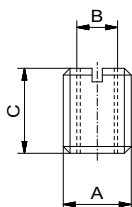
Classic version: Ideal for modular fixturing for fast easy handling
Eco version: Ideal for dedicated fixtures, without wear-reducing helicoil inserts and without threaded hole for positioning rod

Standard thread sizes are printed in bold print



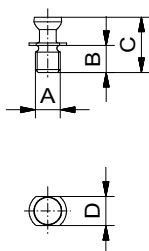
Hex socket head screw DIN 912 V2A

Nr.	System	A	B	⌀
10706-S1	AF16	20	M3	1
10707-S1	AF16	20	M4	2
10526-S1	AF25	30	M4	3
10525-S1	AF25	30	M5	3
10524-S1	AF25	30	M6	8
10475-S1	AF40	50	M6	12
10476-S1	AF40	50	M8	24
10477-S1	AF40	50	M10	38
10478-S1	AF40	50	M12	53
10867-S1	AF50	70	M12	68



Reducer bush

Nr.	A	B	C	⌀
26721	M4	M2	5	1
21859	3/8"	M6	13	1
26045	M6	M4	9	1
21514	M8	M4	10	3
23905	M8	M5	10	2
21865	M8	M6	10	2
21477	M10	M4	12,5	5
23906	M10	M5	12,5	4
21866	M10	M6	12,5	7
21867	M10	M8	12,5	10
20584	M12	M4	15	9
22283	M12	M5	15	8
21868	M12	M6	15	7
21869	M12	M8	15	6
21870	M12	M10	15	4
23600	M16	M12	24	13



Combi bolt shortened, for elements with nubs

Nr.	System	A	B	C	D	⌀
20341	AF16	M4	4,5	8,9	SW5	1
21500	AF25	M6	6,5	13,3	SW7	2
20347	AF40	M10	10,5	20,8	SW11	10
26855	AF50	M12	12	25,9	SW14	16




ALUFIX preferred range

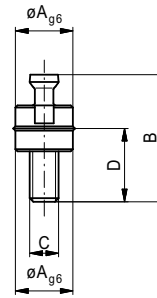
Green: Item is available immediately.

C: Classic version, E: Eco version, CE: Classic or Eco


■: color "black"

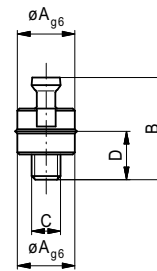
Combi bolt

Nr.	System	A	B	C	D	
23249	AF 16	8	17,7	M4	10,2	3
23225	AF 25	12,5	28	M6	16	12
23259	AF 40	20	44	M10	25,5	64
27543	AF 50	25	55,1	M12	32	98




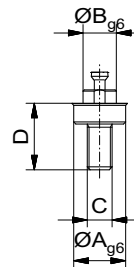
Combi bolt shortened

Nr.	System	A	B	C	D	
25742	AF 16	8	14,2	M4	6,7	1
25743	AF 25	12,5	22,4	M6	10,5	10
25744	AF 40	20	23,5	M10	17	61
28176	AF 50	25	44	M12	21	94




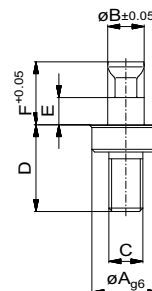
Combi reducer bolt
for connecting different system sizes

Nr.	System	A	B	C	D	
23620	AF 25/AF 16	12,5	8	M6	16	10
23621	AF 40/AF 25	20	12,5	M10	25,5	33
54400	AF 50/AF 25	25	12,5	M12	32	60
28056	AF 50/AF 40	25	20	M12	32	120



Combi bolt
AF40, for 1D bar and 2D base plate

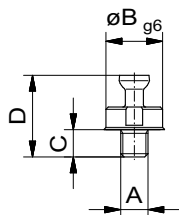
Nr.	System	A	B	C	D	E	F	
25948	AF 25	12,5	6,7	M6	16	5	11,8	24
120510	AF 40	20	10,7	M10	25,5	8	18,5	38



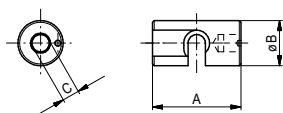
Other versions on request

Combi bolt

for grid plate without fitted bore and keyless chuck

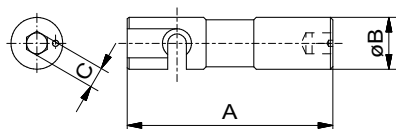


Nr.	System	A	B	C	D	Ø
25746	AF 16	M4	8	3,5	11	2
25654	AF 25	M6	12,5	6	18	10
54587	AF 25	1/4"-20	12,5	12	24	10
54589	AF 25	3/8"-16	12,5	12	24	12
51843	AF 25	M8	12,5	6	18	12
54588	AF 25	M8	12,5	12	24	15
25747	AF 40	M10	20	88	27,3	40
27821	AF 50	M12	25	11	34,1	80
34763	AF 50	M12	25	20	43,1	90

**Lock ALUFIX**

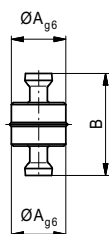
standard lock for quick connection

Nr.	System	A	B	C	Ø
23250	AF 16	16	8	SW3	4
23240	AF 25	25	12,5	SW5	13
23260	AF 40	40	20	SW8	58
26856	AF 50	50	25	SW 10	116

**Lock Alufix ECO Plus**

for quick connection of Alufix ECO Plus bars

Nr.	System	A	B	C	Ø
23246	AF 25	50	12,5	SW5	36
20385	AF 40	80	20	SW8	130
26801	AF 50	100	25	SW 10	300
27930	AF 50	150	25	SW 10	489

**Twin bolt**

for quick connection

Nr.	System	A	B	Ø
23247	AF 16	8	15	3
23223	AF 25	12,5	24	12
23257	AF 40	20	37	48
26854	AF 50	25	47	94



ALUFIX preferred range

Green: Item is available immediately.

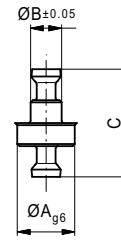
C: Classic version, E: Eco version, CE: Classic or Eco

■: color "black"

Twin bolt

for bar 1D and base plate 2D

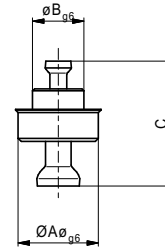
Nr.	System	A	B	C	
23248	AF 16	8	4	15	2
23228	AF 25	12,5	6,7	24	8
23258	AF 40	20	10,7	37	34
28208	AF 50	25	13,7	47	70



Reducer bolt

for quick connection

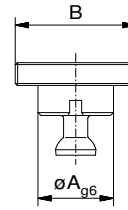
Nr.	System	A	B	C	
20328	AF 25/AF 16	12,5	8	19,5	8
23452	AF 40/AF 25	20	12,5	30,5	30
28209	AF 50/AF 40	25	20	41,6	38
30580	AF 50/AF 25	25	12,5	35	33



Bolt disk with stud

for quick connection of screw jacks, vises or top sections onto base plates or bars

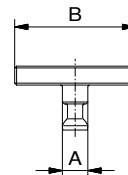
Nr.	System	A	B	
23646	AF 16	8	M12x0,5	5
23252	AF 16	8	M24x1	16
120027	AF 25	12,5	M12x0,5	AF
23239	AF 25	12,5	M24x1	22
23238	AF 25	12,5	M32x1	39
23262	AF 40	20	M24x1	38
23264	AF 40	20	M32x1	58
26926	AF 50	25	M32x1	60



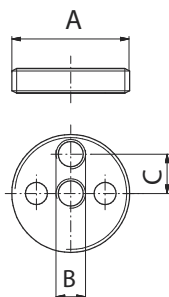
Bolt disk 1D/2D

for quick connection of screw jacks or top sections to base plates 2D or bars 1D with long slots

Nr.	System	A	B	
23647	AF 16	4,3	M12x0,5	5
23253	AF 16	4,3	M24x1	15
23241	AF 25	6,7	M24x1	17
23244	AF 25	6,7	M32x1	36
23263	AF 40	10,7	M24x1	24
23265	AF 40	10,7	M32x1	43

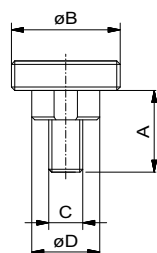


Connecting disks for screw-jacks, top sections, keyless chucks and vises

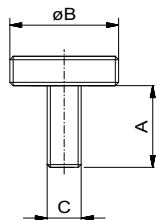
**Disc**

for set up independent of grid

Nr.	A	B	C	$\frac{g}{g}$
21679-1	M24x1	M6	7	5
21711-1	M32x1	M6	9	11

**Fixing disk
with stud shoulder**

Nr.	System	A	B	C	D	$\frac{g}{g}$
81587-1	AF 16	7	M12x0,5	M4	8	5
80748-1	AF 16	10	M24x1	M4	8	7
■ 80600-1	AF 25	15	M24x1	M6	12,5	10
80601-1	AF 25	19	M32x1	M6	12,5	17
82822-1	AF 40	19	M24x1	M10	20	28
80602-1	AF 40	24	M24x1	M12	20	30
92900-1	AF 40	24	M32x1	M10	20	32
80603-1	AF 40	25	M32x1	M12	20	34
82827-1	AF 50	30	M32x1	M12	25	45

**Fixing disc
for set up independent of grid**

Nr.	System	A	B	C	$\frac{g}{g}$
81589-1	AF 16	7,3	M12x0,5	M4	5
81489-1	AF 16	10,2	M24x1	M4	10
80597-1	AF 25	15,3	M24x1	M6	8
95905-1	AF 25	7,7	M24x1	1/4" - 20	10
95906-1	AF 25	15	M24x1	M8	12
95907-1	AF 25	7,7	M24x1	3/8" - 16	11
80598-1	AF 25	19,6	M32x1	M6	15
82770-1	AF 40	26,2	M24x1	M10	10
82771-1	AF 40	25,7	M32x1	M10	20
82772-1	AF 50	30	M24x1	M12	15
82773-1	AF 50	32	M32x1	M12	25



ALUFIX preferred range

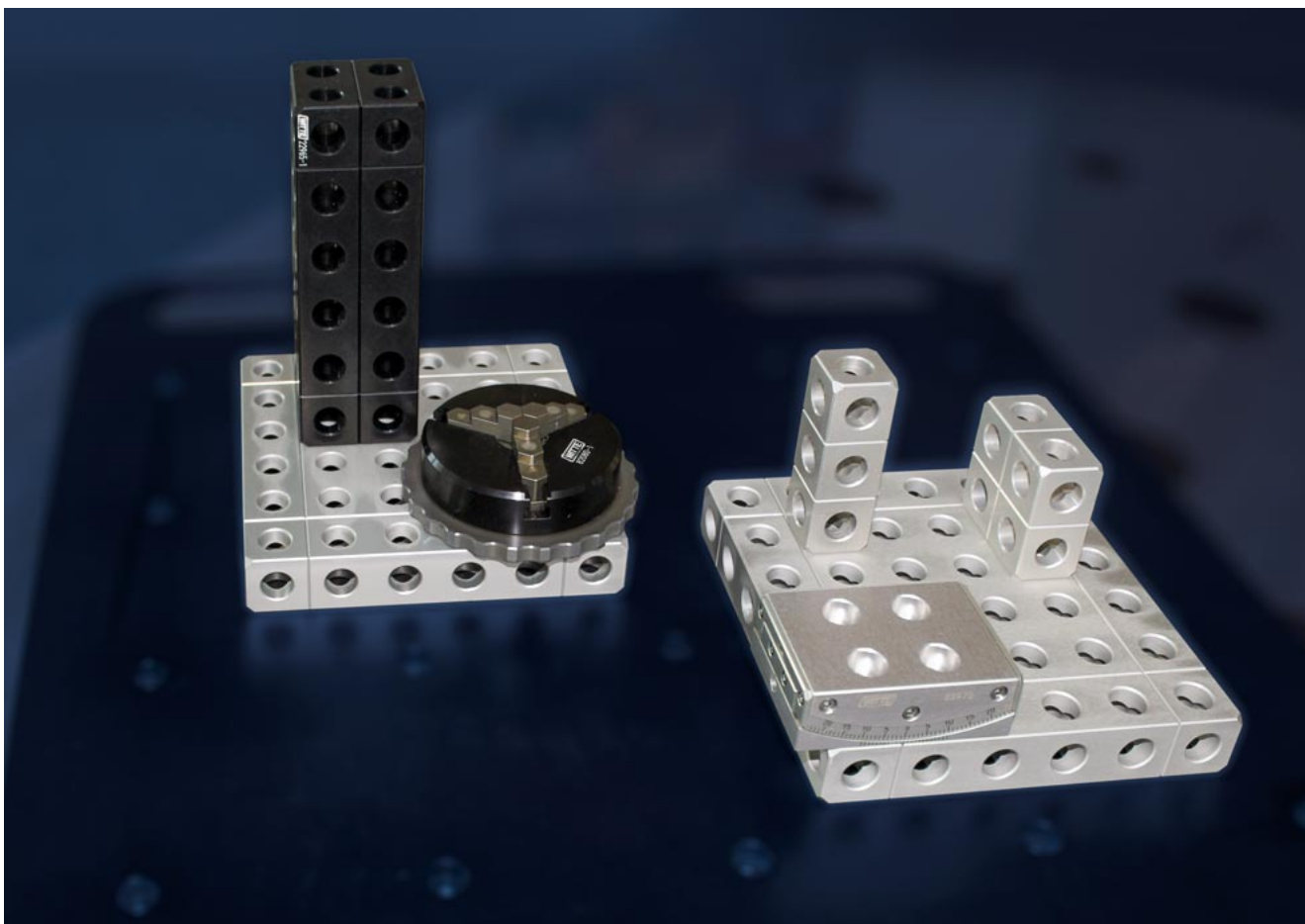
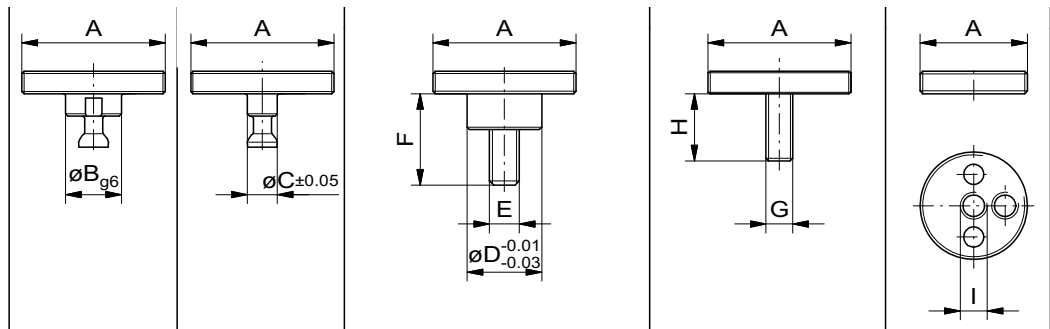
Green: Item is available immediately.

C: Classic version, E: Eco version, CE: Classic or Eco

■: color "black"

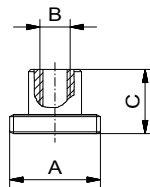
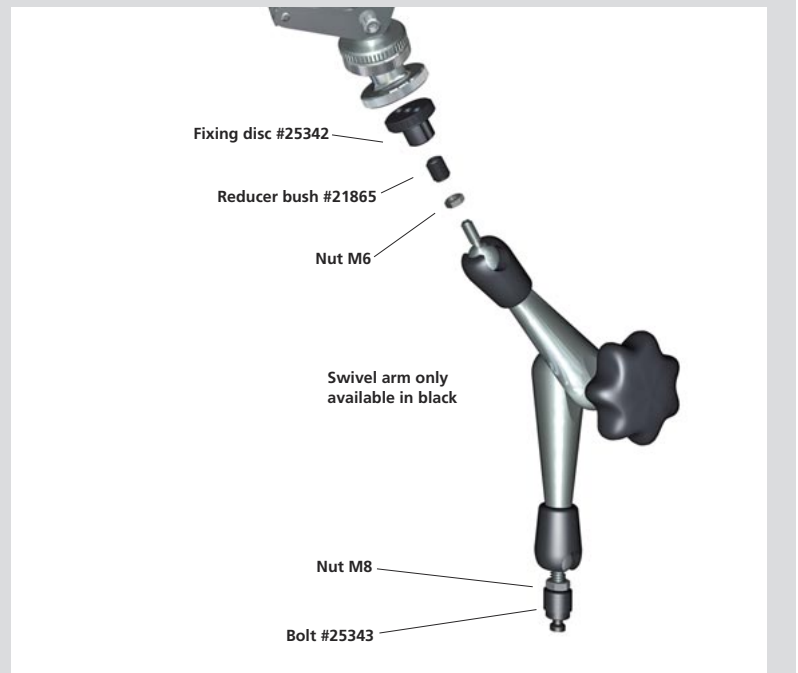
Overview connecting disks for keyless chucks

ø	A	System	#	B	#	C	#	D	E	F	#	G	H	#	I
50	M12x0,5	AF16	23646	8	23647	4,3	81587-1	8	M4	7	81589-1	M4	8	52111-1	M4
50	M12x0,5	AF25	29580	12,5											
80	M16x1,0	AF16	52102	8	52106	4,3	93434-1	8	M4	7	93438-1	M4	7	55977-1	M4
80	M16x1,0	AF25	52103	12,5	52107	6,7	93435-1	12,5	M6	15	93439-1	M6	15	21711-1	M6
125	M32x1,0	AF25	23238	12,5	23244	6,7	80601-1	12,5	M6	19	80598-1	M6	15	21711-1	M6
125	M32x1,0	AF40	23264	20	23265	10,7	92900-1	20	M10	24	82771-1	M10	24	52114-1	M10
125	M32x1,0	AF50	26926	25	52108	13,6	82827-1	25	M12	25	82773-1	M12	29	52115-1	M12
200	M50x1,5	AF40	52104	20	52109	10,7	93436-1	20	M10	24	93440-1	M10	22	52116-1	M10
200	M50x1,5	AF50	52105	25	52110	13,6	93437-1	25	M12	25	93441-1	M12	27	52117-1	M12



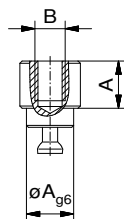
Application example: Small pre-assemblies with manual chuck and rocker.

Connection elements for swivel arm with joint:



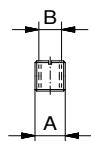
Fixing disk for swivel arm

Nr.	A	B	C	
25342-1	M24x1	M8	17	10



Bolt for swivel arm

Nr.	System	A	B	
25343	AF25	12,5	M8	21



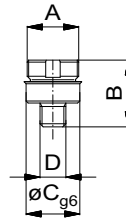
Reducer bush for swivel arm

Nr.	A	B	
21865	M8	M6	1

Connection elements for keyless chucks and rotary plates

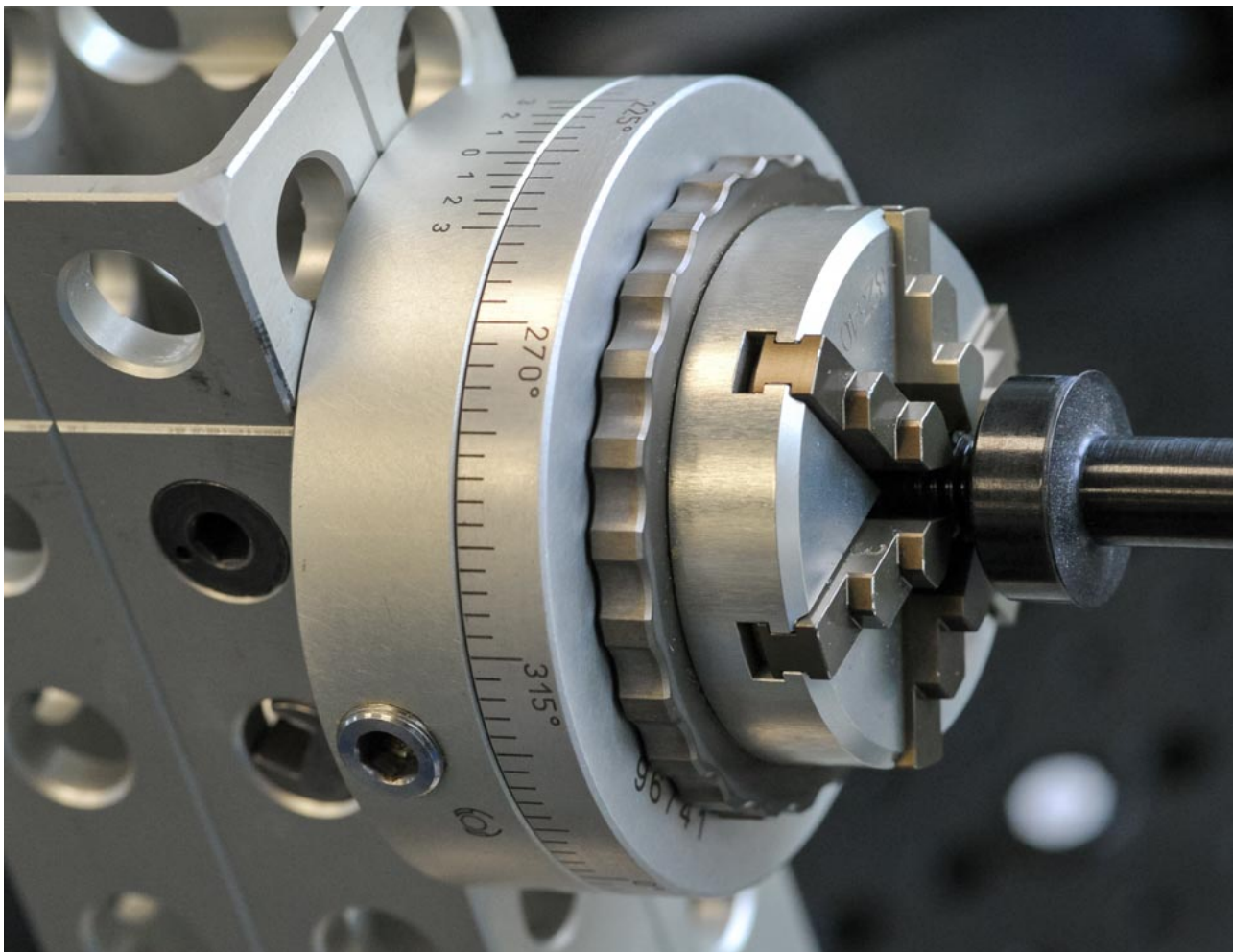
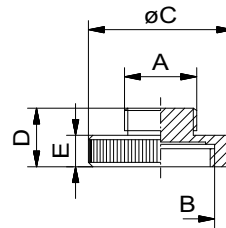
Fixing disk
for keyless chuck / screw-jack

Nr.	A	B	C	D	g
56118	M12x0,5	15,5	12,5	M6	19
56163	M16x1	15,5	12,5	M6	30

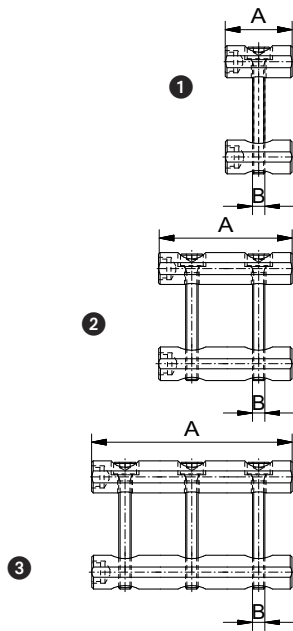


Fixing disk
for keyless chuck / screw-jack

Nr.	für HSF	A	B	C	D	E	g
30084-1	ø 50	M12x0,5	M24x1	32	13	7	12
30085-1	ø 80	M16x1	M24x1	32	13	7	15



Application example fixture for rotary plate.



Picture shows a screw connector with positioning sleeves which fit into Alufix bores. Positioning sleeves are not included in set, see page 100.



Connecting set for screw connection

Eco Nr.	#	Classic Nr.	System	B	A	📄
AF16						
94051-1	1	80697-1	16	M3	16	4
94052-1	1	80698-1	16	M4	16	14
AF25						
94053-1	1	80699-1	25	M4	25	14
94054-1	1	80700-1	25	M5	25	15
94055-1	1	80701-1	25	M6	25	20
94056-1	2	81598-1	25	M4	50	28
94057-1	2	82233-1	25	M6	50	30
AF40						
94060-1	1	80702-1	40	M6	40	60
94061-1	1	80703-1	40	M8	40	66
94062-1	1	80704-1	40	M10	40	85
94063-1	1	80705-1	40	M12	40	93
94064-1	2	81599-1	40	M6	80	120
94065-1	2	81520-1	40	M10	80	176
94066-1	3	82009-1	40	M6	120	180
94067-1	3	81896-1	40	M10	120	358
AF50						
94068-1	1	82488-1	50	M6	50	75
94069-1	1	82518-1	50	M12	50	120
94070-1	2	82489-1	50	M6	100	150
94071-1	2	82469-1	50	M12	100	230
94072-1	3	82490-1	50	M6	150	230
94073-1	3	82470-1	50	M12	150	350

Classic version: Ideal for modular fixturing for fast easy handling.
Eco version: Ideal for dedicated fixtures, without wear reducing helicoil inserts, and without threaded hole for positioning rod.

Standard thread sizes are printed in **bold print**.



Quick connection set, AF16, small
82672, (36-pcs.), 160g
comprising of:

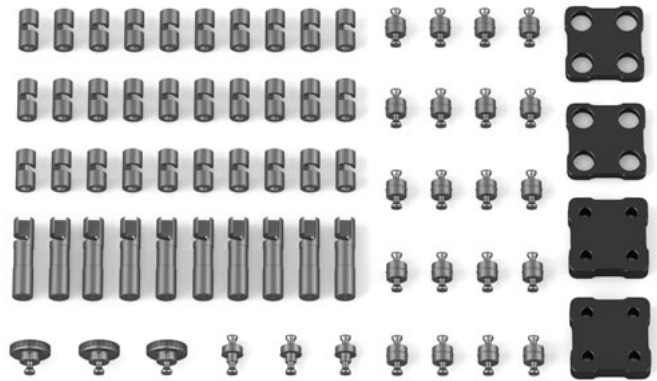
Nr.	Pcs.	Name
23250	20	Lock, short
23247	10	Twin bolt
23249	3	Combi bolt
23252	3	Bolt disk

Quick connection set, AF25, small
82673, (36-pcs.), 1.000g
comprising of:

Nr.	Pcs.	Name
23240	20	Lock, short
23223	10	Twin bolt
23225	3	Combi bolt
23239	3	Bolt disk

Quick connection set, AF40, small
82674, (36-pcs), 2.500g
comprising of:

Nr.	Pcs.	Name
23260	20	Lock, short
23257	10	Twin bolt
23259	3	Combi bolt
23264	3	Bolt disk



Quick connection set, AF25, large
81285-1, (70-pcs.), 1.216g
comprising of:

Nr.	Pcs.	Name
23240	30	Lock, short
23246	10	Lock, long
23223	20	Twin bolt
23228	3	Bolt for bar 1D
23239	3	Bolt disk
23325-E1	2	Coupling 50x50 single eco AF25
23330-E1	2	Coupling 50x50 double eco AF25

Quick connection set, AF40, large
81516-1, (70-pcs.), 4.876g
comprising of:

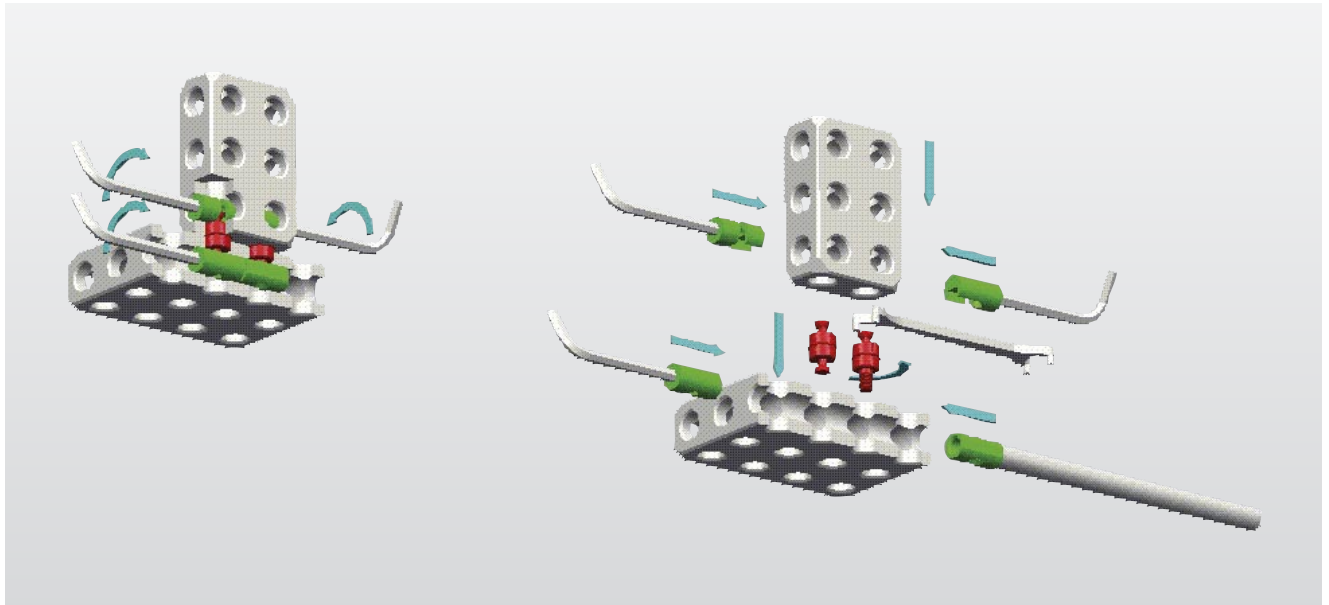
Nr.	Pcs.	Name
23260	30	Lock, short
20385	10	Lock, long
23257	20	Twin bolt
23258	3	Bolt for bar 1D
23262	3	Bolt disk
20792-E1	2	Coupling 80x80 single eco AF40
20791-E1	2	Coupling 80x80 double eco AF40

Quick connection set, AF50, large
82801-1, (70-pcs.), 8.600g
comprising of:

Nr.	Pcs.	Name
26856	30	Lock, short
26801	10	Lock, long
26854	20	Twin bolt
28208	3	Bolt for bar 1D
26926	3	Bolt disk
26727-E1	2	Coupling 100x100 single eco AF50
26850-E1	2	Coupling 100x100 double eco AF50

ALUFIX Tools

High quality components – ideal for use with ALUFIX



Adjust torque
with hex key



Torque wrench
with adjustable torque incl. hex key
and 3, 4 and 5 mm bits

Nr.	System	Maximum torque
82840	AF 16	3 N/m
98022	AF 25	5 N/m

In order to guarantee function of the quick connectors,
recommended torque should not be exceeded.



Torque wrench
with pre-set torque

Nr.	System	Maximum torque
82099	AF 40	25 N/m
82789	AF 50	30 N/m

In order to guarantee function of the quick connectors,
recommended torque should not be exceeded.

#81492-1 Tools

ALUFIX 16 (5-pcs.), comprising of:

Nr.	Pcs.	Name
80622-1	1	Positioning rod
81175-1	1	Extended hex key WAF3
54902-1	1	Combi tool AF 16
81118-1	2	Key for knurled profiles 32/42

**#81493 Tools**

ALUFIX 25 (10-pcs.), comprising of:

Nr.	Pcs.	Name
80534-1	1	Positioning rod
80520	1	Handle 112,5
80521	2	Extension 150
10523	1	Hex insert bit WAF3
10522	1	Hex insert bit WAF4
10521	1	Hex insert bit WAF5
21820-1	1	Pin spanner 14/17
81118-1	2	Key for knurled profiles 32/42

**#81494-1 Tools**

ALUFIX 40 (10-pcs.), comprising of:

Nr.	Pcs.	Name
80535-1	1	Positioning rod
80439	1	Handle 112,5
80435	1	Extension 200
80437	1	Extension 300
10484	1	Hex insert bit WAF6
10485	1	Hex insert bit WAF8
10486	1	Hex insert bit WAF10
21820-1	1	Pin spanner 14/17
81118-1	2	Key for knurled profiles 32/42

**#82263-1 Tools**

ALUFIX 50 (10-pcs.), comprising of:

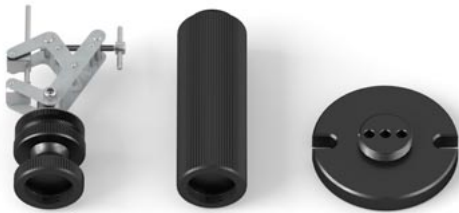
Nr.	Pcs.	Name
82551-1	1	Positioning rod
80439	1	Handle 112,5
80435	1	Extension 200
80437	1	Extension 300
10484	1	Hex insert bit WAF6
10485	1	Hex insert bit WAF8
10486	1	Hex insert bit WAF10
27931-1	1	Pin spanner 17/23
81118-1	2	Key for knurled profiles 32/42

The components in tool sets are also available as single items.

ALUFIX

Basic Kits

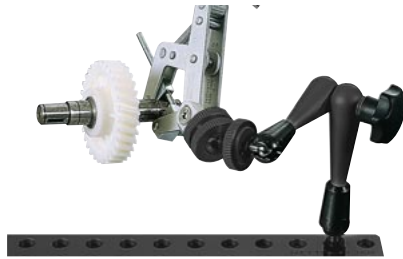
Starter-Kits, optimal selection of basic modular elements and accessories



Starter-Kit A

#83131-1 Screw clamp
with ball joint, foot plate and extension, 371g

- max clamping width 25 mm
- extension 100 mm



Starter-Kit B

#83132-1 Screw clamp
with ball joint, swivel arm and footplate, 936 g

- max clamping width 50 mm
- arm length 280 mm (2x140)
- hydraulic central clamping
- workpiece can be fixed in any position
- swivel arm only available in black



Starter-Kit C

#81020-1 Clamping element set
M6, 69 Pcs., 650 g

Comprising:

- 20 clamps in different shapes and lengths from 45 to 85 mm
- 24 threaded rods M6 in 6 lengths from 25 to 150 mm
- 4 coupling nuts, 10 knurled nuts and 10 washers



Starter-Kit D

#83134-1 Hold down spring
and hold down stud with M6 thread, 40g

Comprising:

- Hold down spring L=60mm
- Hold down stud L=60mm (other length on request)
- One reducer sleeve each with thread M8, M10 und M12

Starter-Kit E

#83135-1 **Vise**
with pins, jaw width 50 mm, 810 g

- high tensile aluminium
- exchangeable jaws
- clamping width 65 mm



Starter-Kit F

#82080-1A **Keyless chuck**
with reversible jaws and pins,
D80, 368 g

- high tensile aluminium
- centric clamping
- diameter 80 mm
- 3 jaw version



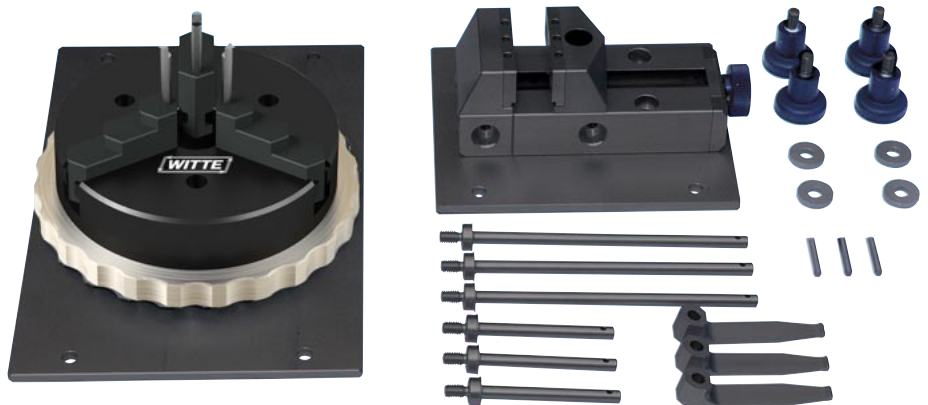
STARTER KIT G

#96092-1 **Basic Set**
Clamp accessory kit for measuring machines
(23-pcs), 9,8 kg

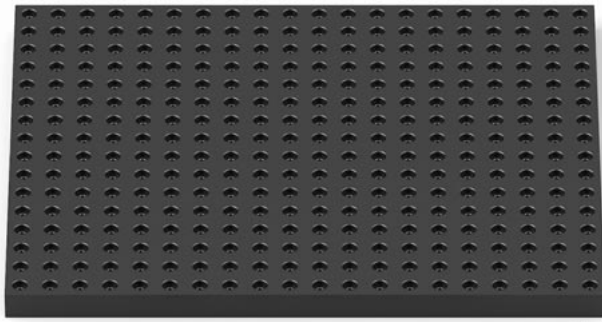
Nr.	Qty.	Name
96106-1	1	Keyless chuck \varnothing 125, 3 jaws
96107-1	1	Vise 50 AF25
24605-1	3	Pin for vise AF25
22258-1	3	Hod down spring
54766-1	3	Hold down stud AF25
54767-1	3	Hold down stud AF25
13086	4	Screw with knurled grip
21286-1	4	Washer \varnothing 6,4
96315	1	Storage box with inlay



Keyless chuck and vise mounted on aluminium plate



C·E ALUFIX preferred range
Green: Item is available immediately.
C: Classic version, E: Eco version, CE: Classic or Eco
■: color "black"



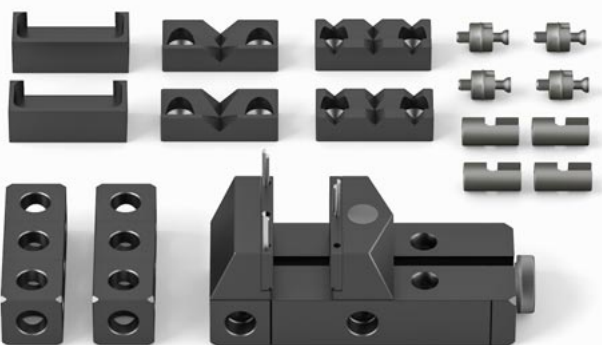
294408-1 Starter-Set ALUFIX 25, 46-pcs.

Nr.	Pcs.	Name
124676-1	1	Grid Base Plate 400x500mm
82033-1	4	Screw-jack
21667-1	4	Cap for screw-jack
285204-1	3	x-y-Stop for screw-jack
85232-1	3	Clamping plate
11432-51	3	Socket head screw M6x25
22772	3	Washer
22263-1	4	Hold down stud
22268-1	4	Traverse holder with heel
22258-1	4	Hold down spring
80600	4	Fixing disk with stud shoulder
81493-1	1	Tools (10 pcs.)



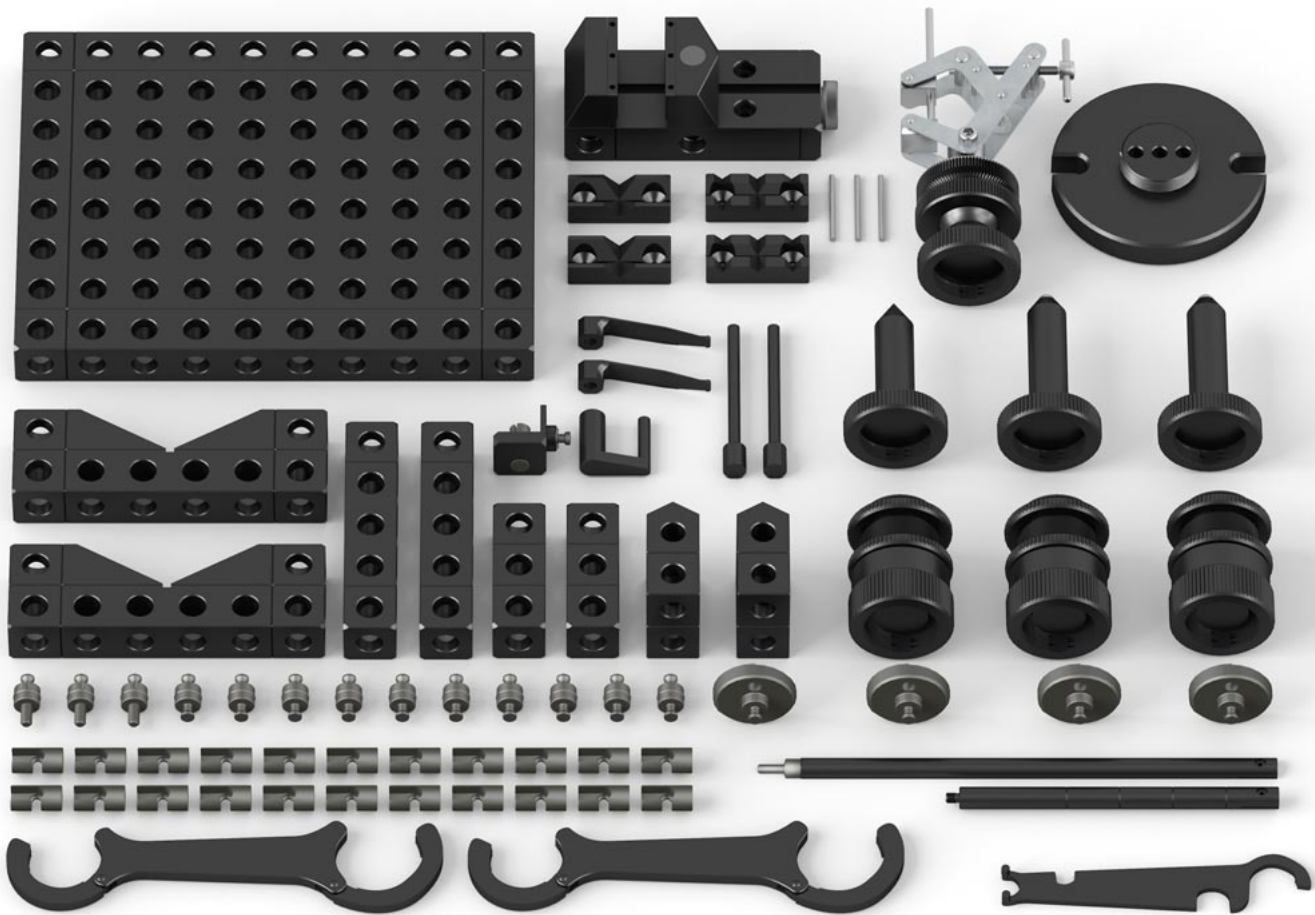
#294409-1 Extension for cylindrical parts ALUFIX 25, 26-pcs.

Nr.	Pcs.	Name
22253-1	4	Deltablock 120°
82125-1A	1	3 Jaw Keyless Chuck
21374-1	2	Bar 25x25x75
25743	8	Combi-Bolt
23240	8	Lock ALUFIX



#294410-1 Extension for square parts ALUFIX 25, 20-pcs.

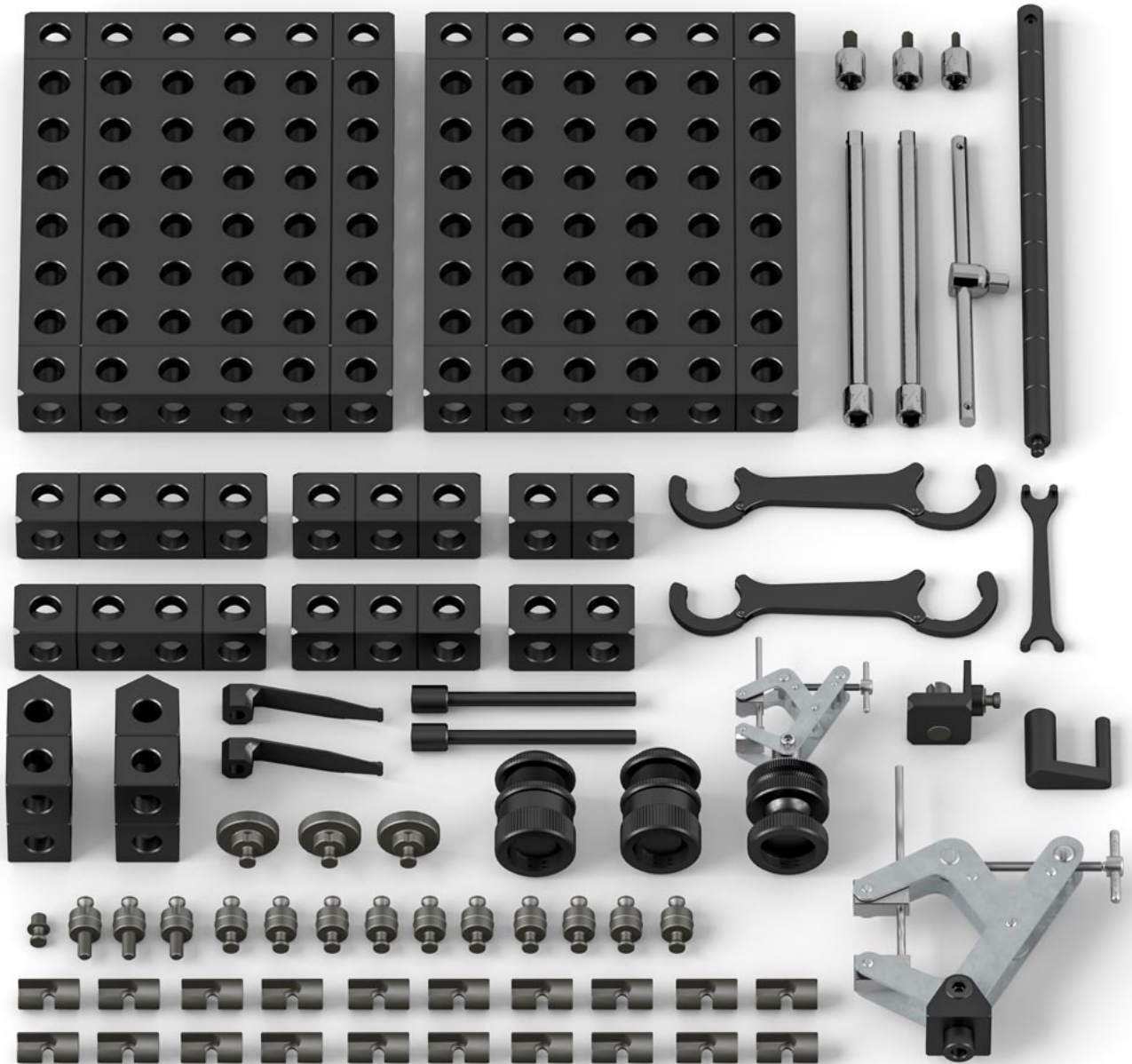
Nr.	Pcs.	Name
81792-1	1	Vise set
21374-1	2	Bar 25x25x75
25743	4	Combi-Bolt
23240	4	Lock ALUFIX

**#90271-1 Basic Set**

Alufix 16, medium (75-pcs), 2,3 kg

Nr.	Qty.	Name
21573-1	1	Base plate 16x96x160
21586-1	2	Bar 16x16x80
21584-1	2	Bar 16x16x48
22173-1	2	V Block 90°
82672	1	Quick connector set (36-pcs)
81492	1	Tools (5-pcs)
82139-1	3	Screw-jack h38-50
23252	1	Bolt disk with stud
21670-1	1	Universal plate

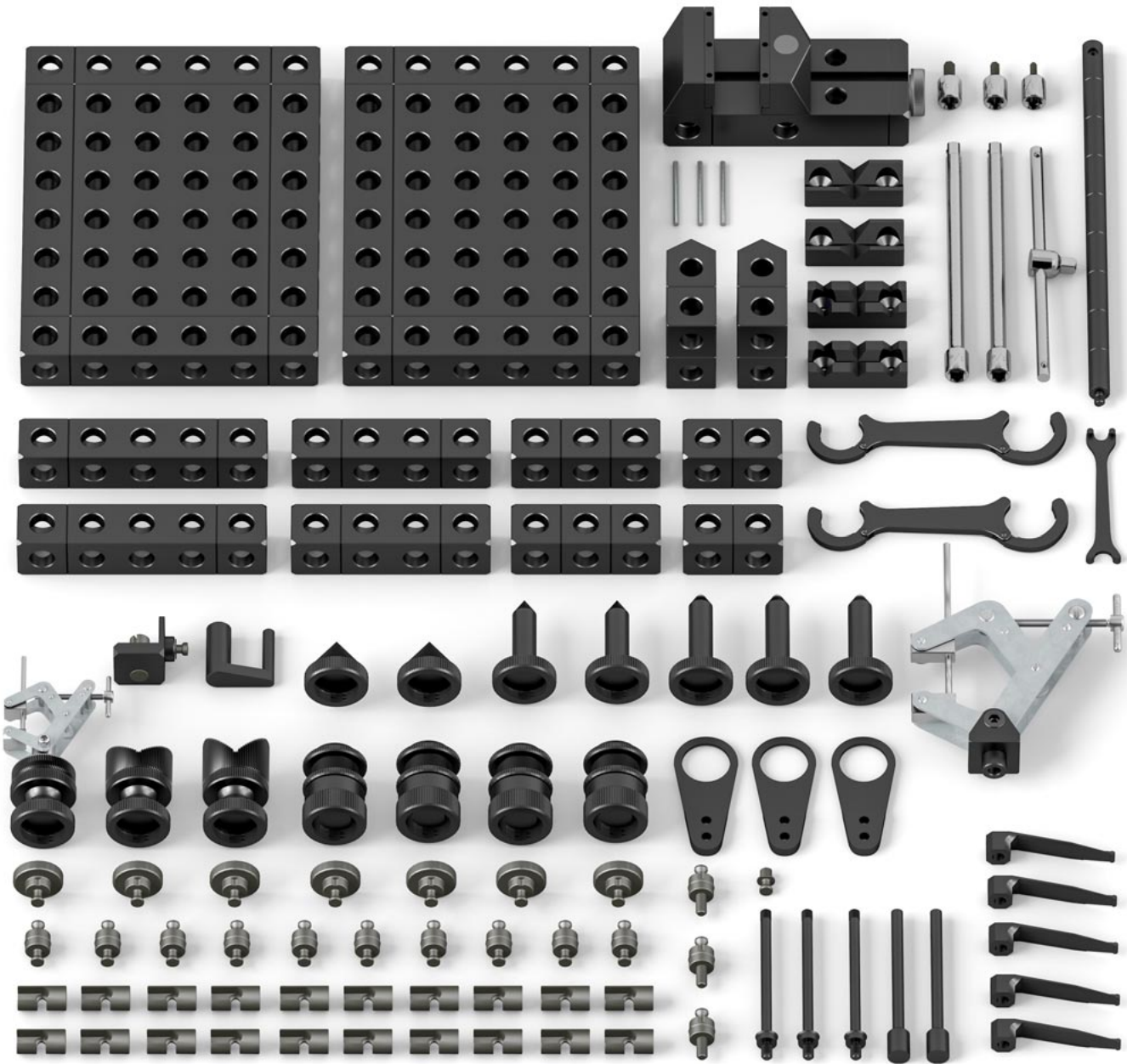
Nr.	Qty.	Name
21646	1	Center, long
80584-1	2	Center with ball
21988-1	2	V piece 120°
80925-1	1	Screw clamp w ball joint
80742-1	1	Winder
22274-1	1	Deflector
20244-1	2	Hold down spring
20338-1	2	Hold down stud
81790-1	1	Vise set with flat and V jaws (10-pcs)



#90274-1 Basic Set 1
Alufix 25 (67-pcs), 4,5 kg

Nr.	Qty.	Name
21352-1	2	Base plate 25x150x200
21373-1	2	Bar 25x25x50
21374-1	2	Bar 25x25x75
21375-1	2	Bar 25x25x100
22256-1	2	Delta block 120° Form 3
82673	1	Quick connector set (36 pcs)
21500	1	Bolt, shortened for thread
81493	1	Tools (10 pcs)

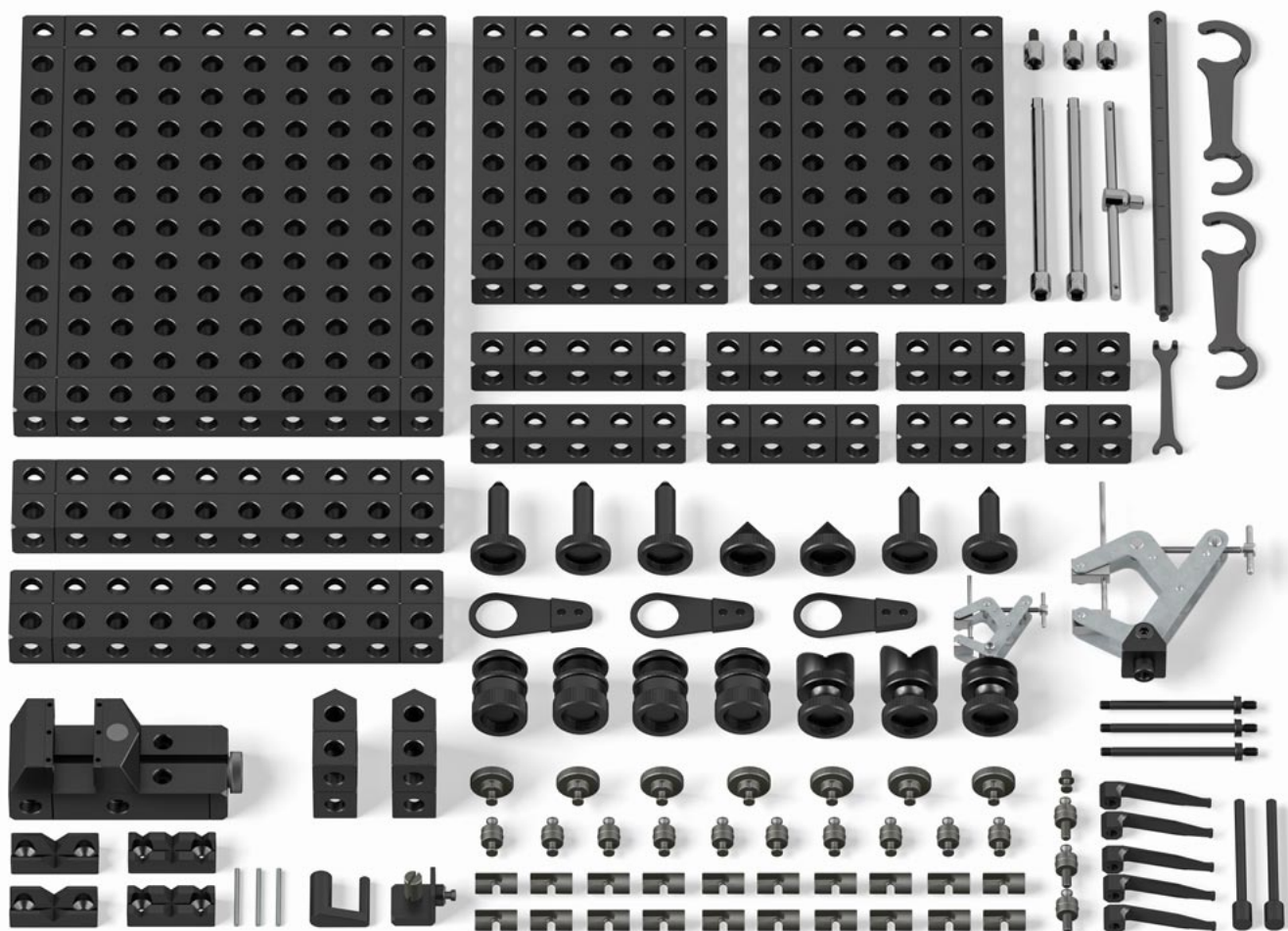
Nr.	Qty.	Name
82139-1	2	Screw-jack h38-50
80925-1	1	Screw clamp with ball joint
80924-1	1	Screw clamp with joint
22258-1	2	Hold down spring
22260-1	2	Hold down stud
80743-1	1	Winder
22275-1	1	Deflector



#90275-1 Basic Set 2
Alufix 25 (103-pcs), 5,9kg

Nr.	Qty.	Name
21352-1	2	Base plate 25x150x200
21373-1	2	Bar 25x25x50
21374-1	2	Bar 25x25x75
21375-1	2	Bar 25x25x100
21376-1	2	Bar 25x25x125
22256-1	2	Delta block 120° Form 3
82673	1	Quick connector set (36 pcs)
21500	1	Bolt, shortened for thread
81493	1	Tools (10 pcs)
82139-1	4	Screw-jack h38-50
23239	4	Bolt disk with stud
80924-1	1	Screw clamp with joint
21644	2	Center

Nr.	Qty.	Name
21646	2	Center
80584-1	3	Center with ball
80733-1	1	V piece 120° with ball joint
80725-1	1	V piece 90° with ball joint
80925-1	1	Screw clamp with ball joint
81791-1	1	Vise Set 50mm (10 pcs)
22258-1	5	Hold down spring
22260-1	2	Hold down stud
22263-1	3	Hold down stud
22268-1	3	Traverse holder with heel
80743-1	1	Winder
22275-1	1	Deflector



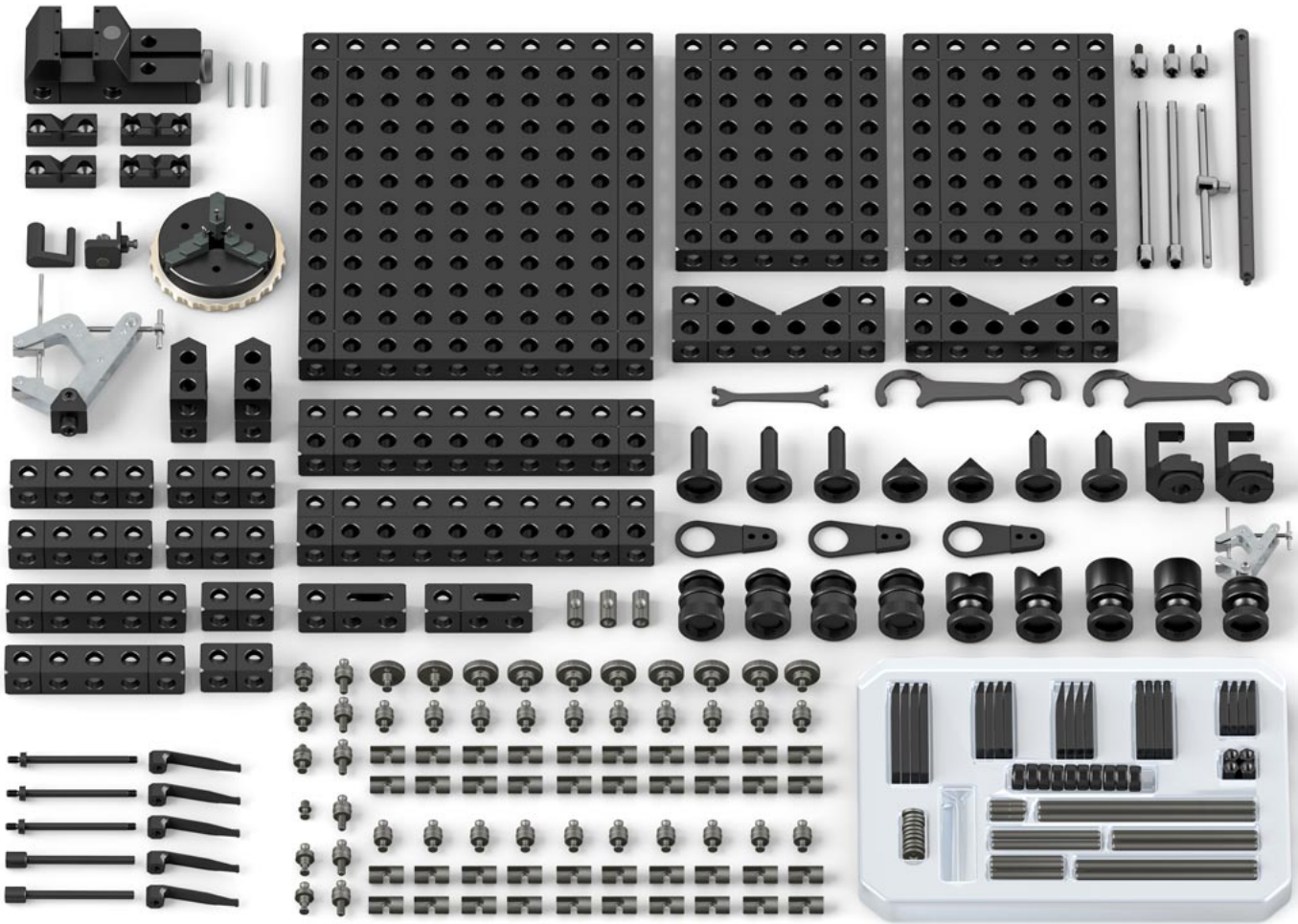
#90276-1 Basic Set 3
Alufix 25 (105-pcs), 12,6 kg

Nr.	Qty.	Name
21360-1	1	Base plate 25x250x300
22885-1	2	Base plate 25x50x250
21352-1	2	Base plate 25x150x200
21373-1	2	Bar 25x25x50
21374-1	2	Bar 25x25x75
21375-1	2	Bar 25x25x100
21376-1	2	Bar 25x25x125
22256-1	2	Delta block 120° Form 3
82673	1	Quick connector set (36 pcs)
21500	1	Bolt, shortened for thread
81493	1	Tools (10 pcs)
82139-1	4	Screw-jack h38-50
23239	1	Bolt disk
80925-1	2	Screw clamp with ball joint

Nr.	Qty.	Name
21644	2	Center, short
21646	2	Center, long
80733-1	1	V piece 120° with ball joint
80725-1	1	V piece 90° with ball joint
81791-1	1	Vise Set 50mm (10 pcs)
22258-1	5	Hold down spring
22260-1	2	Hold down stud
22263-1	3	Hold down stud
22268-1	3	Traverse holder with heel
80743-1	1	Winder
22275-1	1	Deflector
80924-1	1	Screw clamp with joint
80584-1	3	Center with Ball D6/M24
12584	1	Storage case



Aluminium case #12584,
without inlays,
version may be different to case shown,
included in supply free of charge



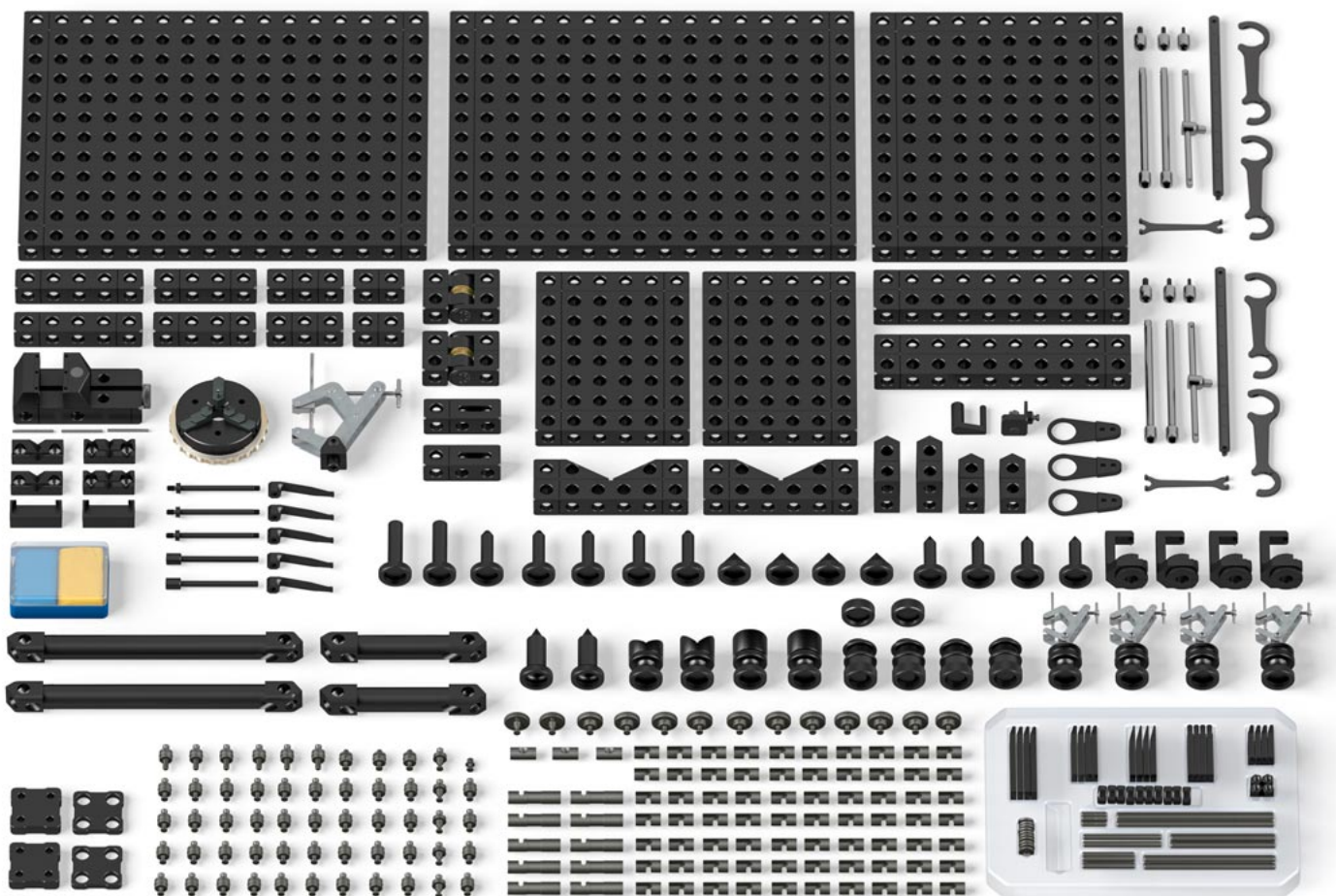
#90277-1 Basic Set 4
Alufix 25 (228-pcs), 15,5kg

Nr.	Qty.	Name
21360-1	1	Base plate 25x250x300
21352-1	2	Base plate 25x150x200
22885-1	2	Base plate 25x50x250
21376-1	2	Bar 25x25x125
21375-1	2	Bar 25x25x100
21374-1	2	Bar 25x25x75
21373-1	2	Bar 25x25x50
23233-1	2	Bar 1D
21987-1	2	V block 120°
22256-1	2	Delta block 120° Form 3
82673	2	Quick connector set (36-pcs)
21500	1	Bolt, shortened for thread
25654	3	Bolt f. grid plate + keyless chuck
23228	2	Twin bolt for bar 1D/2D
23241	2	Bolt disk
80531-1	3	Crosspiece nut
81493	1	Tools (10-pcs)
82139-1	4	Screw-jack h38-50
23239	1	Bolt disk

Nr.	Qty.	Name
21644	2	Center, short
21646	2	Center, long
80584-1	3	Center with ball
80941-1	2	Magnetic holder with ball joint
80733-1	1	V piece 120° with ball joint
80725-1	1	V piece 90° with ball joint
81111-1	2	C clamp adjustable
80925-1	1	Screw clamp with ball joint
81791-1	1	Vise Set 50mm (10-pcs)
82080-1A	1	3 jaw keyless chuck compl. ø80
22258-1	5	Hold down spring
22260-1	2	Hold down stud
22263-1	3	Hold down stud
22268-1	3	Traverse holder with heel
80743-1	1	Winder
22275-1	1	Deflector
80924-1	1	Screw clamp with joint
81020	1	Clamp Set 9 M6S (69-pcs)
12584	1	Storage case



Aluminium case #12584, without inlays, version may be different to case shown, included in supply free of charge

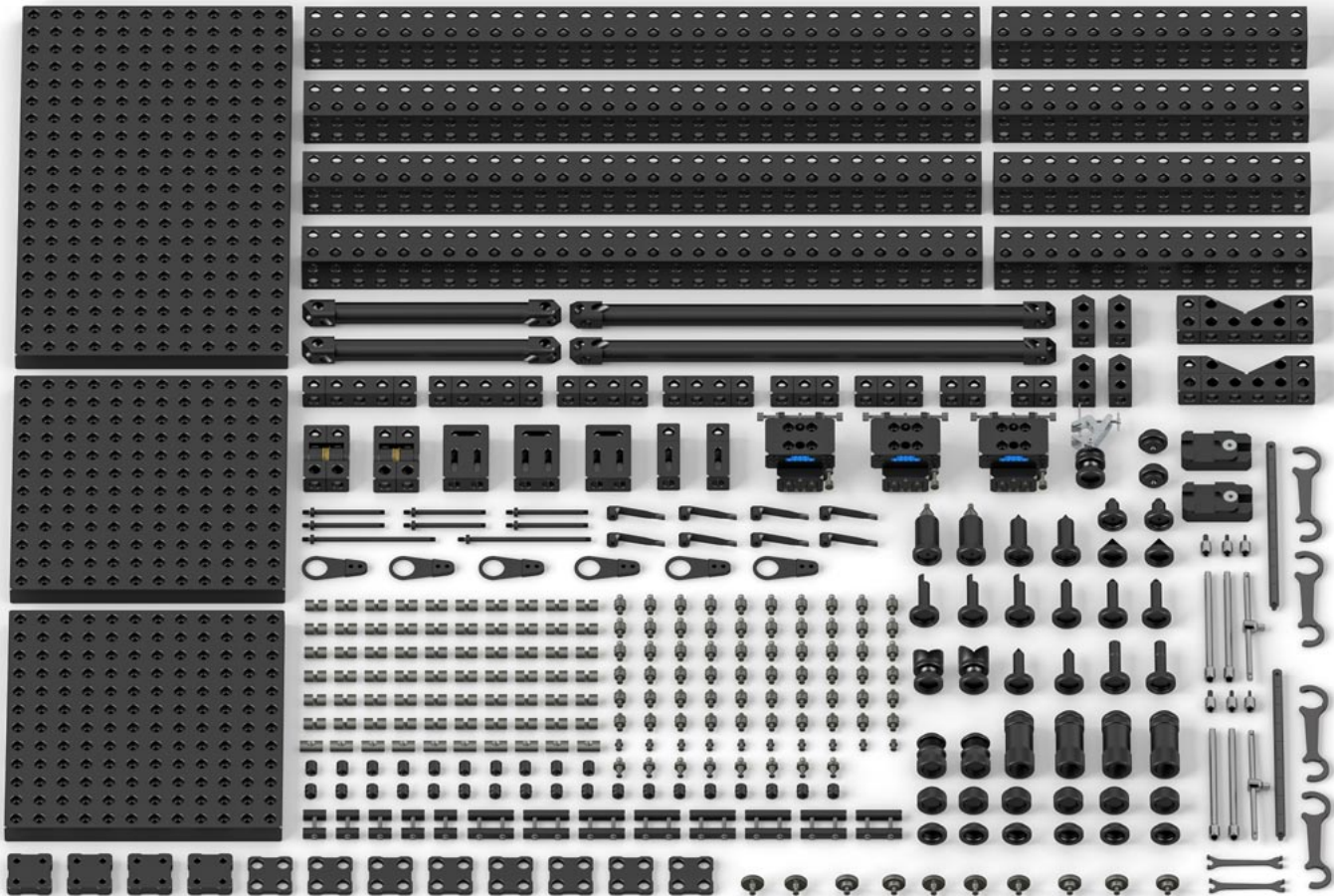


#90278-1 Basic Set 5

Alufix 25 (344-pcs), 29,3 kg

Nr.	Qty.	Name
21361-1	2	Base plate 25x300x400
21360-1	1	Base plate 25x250x300
21352-1	2	Base plate 25x150x200
22885-1	2	Base plate 25x50x250
21376-1	2	Bar 25x25x125
21375-1	2	Bar 25x25x100
21374-1	2	Bar 25x25x75
21373-1	2	Bar 25x25x50
81443-1	2	Strut 25x25x125
81444-1	2	Strut 25x25x250
23233-1	2	Bar 1D
81028-1	2	Double knuckle
21987-1	2	V block 120°
22256-1	2	Delta block 120° Form 3
22253-1	2	Delta block 120° Form 2
81285	1	Quick connector set (70-pcs)
82673	2	Quick connector set (36-pcs)
80531-1	3	Crosspiece nut
23228	2	Bolt for bar 1D/2D
25654	3	Bolt f. grid plate + keyless chuck
21500	1	Bolt, shortened for thread
81493	2	Tools (10-pcs)
82139-1	4	Screw-jack h38-50
23239	1	Bolt disk
23241	2	Bolt disk

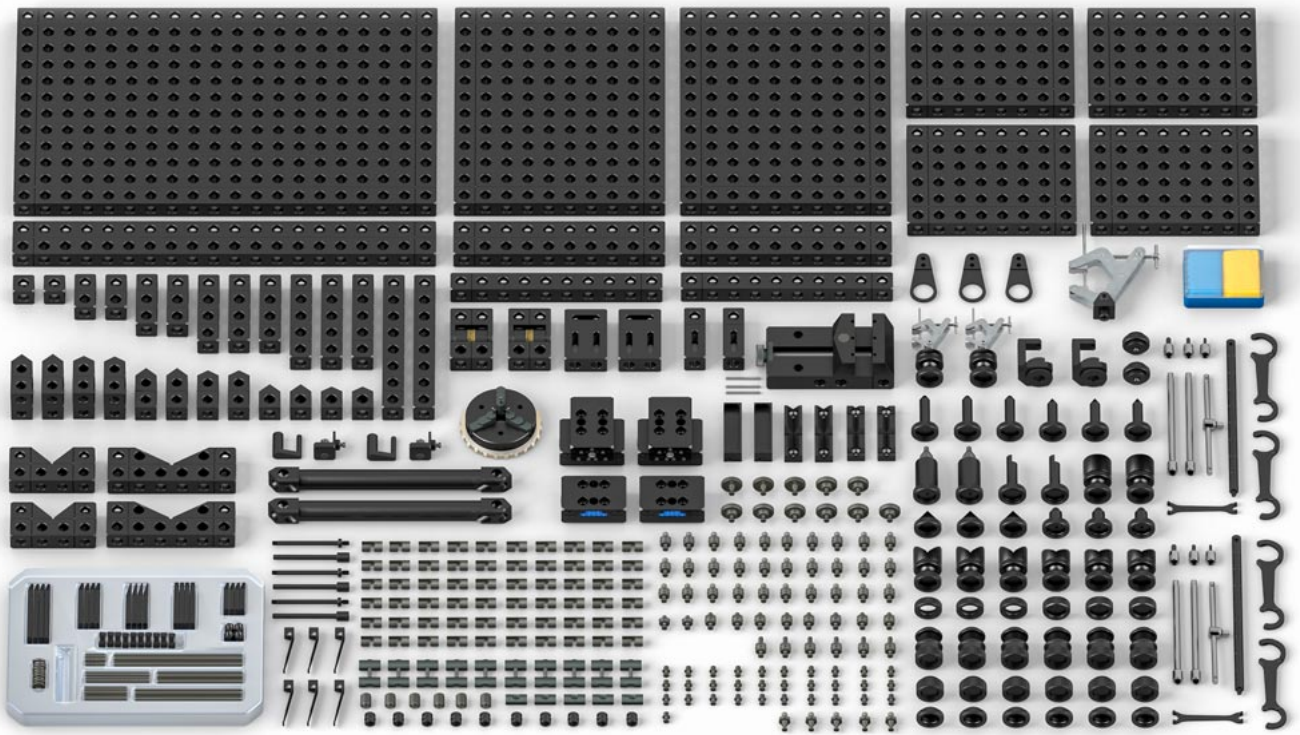
Nr.	Qty.	Name
21644	4	Center, short
21646	4	Center, long
80584-1	5	Center with ball
80733-1	1	V piece 120° with ball joint
80725-1	1	V piece 90° with ball joint
80661 -1	2	True line stud
80941-1	2	Magnetic holder with ball joint
81212-1	2	Autocenter
81111-1	4	C clamp adjustable
80925-1	4	Screw clamp with ball joint
22005-1	2	Moulding cap
81791-1	1	Vise Set 50mm (10 pcs)
80685	1	Compound resin 400g
81832-1	2	Forming jaw with bushes (3 pcs)
82080-1A	1	3 jaw keyless chuck compl. ø80
22258-1	5	Hold down spring
22260-1	2	Hold down stud
22263-1	3	Hold down stud
22268-1	3	Traverse holder for stud
80743-1	1	Winder
22275-1	1	Deflector
80924-1	1	Screw clamp with joint
80604-1	2	Base for screw clamp
81020	1	Clamp Set 9 M6S (69 pcs)
12584	1	Storage case



#98156-1 Basic Set 6
Alufix 25 (372-pcs), 50 kg

Nr.	Qty.	Name
33502-1	1	Base plate 25x300x500 AF25
56492-1	2	Base plate 25x300x300 AF25
21373-1	4	Bar 25x25x50 AF25
21374-1	4	Bar 25x25x75 AF25
21375-1	4	Bar 25x25x100 AF25
21376-1	4	Bar 25x25x125 AF25
25B0750-1	4	Bar 50x50x750 ECO Plus AF25
25B0350-1	4	Bar 50x50x350 ECO Plus AF25
23225-E1	8	Coupling 50x50 single AF25 eco
23330-E1	4	Coupling 50x50 double AF25 eco
23233-1	2	Bar 25x25x75 1D AF25
23232-1	3	Base plate 2D 25x50x75 AF25
81028-1	2	Double knuckle AF25
82437-1	3	Cross guiding slide, AF25 with stop
81444-1	2	Strut 250 AF25
81327-1	2	Strut 500 AF25
21987-1	2	V-Block 120° 25x50x150 AF25
22253-1	4	Deltablock 120° Form2 AF25
23240	60	Lock SW5 AF25
23223	30	Twin bolt AF25
25743	30	Combi bolt shortened AF25
21500	10	Bolt shortened AF25
23228	8	Twin bolt AF25 for Bar 1D/2D
21386-1	10	Positioning sleeve ø12,5
81493	2	Tool AF25 (10pcs)
21385-1	10	Positioning sleeve ø12,5 AF25

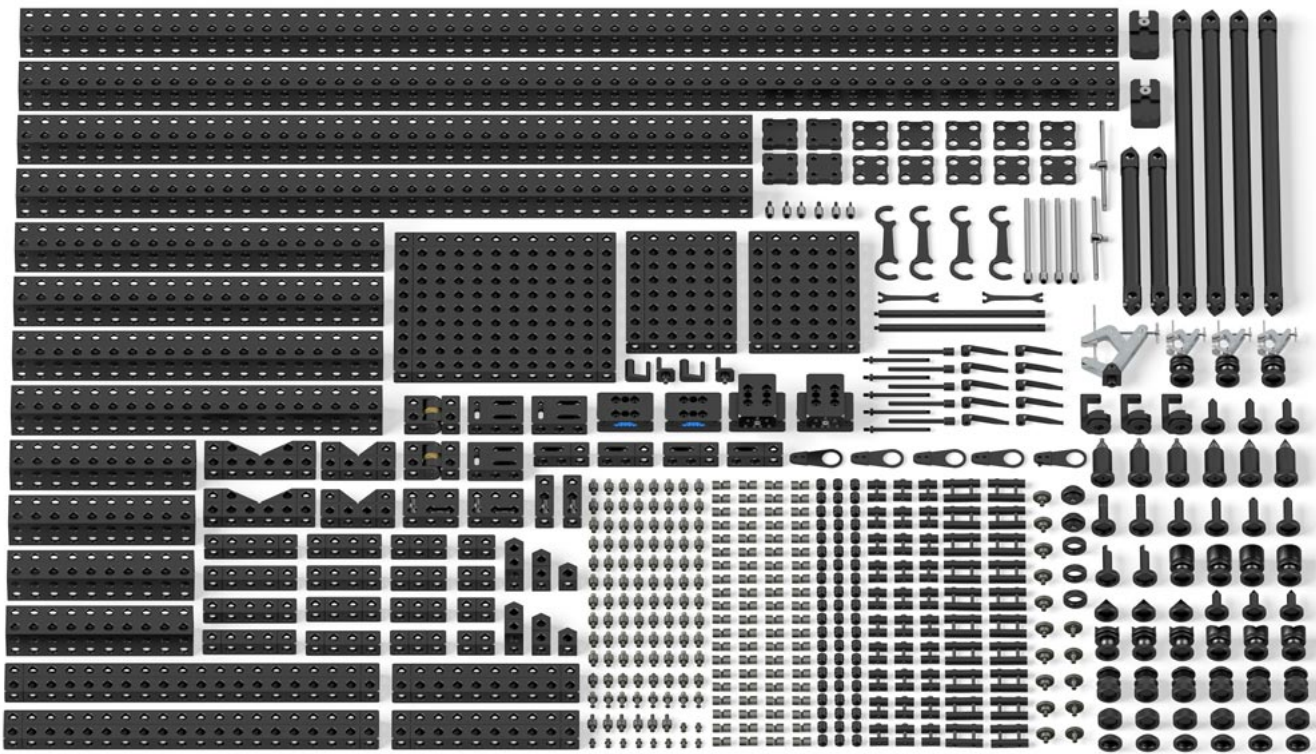
Nr.	Qty.	Name
23241	5	Bolt disk ø6,7/M24 AF25
80701	10	Connector Set M6/25 AF25
82139-1	2	Screw-jack h=38/50 M24X1
82033-1	4	Screw-jack h=70/105 M24X1
20628-1	6	Screw-jack extension 6/M24x1
23286-1	6	Screw-jack extension 12/M24x1
23239	5	Bolt Disk with stud ø12,5/M24
21644	2	Center ø32/M24
21646	2	Center, ø12,5/M24 50 long
94543-1	2	Autocenter, star shaped, M24x1
95532-1	2	Autocenter, star shaped, M24x1
81112	3	Stop and support 180° AF25
81113	2	Stop and support 90° AF25
80531-1	10	Nut M6/25 AF25
80585-1	3	Center w. ball ø8/M24
80733-1	2	V Block 120° with ball joint
80590-1	2	True line stud ø15/M24/32,6
22647-1	2	Crossover male/male M24x1
93443-1	8	Hold down spring f.sens. surfaces
22263-1	6	Hold down stud M6 AF25
24885-1	2	Hold down stud M6 AF25 I125
22268-1	6	Traverse holder with heel 6/60
80743-1	1	Winder AF25
22275-1	1	Deflector AF25
80924-1	1	Screw clamp with ball joint
82233-1	8	Connector Set M6/50 AF25



#82689-1 Basic Set 7
Alufix 25 (436-pcs), 54 kg

Nr.	Qty.	Name
22885-1	2	Base plate 25x50x250
21707-1	1	Base plate 25x50x500
21360-1	2	Base plate 25x250x300
21352-1	4	Base plate 25x150x200
21362-1	1	Base plate 25x300x500
21372-1	2	Bar 25x25x25
21373-1	2	Bar 25x25x50
21374-1	2	Bar 25x25x75
21375-1	3	Bar 25x25x100
21376-1	3	Bar 25x25x125
22963-1	2	Bar 25x25x200
22882-1	2	Bar 25x25x250
23233-1	2	Bar 1D
23232-1	2	Base plate 2D
81028-1	2	Double knuckle
82172-1	2	Roller slide
82462-1	2	Cross roller slide
81444-1	2	Strut 25x25x250
21992-1	2	V block 90°
21987-1	2	V block 120°
22235-1	2	Delta block 90° Form 1
22177-1	2	Delta block 90° Form 2
22174-1	2	Delta block 90° Form 3
22241-1	2	Delta block 120° Form 1
22253-1	2	Delta block 120° Form 2
22256-1	2	Delta block 120° Form 3
23240	60	Lock
23223	30	Twin bolt
21500	31	Bolt, shortened for thread
25654	2	Twin bolt for grid base plate
23225	6	Combi bolt
23228	5	Twin bolt for bar 1D
25743	8	Combi bolt shortened
81493	2	Tools (10 pcs)

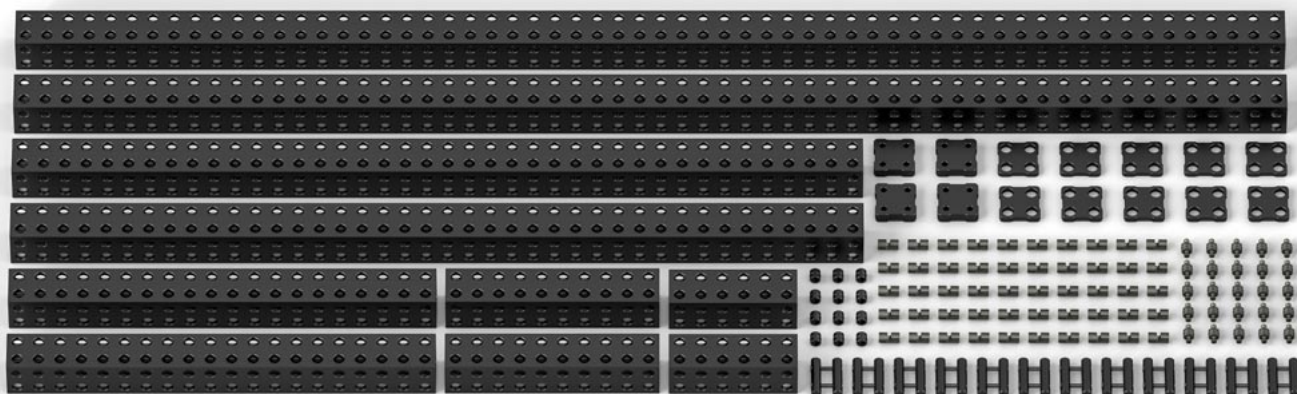
Nr.	Qty.	Name
21385-1	10	Positioning sleeves
21869	6	Reducer bush
21714-1	5	Crosspiece nut
80701-1	10	Connecting set
82139-1	6	Screw-jack h38-50
20628-1	6	Screw-jack extension 6mm
23286-1	6	Screw-jack extension 12mm
23239	8	Bolt disk
23241	3	Bolt disk
21644	3	Center, short
21646	3	Center, long
80584-1	3	Center with ball
80733-1	3	V piece 120° with ball joint
80725-1	3	V block 90° with ball joint
80590-1	3	True line stud
80941-1	2	Magnetic holder with ball joint
81212-1	2	Auto-center
81112	2	Stop and support 180°
81111-1	2	C clamp adjustable
22644-1	3	Spacer
80925-1	2	Screw clamp with ball joint
22647-1	2	Cross over male/male
81792-1	1	Vise Set 75mm (10 pcs)
81833-1	2	Forming jaw with bushes (3 pcs)
80685	1	Compound resin 400g
82080-1A	1	3 jaw keyless chuck compl. ø80
22258-1	6	Hold down spring
22260-1	3	Hold down stud
22263-1	3	Hold down stud
81020	1	Clamp set 9 M6S (69 Pcs.)
80924-1	1	Screw clamp 50 with joint
22268-1	3	Traverse holder with M6 heel
80743-1	2	Winder AF25
22275-1	2	Deflector AF25



#90281-1 Basic Set 9
Alufix 25 (594-pcs), 44 kg

Nr.	Qty.	Name
21360-1	1	Base plate 25x250x300
21352-1	2	Base plate 25x150x200
22885-1	2	Base plate 25x50x250
21707-1	2	Base plate 25x50x500
21373-1	4	Bar 25x25x50
21374-1	4	Bar 25x25x75
21375-1	4	Bar 25x25x100
21376-1	4	Bar 25x25x125
25B0250-1	4	Bar ECO Plus 50x50x250
25B0500-1	4	Bar ECO Plus50x50x500
25B1000-1	2	Bar ECO Plus50x50x1000
25B1500-1	2	Bar ECO Plus50x50x1500
23325-E1	10	Coupling AF25 eco, single
23330-E1	4	Coupling AF25 eco, double
23233-1	4	Bar 1D
81021-1	2	Bar with 1 offset unit
23232-1	3	Base plate 2D
81023-1	2	Base plate with 2 offset units
81028-1	2	Double knuckle
82172-1	2	Roller slide
82462-1	2	Cross roller slide
81444-1	2	Strut 25x25x250
81327-1	4	Strut 25x25x500
21992-1	2	V Block 90°
21987-1	2	V Block 120°
22241-1	2	Delta block 120° Form 1
22253-1	2	Delta block 120° Form 2
22256-1	2	Delta block 120° Form 3
23240	80	Lock
23225	6	Kombi bolt M6
23228	10	Twin bolt for bar 1D
23223	40	Twin bolt
21500	10	Bolt, shortened for thread

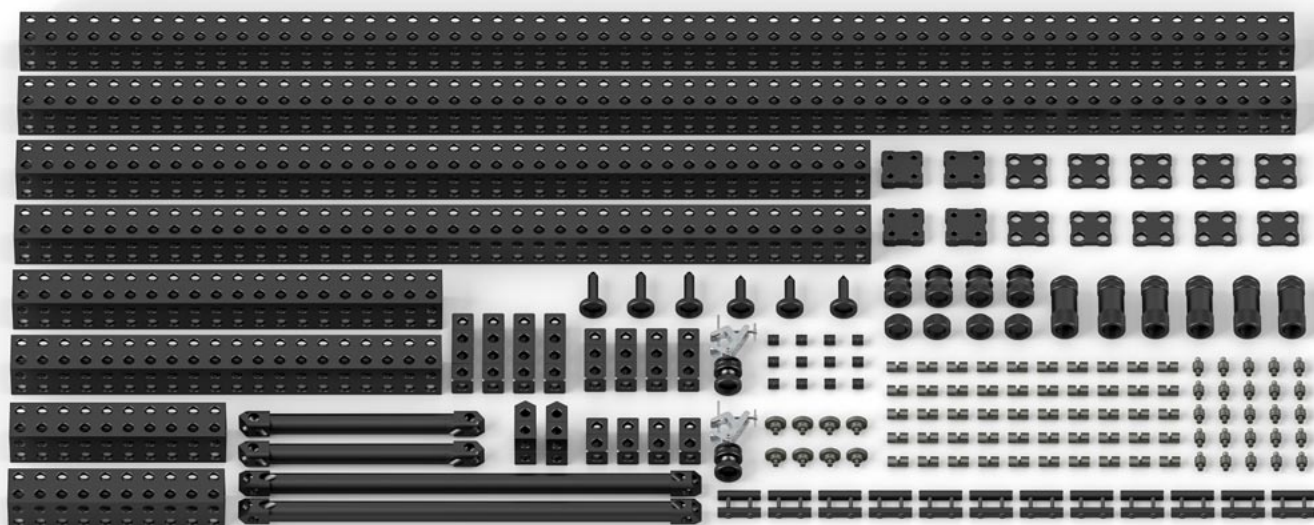
Nr.	Qty.	Name
25743	8	Combi bolt shortened
81493	2	Tools (10-pcs)
21385-1	40	Positioning sleeves
80701-1	30	Connector Set M6/25 AF25
82139-1	6	Screw-jack h38-50
20628-1	6	Screw-jack extension 6mm
23286-1	6	Screw-jack extension 12mm
23239	10	Bolt disk
23241	5	Bolt disk
21644	3	Center, short
21646	3	Center, long 50
21648	2	Center, long 70
80584-1	4	Center with ball
80733-1	3	V Block 120° with ball joint
80927-1	3	Knife V 120° with ball joint
80941-1	4	Magnetic holder with ball joint
81212-1	3	Autocenter
82252-1	3	Autocenter
81112	2	Stop and support 180°
81113	2	Stop and support 90°
81111-1	3	C clamp adjustable
80925-1	3	Screw clamp with ball joint
22644-1	3	Spacer
22647-1	2	Cross over male/male
22258-1	10	Hold down spring
22260-1	5	Hold down stud
22263-1	5	Hold down stud
22268-1	5	Traverse holder for stud
80743-1	2	Winder
22275-1	2	Deflector
80924-1	1	Screw clamp with joint
80604-1	2	Base for toggle clamp
82233-1	20	Connector Set M6/50 AF25

**#90283-1 Extension Set 1**

Alufix 25 Light (157-pcs), 17,3 kg

Nr.	Qty.	Name
25B0150-1	2	Bar ECO Plus 50x50x150
25B0250-1	2	Bar ECO Plus 50x50x250
25B0500-1	2	Bar ECO Plus 50x50x500
25B1000-1	2	Bar ECO Plus 50x50x1000
25B1500-1	2	Bar ECO Plus 50x50x1500
23330-E1	4	Coupling, AF25 eco double

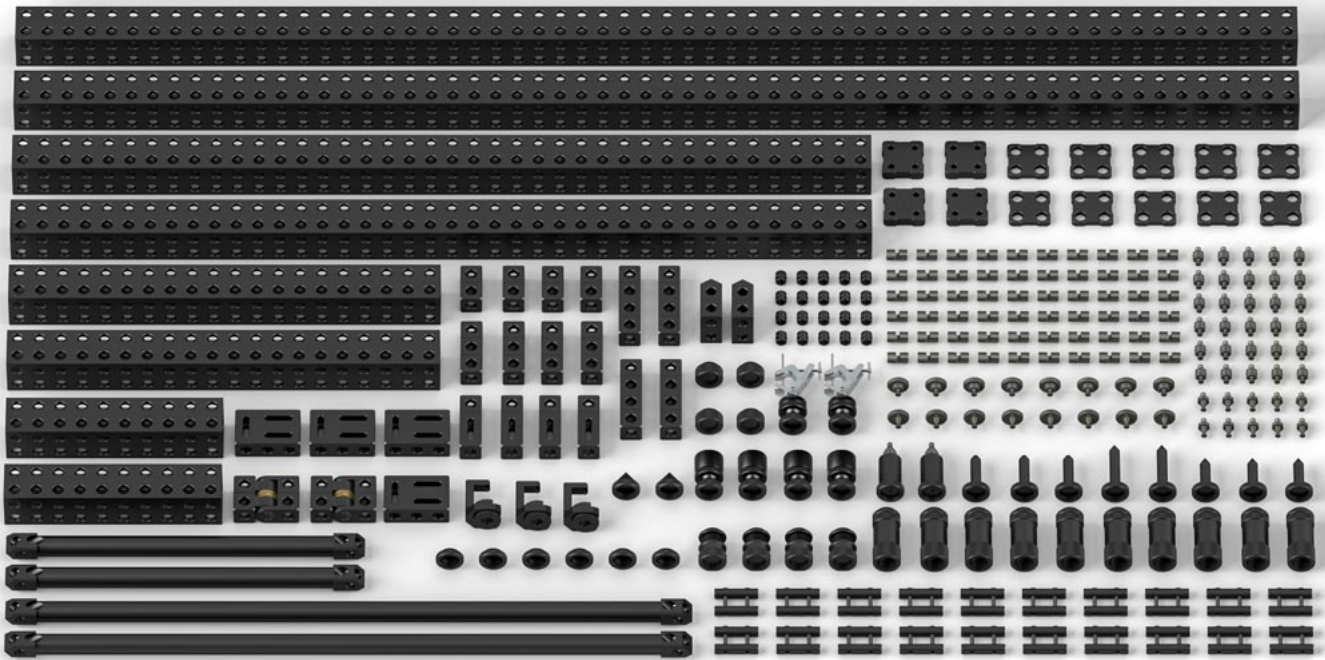
Nr.	Qty.	Name
23325-E1	8	Coupling, AF25 eco single
23240	50	Lock
23223	25	Twin bolt
82233-1	12	Connector Set M6/50 AF25
21385-1	12	Positioning sleeve 12,5 AF25

**#90284-1 Extension Set 2**

Alufix 25 Light (203-pcs), 21,3 kg

Nr.	Qty.	Name
21373-1	4	Bar 25x25x50
21374-1	4	Bar 25x25x75
21375-1	4	Bar 25x25x100
25B0250-1	2	Bar ECO Plus 50x50x250
25B0500-1	2	Bar ECO Plus 50x50x500
25B1000-1	2	Bar ECO Plus 50x50x1000
25B1500-1	2	Bar ECO Plus 50x50x1500
23330-E1	4	Coupling, AF25 eco double
23325-E1	8	Coupling, AF25 eco single
81444-1	2	Strut 25x25x250
81327-1	2	Strut 25x25x500
22256-1	2	Deltablock 120° Form 3

Nr.	Qty.	Name
23240	50	Lock
23223	25	Twin bolt
82139-1	4	Screw-jack h 38-50
82033-1	6	Screw-jack h 70-105
23286-1	4	Screw-jack extension 12 mm
23239	8	Boöt disk
21646	3	Center
80584-1	3	Center with ball
80925	2	Screw clamp with ball joint
82233-1	12	Connector Set M6/50 AF25
21385-1	12	Positioning sleeve 12,5 AF25

**#90285-1 Extension Set 3**

Alufix 25 Light (309-pcs), 25,2 kg

Nr.	Qty.	Name	Nr.	Qty.	Name
21373-1	4	Bar 25x25x50	23228	10	Twin bolt for bar 1D
21374-1	4	Bar 25x25x75	82139-1	4	Screw-jack h38-50
21375-1	4	Bar 25x25x100	82033-1	10	Screw-jack h70-105
25B0250-1	2	Bar ECO Plus 50x50x250	20628-1	6	Screw-jack extension 6mm
25B0500-1	2	Bar ECO Plus 50x50x500	23286-1	4	Screw-jack extension 12mm
25B1000-1	2	Bar ECO Plus 50x50x1000	23239	8	Bolt disk
25B1500-1	2	Bar ECO Plus 50x50x1500	23241	8	Bolt disk
23330-E1	4	Coupling , AF25 eco double	21644	2	Center, short
23325-E1	8	Coupling , AF25 eco single	21646	3	Center, long 50
23233-1	4	Bar 1D	21648	2	Center, long 70
23232-1	4	Base plate 2D	80584-1	3	Center with ball
81028-1	2	Double knuckle	80941-1	4	Magnetic holder with ball joint
81445-1	2	Strut 25x25x375	82252-1	2	Autocenter
81329-1	2	Strut 25x25x750	81111-1	3	C clamp adjustable
22256-1	2	Delta block 120° Form 3	80925-1	2	Screw clamp with ball joint
23240	60	Lock	82233-1	12	Connector Set M6/50 AF25
23223	30	Twin bolt	21385-1	12	Positioning sleeve 12,5 AF25



Workstation, metal, lockable
with drawers, suitable for Basic Sets 6 and 7

Nr.	Width	Height	Depth	Kg.
282562	570	780	960	85

Storage of Alufix components in 6 clearly laid out, spacious and fully extendable drawers, also suitable for Alufix 40 Bars 80x80. Two top drawers are equipped with inlays for small components. Lower drawers equipped with non-slip mats.

Load capacity per drawer 75 kg.



Workstation, metal, lockable
with drawers and storage compartment, suitable
for Basic Set 9 and extension sets

Nr.	Width	Height	Depth	Kg.
282727	570	780	1030	88

Storage of Alufix components in 6 clearly laid out, spacious and fully extendable drawers, also suitable for Alufix 40 Bars 80x80. Additional storage compartment mounted at rear for safe storage of long bars and profiles 50x50.

Two top drawers are equipped with inlays for small components. Lower drawers equipped with non-slip mats.

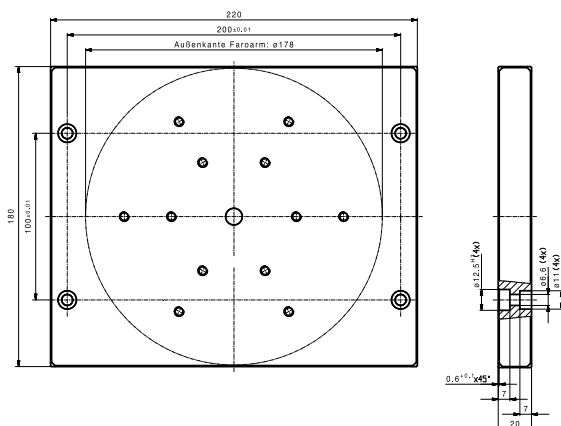
Load capacity per drawer 75 kg



Storage compartment for workstations
for storage of long bars 50x50

Nr.	Width	Height	Depth	Kg.
51753	480	660	68	-

Storage of long bars in 6 pockets.
Assembly on rear of workstation with M8 screws included in supply.



As accessory for mobile measuring units:

Adapter plate for mobile measuring arms

Nr. 91487

Incl. connection elements to mount on mobile measuring units.
Further adapter plates available on request

Mobile measuring and storage unit
With gridded precision plate and drawers

Suitable as assembly platform and fixture base, with grid base plate 800x1200mm, grid 100mm, grid holes D12,5/M6.

Nr.	Wigth	Height	Depth	Load capacity	Kg.
284751	1200	930	800	170 Kg	130

- 4 drawers 50 mm
- 2 drawers 75 mm
- 1 drawer 100 mm
- 1 drawer 150 mm
- 4 swivel castors, 2 with brake
- Grid plate anodized black on request
- Grid plate with optional with other grid / sleeves



Mobile measuring and storage unit
With gridded precision plate and drawers

Height adjustable, also suitable as assembly platform and fixture base, with grid base plate 800x1200mm, grid 100mm, grid holes D12,5/M6.

Nr.	Width	Height	Lift	Deptj	Load cap.	Kg.
284452	1200	930	180	800	170 Kg	140

- 4 drawers 50 mm
- 2 drawers 75 mm
- 1 drawer 100 mm
- 1 drawer 150 mm
- 4 swivel castors, 2 with brake
- Grid plate anodized black on request
- Grid plate with optional with other grid / sleeves



Mobile measuring and storage unit XL
With gridded precision plate and drawers

Suitable as assembly platform and fixture base, with grid base plate 1600x1200mm, grid 100mm, grid holes D12,5/M6.

Nr.	Width	Height	Depth	Laod cap.	Kg.
285101	1200	930	1600	300 Kg	250

- 8 drawers 50 mm
- 4 drawers 75 mm
- 2 drawer 100 mm
- 2 drawer 150 mm
- 6 swivel castors, 2 with brake
- Grid plate anodized black on request
- Grid plate with optional with other grid / sleeves





Vacuum base

Item number: 282446B-1

This universally applicable vacuum plate forms the basis for mounting measuring arms. A battery-operated miniature pump creates a vacuum in seconds so that the plate is "sucked down".

Monitoring displays, control lights and pressure switches ensure a firm and secure stand. Adaptations on the top enable the quick and secure attachment of measuring arms of known brands.

The Witte Vacuum Base does not require any additional units. A vacuum pump, signaling devices, function and monitoring devices are integrated in the compact design.

This enables use in locations far away from any energy supply. A special double lipped seal also allows use on curved surfaces and expands the range of applications possible uses in many ways.

Pre-machined connection options for measuring arm adapters from various manufacturers enable the mounting of special adapter rings.

Dimensions: 260 x 80 mm

Weight: 3,7 Kgs

Clamping force:
maximal 3.250 Newton at sea level

Battery Charger*: 100 to 240 volt

Battery pack* power: 12 volt
Light diodes indicate energy supply.

Should the battery level drop below the safe operating level then a signal will warn the operator.

End vacuum is adjusted to 200 mbar which equals 80%.

(*): Parts are included in delivery .



The special suction seal allows fixation even on curved surfaces.

FIXMES

Alufix and TopPos parts library for CAD systems

Fixmes is an Alufix parts library on a geometric basis for designing and documenting fixtures. Using Alufix standard elements fixtures can be built in a fraction of the time required previously. By designing the fixture on-screen expensive idle-times of the measuring machine are avoided.

The principle:

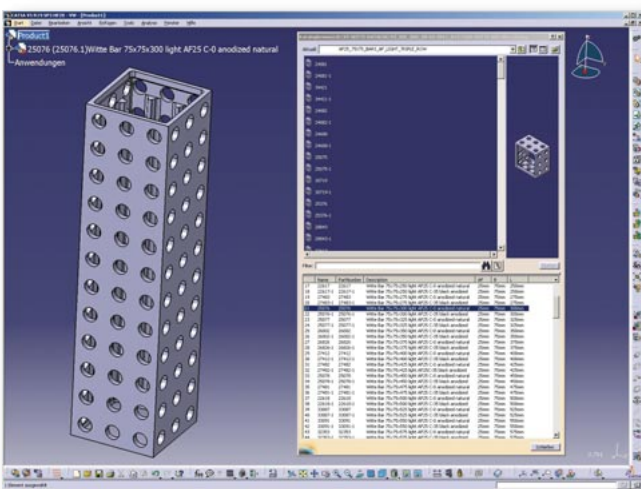
at the CAD workplace the user designs a desired fixture for workpiece machining or measuring using Alufix components. To do so he can use all parts available in the Fixmes library.. The selection is made according to one of the following features:

- Item No.
- Name
- Dimension

The parts of the fixture can be displayed as a wire model or solid. For a clearer image and an increase in speed individual planes or elements (holes) can be excluded. A printout of the finished fixture includes a parts list.

The advantages:

- Shorter design times
- Better prolonged use of measuring machine
- Timely preparation of fixture
- Documentation for later repeat assembly of fixture
- Short term changes can be carried out quickly
- No training necessary,
- CATIA or AutoCAD functions are utilised
- Also for off-line programming



83677 Fixmes Library für Catia V5
Elements of Alufix modular fixturing system are stored as *.catpart and *.catproduct files.

In addition a CATIA catalogue with parameterized parts is available on request. Elements can be selected according to different criteria such as item number, description or dimensions.

92562 Fixmes Library für Unigraphics NX5
Alufix elements stored with attachment *.prt

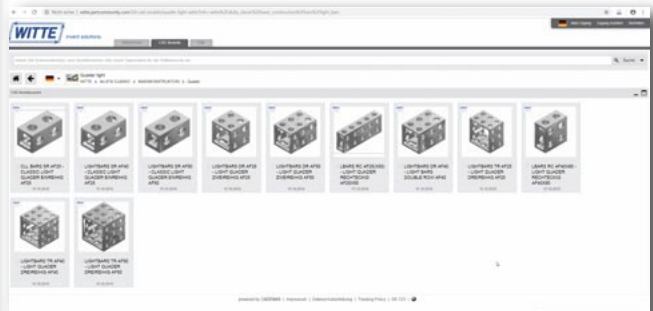
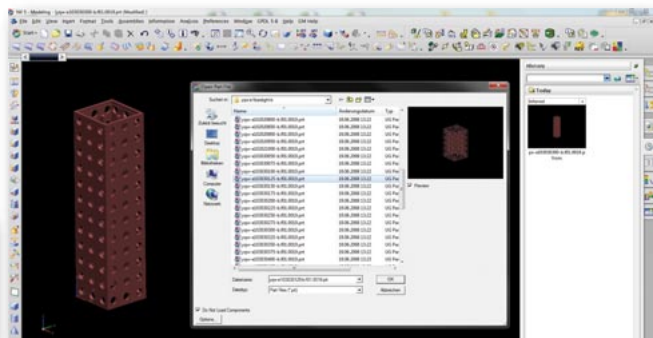
83676 Fixmes Library for AutoCAD
Alufix elements stored with attachment *.dwg

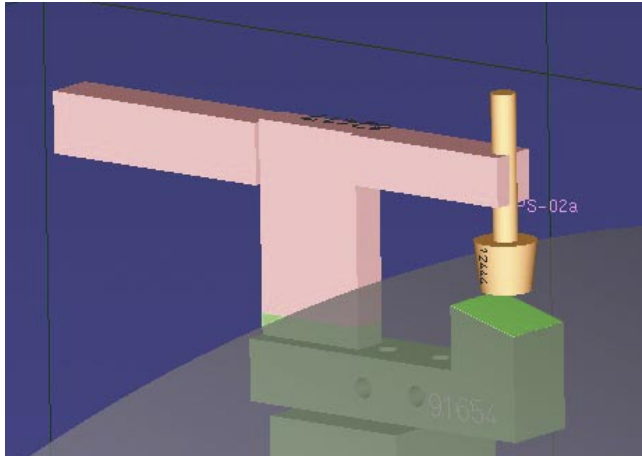
82157 Fixmes Library IGES Format
Alufix elements stored with attachment *.igs

82662 Fixmes Library STEP Format
Alufix elements stored with attachment *.stp.

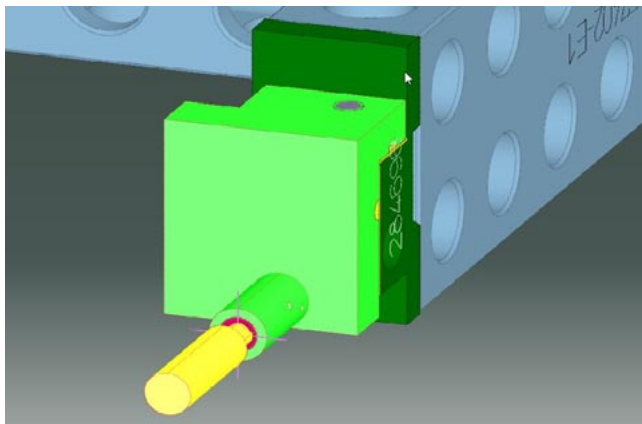
In addition we also offer a download service from internet under: www.partserver.de

After registration Alufix components can be downloaded free of charge in all native or universal formats under this address.





Surface cut for contour blocks



Individual contour block design

ALUFIX Experte

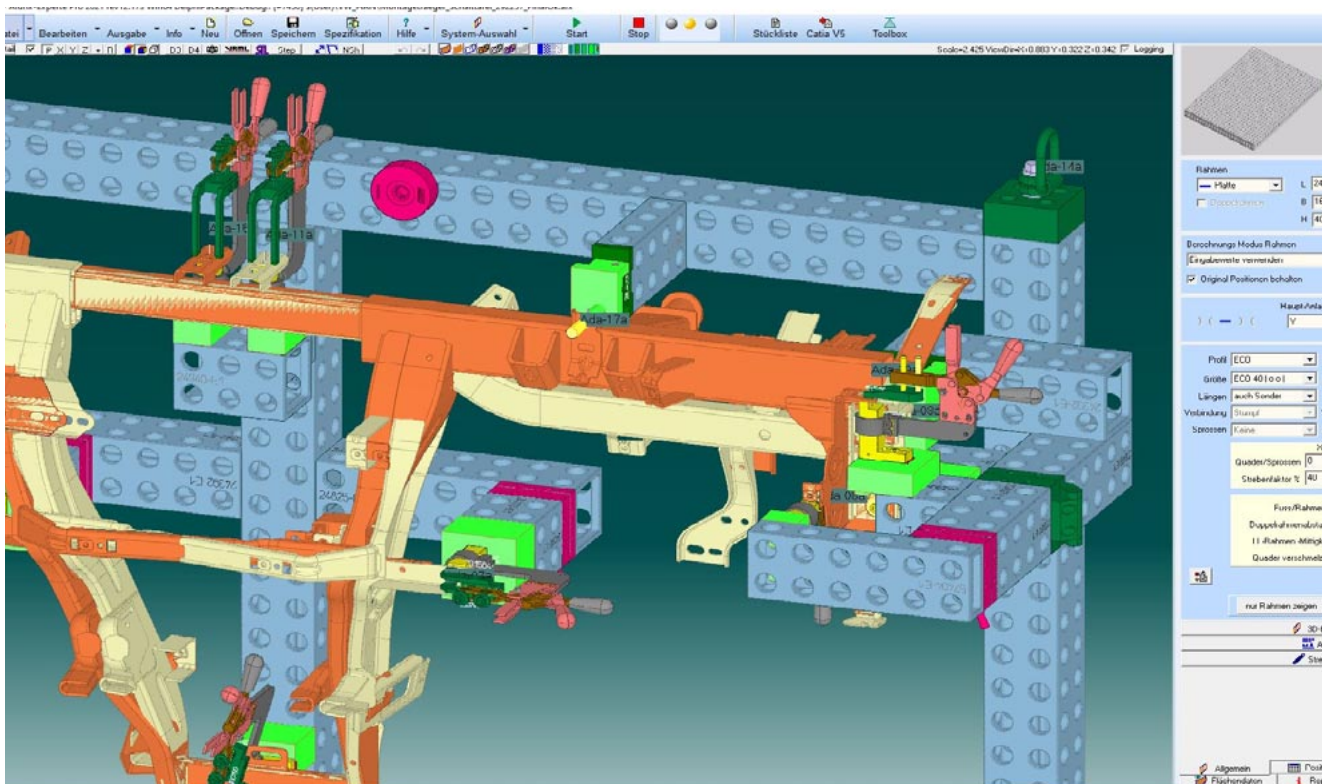
3D Design Software #85344

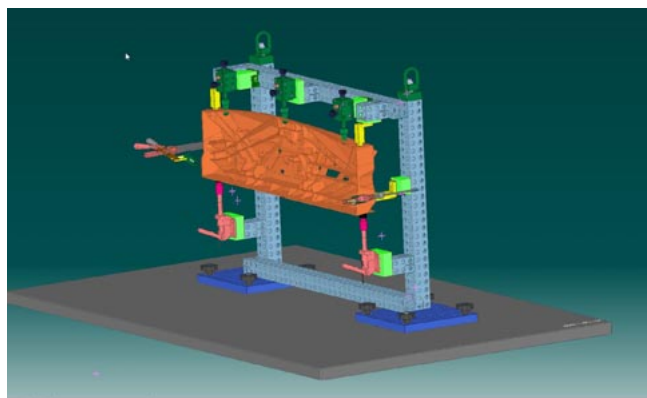
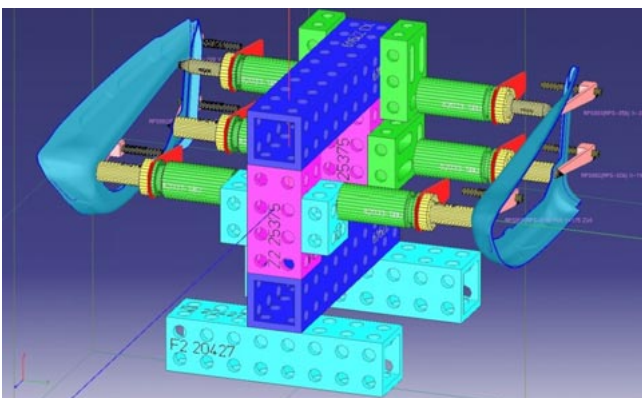
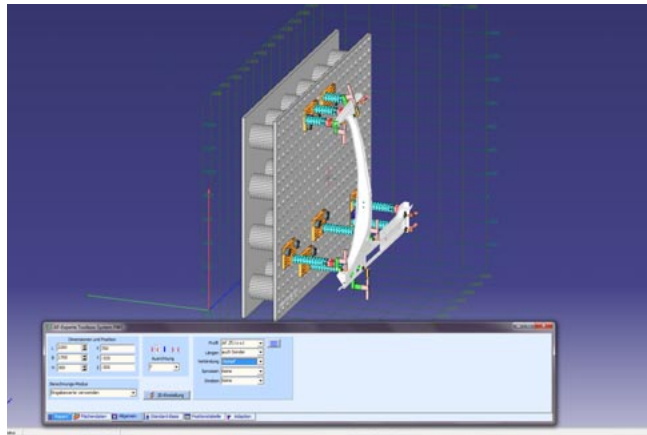
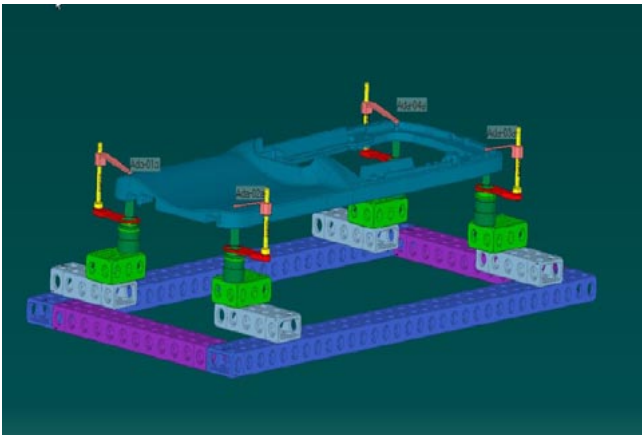
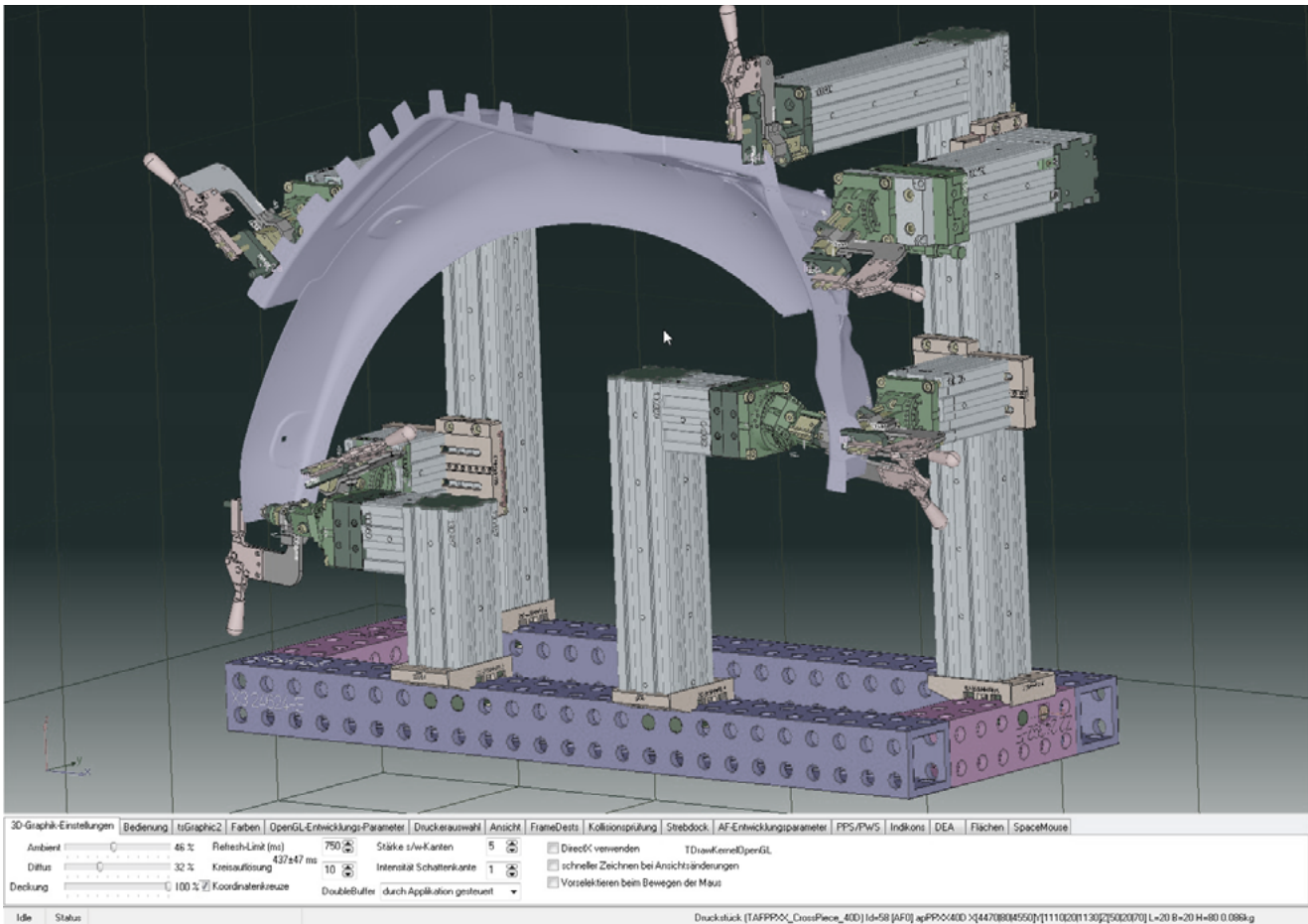
Alufix Expert software makes automatic designs for fixtures with corresponding partlists.

You choose the Alufix /TopPos system and define clamping points. The software calculates on the basis of this information complete solutions and variations of a fixture. Simply select the desired Alufix system, the basic type of build (frame or plate), the grid size and the position and function of clamping points.

On the basis of this input the software calculates complete solutions and variations. For checking purposes and measuring off of surface vectors additional part data in all established formats can be imported.

Pictures show some variations, which have been calculated by the software. The clearly structured, self-explaining software is easy to learn. Two separate but complementing help functions (Tool tips and Operation Manual) support users at all times. The design data is exported in either IGES, STL or VRML format (i.e. for offline programming of coordinate measuring machines), or can be transferred with a macro and the corresponding parts library in Catia V4/V5, Unigraphics or Auto-cad.





Complementary range for fixture building

Contents

Page	Chapter
135	Column variations
136	Column connection
138	Column connection PPS
140	Column connection PWS
142	Clamp units
143	Contour blocks
144	Hook clamps
148	Fold up and swivel Castors
150	Reference balls

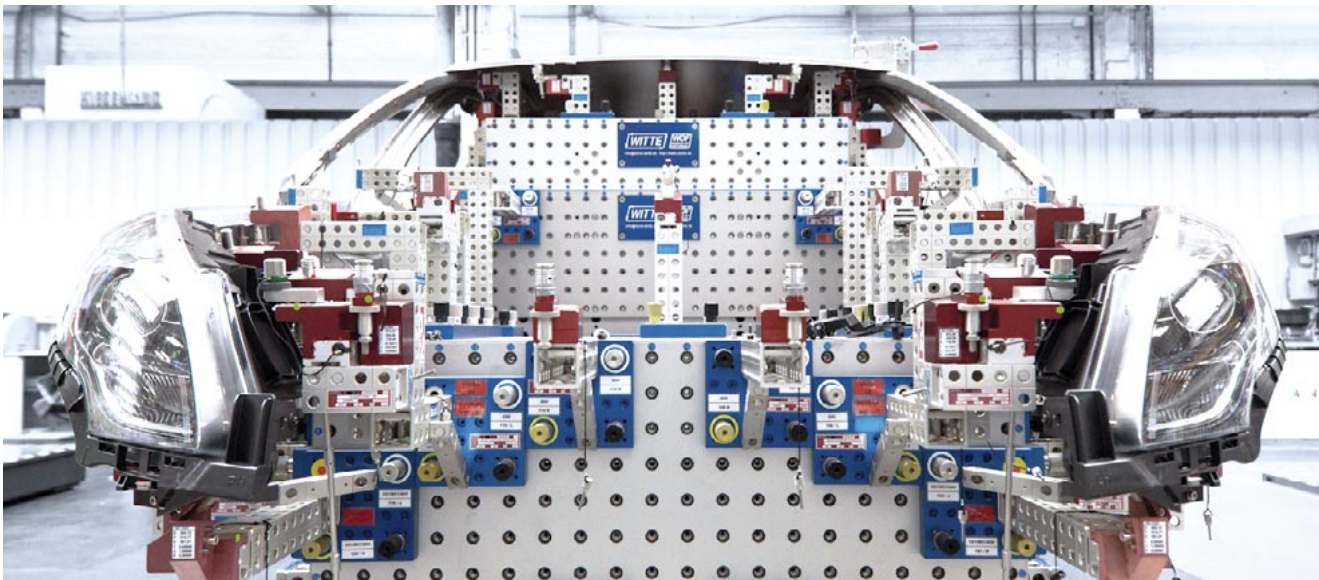


Structure plates from the Witte FixBase® range are ideally suited as a base for column type fixture design.

These extremely robust plates in sandwich style have been consistently further developed for years and are available with different grids, horizontal, vertical, mobile, rotatable and height-adjustable - right up to autonomous models with safety features.

Further information can be found in the Witte FixBase® brochure.





Column variations

for use on grid base plates or structure plates

Combining a grid plate (conventional or structure type) with exchangeable columns offers following advantages:

Use of one base for user-defined assembly of various workpieces, different assembly degrees of parts (single parts, welded groups, assemblies) different derivatives, match metal function.

Considerably less storage space is required in comparison with complete fixtures.

Comprehensive accessories such as multi level trolleys, foldable, stationary or mobile storage stations and tables are available for storing column supports.

Advantages:

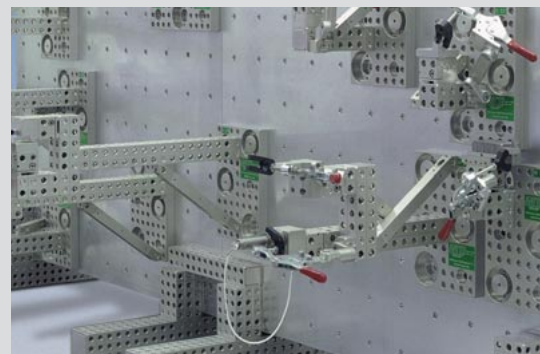
Multiple use of column supports is possible on different base plates or in different departments. Pre measuring of supports on small measuring equipment is possible.

Different types of connection: Fitted screws, PPS (centering bolt and bayonet lever), PWS (clutch bolt with centering pin).

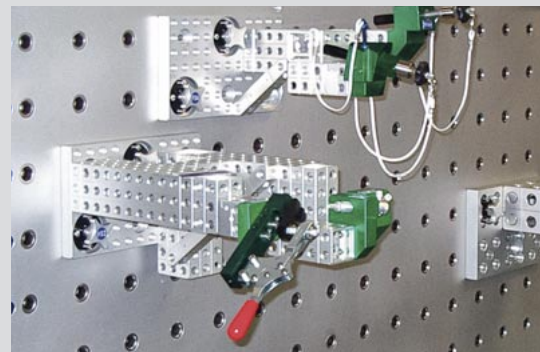
Optional footplates for Classic or Eco bars or simple footplates for Megalu columns are available.

The columns can be used for further functions or contact points by using folding or quick change couplings.

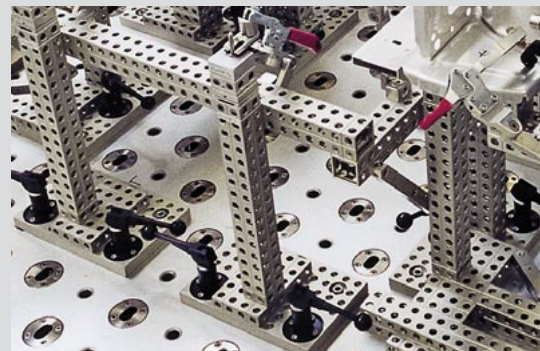
Extra long bars on columns are supported by angled struts or connected to each other using cross bars.



Columns mounted using fitted screw connection



Columns mounted using clutch bolt (PWS)



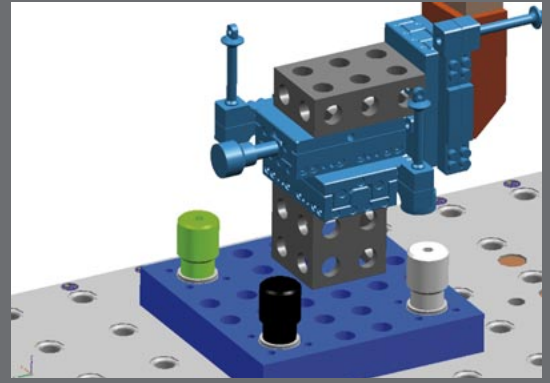
Columns mounted using bayonet clamps (PPS)

Column connection

with fitting screws for basic grid holes

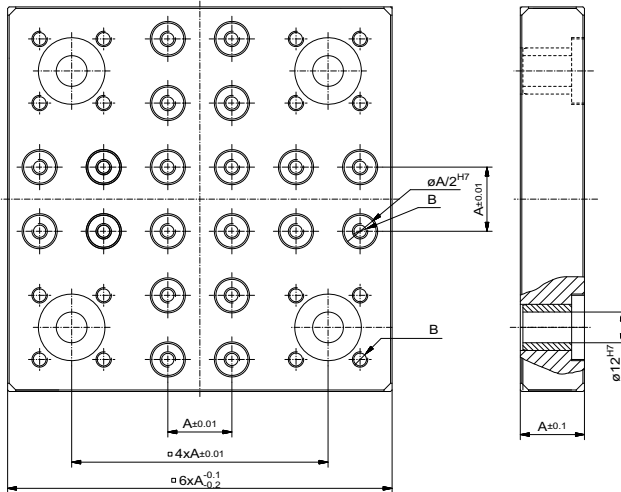
Simple and proven version.
Two types of locators are available:

- Snug fit, floating (xy positioning)
- Without fit (only clamping)



Footplate

150x150, AF 25/50

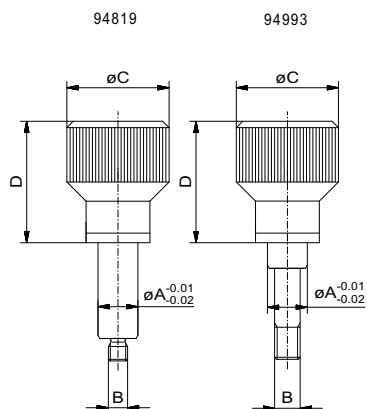


Nr.	A	B	C	
289356-1	25	M6	$\phi 12 H7$	1.500



Lock pin

Types I + II for footplate 304231



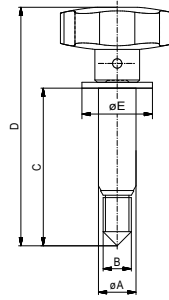
Nr.	A	B	C	D	Type	
94819-1	12	M8	32	38	I	180
94993-1	10,5	M8	32	38	II	175



Plates are available in different dimensions and with different grids.
Lock pins are available in different dimensions.

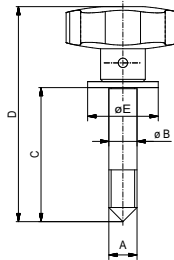
Fitting screw
for plate or bracket with with positioning or
excenter sleeves

Nr.	A	B	C	D	E		g
82342	ø16h6	M12	67	102	30	●	125
82225	ø16h6	M12	79,5	114	30	●	145
92488	ø15,98-0,02	M12	67	102	30	○	125
92489	ø15,98-0,02	M12	79,5	114	30	○	145

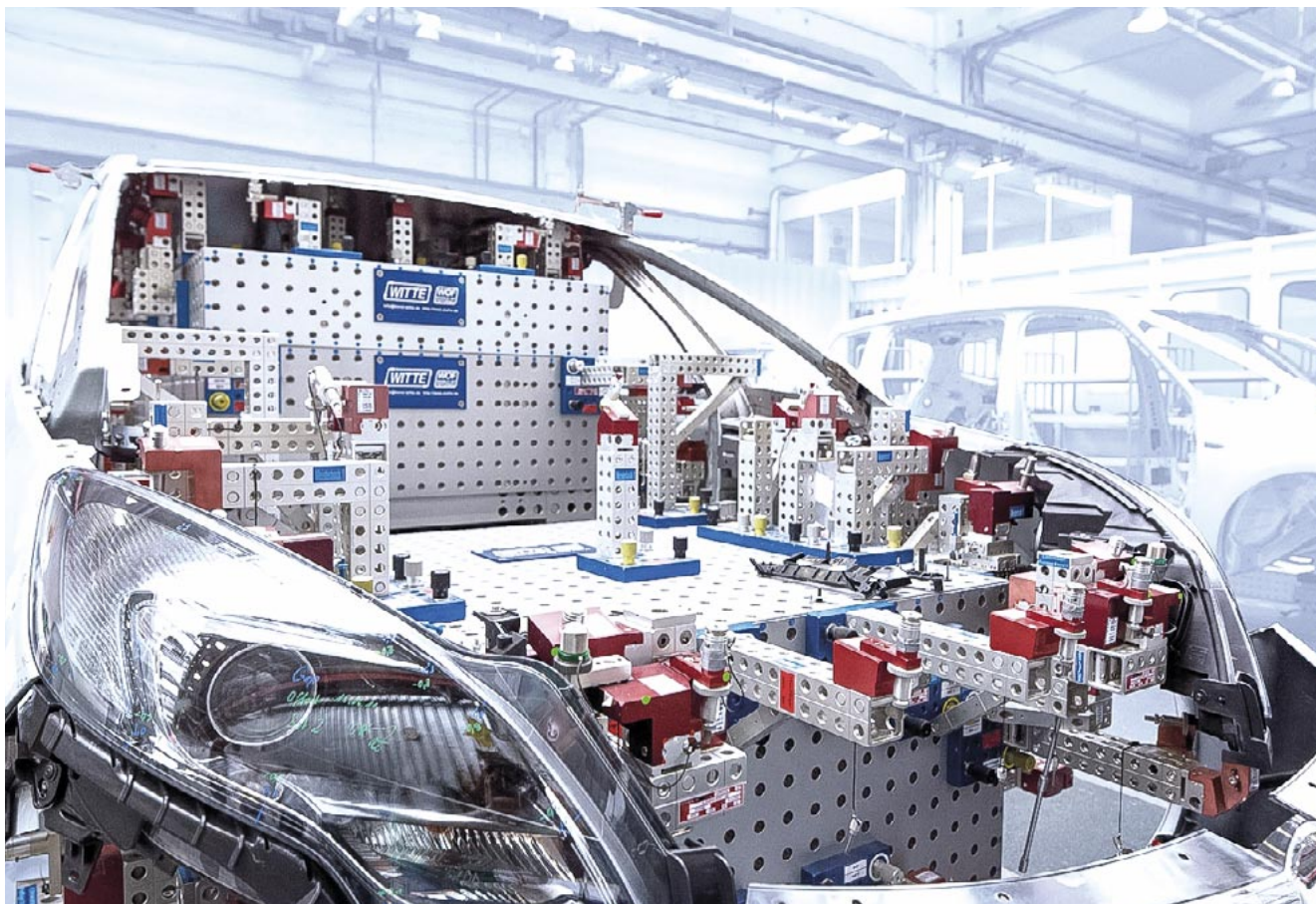


Clamp screw
for plate or bracket with with positioning or
excenter sleeves

Nr.	A	B	C	D	E		g
82343	M12	12	57	102	30	●	110
82341	M12	12	79,5	114	30	●	140



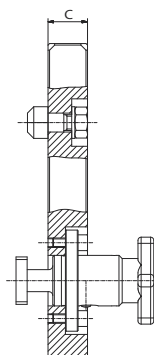
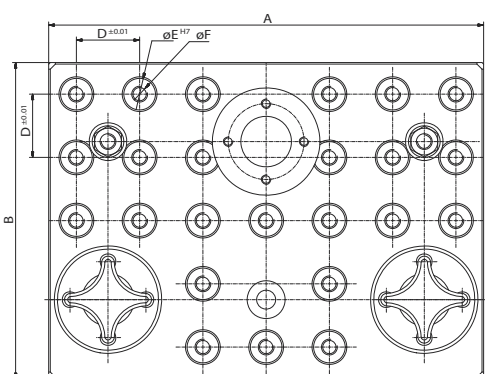
Other versions on request



Column connection

with Witte PPS quick clamp system

Separate positioning and fixation of footplates via centering pin and clamp units.



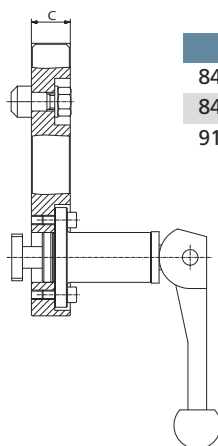
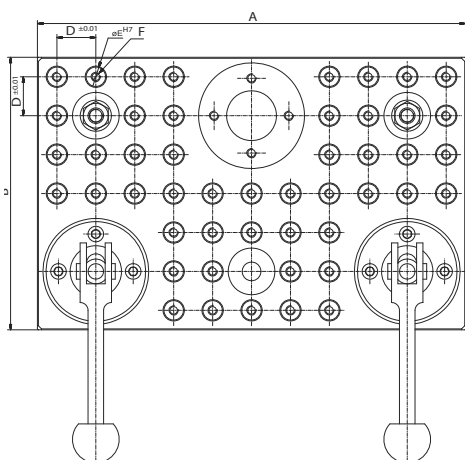
Footplate for Witte PPS-System with star knob

Nr.	System	A	B	C	D	E	F	g
93513-1	AF25	275	175	25	25	12,5	M6	3.300
93514-1	AF40	275	200	25	40	20	M10	3.740
93515-1	AF50	300	200	30	50	25	M12	5.100



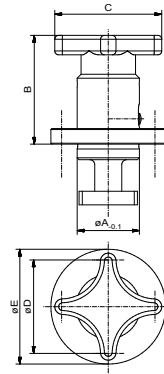
Footplate for Witte PPS System with hand lever

Nr.	System	A	B	C	D	E	F	g
84608-1	AF25	275	175	25	25	12,5	M6	3.950
84609-1	AF40	275	200	25	40	20	M10	4.400
91050-1	AF50	300	200	30	50	25	M12	5.560



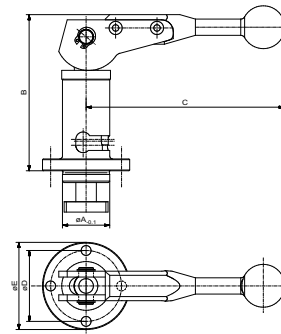
**Lock unit
with star knob**

Nr.	A	B	C	D	E	
93444-1	32	56	55	48	59	280




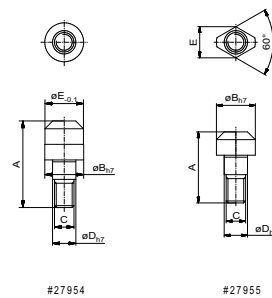
**Lock unit
with hand lever**

Nr.	A	B	C	D	E	
82714	32	106	135	48	59	1.500



Centering pin

Nr.	A	B	C	D	E	
27954	44,5	20	M10	12	19,8	60
27955	36,5	20	M10	12	16	36



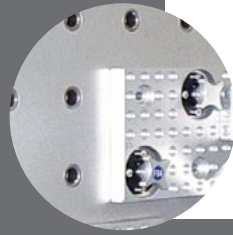
#27954

#27955

Column connection

with Witte PWS quick clamp system

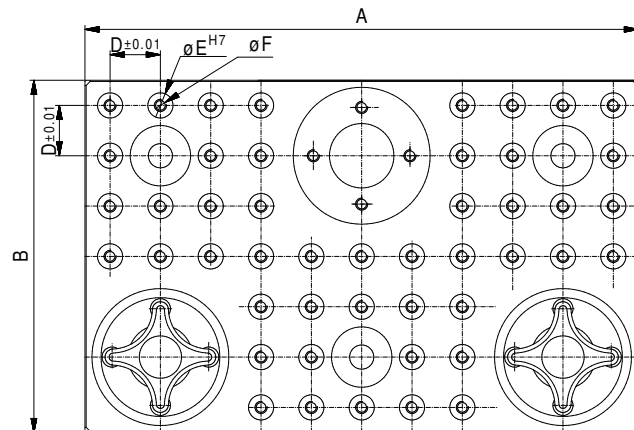
Expanding clutch bolt centers and clamps footplate on PWS grid or sandwich plate.



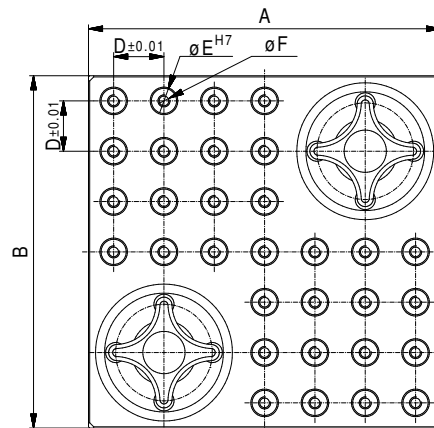
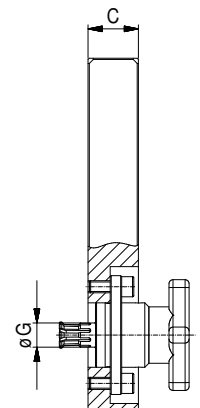
Footplate for Witte PWS System with expanding clutch bolt 45°



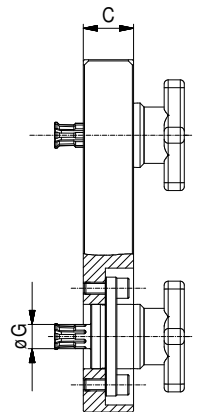
Nr.	Type	A	B	C	System/D	E	F	øG	h
93525-1	2	175	175	25	25	12,5	M6	12	2.280
93524-1	1	275	175	25	25	12,5	M6	12	3.050
92883-1	2	175	175	25	25	12,5	M6	20	2.370
92842-1	1	275	175	25	25	12,5	M6	20	3.080
92950-1	2	200	200	25	40	20	M10	20	3.200
92843-1	1	275	200	25	40	20	M10	20	3.540
92844-1	1	300	200	30	50	25	M12	20	4.840



Type 1

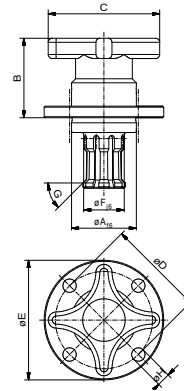


Type 2



Expanding clutch bolt with star knob

Nr.	A	B	C	D	E	F	G	H	
93523-1	32	39	55	48	59	12	45°	6,7	280
92755-1	32	39	55	48	59	20	45°	6,7	320
96109-1	32	39	55	48	59	20	30°	6,7	320

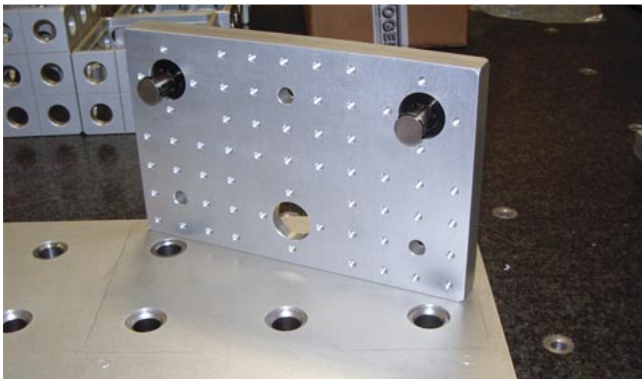


Footplate without bolts or locks
für Witte PWS-/PPS-System

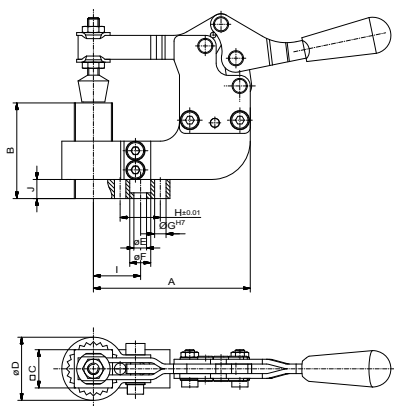
Nr.	System	Dorn-ø	Type	Base for Nr.	
				PWS	PPS
27958-1	25	12 bzw. 20	1	93524 bzw. 92842	93513
51561-1	25	12 bzw. 20	2	93525 bzw. 92883	-
29375-1	40	20	1	92843	93514
51606-1	40	20	2	92950	-
33747-1	50	20	1	92844	93515



Drawing see page 140.

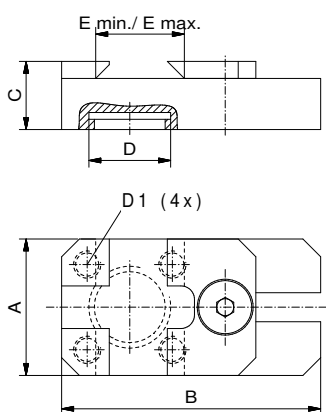


Underside of PWS footplate



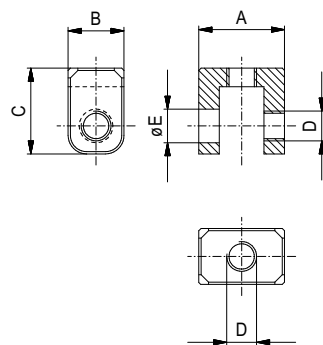
Clamp unit with ratchet grip
spacing 15°, for toggle clamp 217 UBL, with surface contact 20

Nr.	A	B	C	D	E	F	G	H	I	J	Pressure fork.#	⊗
282000-1	112	50	20	33	6,6	11	6	21	24,7	10	/.	200
282001-1	87	50	20	33	6,6	11	6	21	24,7	10	/.	200
282003-1	112	70	20	33	6,6	11	6	21	24,7	10	/.	220
282004-1	87	70	20	33	6,6	11	6	21	24,7	10	/.	220
282005-1	112	70	20	33	6,6	11	6	21	24,7	10	357582-1	240
282006-1	112	50	20	33	6,6	11	6	21	24,7	10	357582-1	240
282007-1	112	50	20	33	6,6	11	6	21	24,7	10	357578-1	250
282008-1	112	70	20	33	6,6	11	6	21	24,7	10	357578-1	250



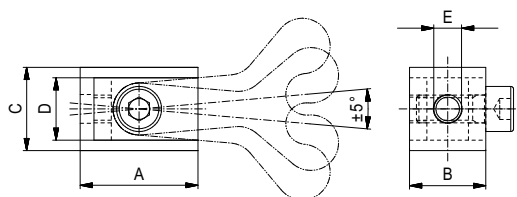
Base
for toggle clamp M24x1

Nr.	A	B	C	D	D1	E min.	E max.	⊗
80604-1	40	76	20	M24x1	M8	26	44	133



Foot for pressure fork

Nr.	A	B	C	D	E	⊗
87590-1	23	15	23	M8	9	25




Foot for pressure fork
limited angle

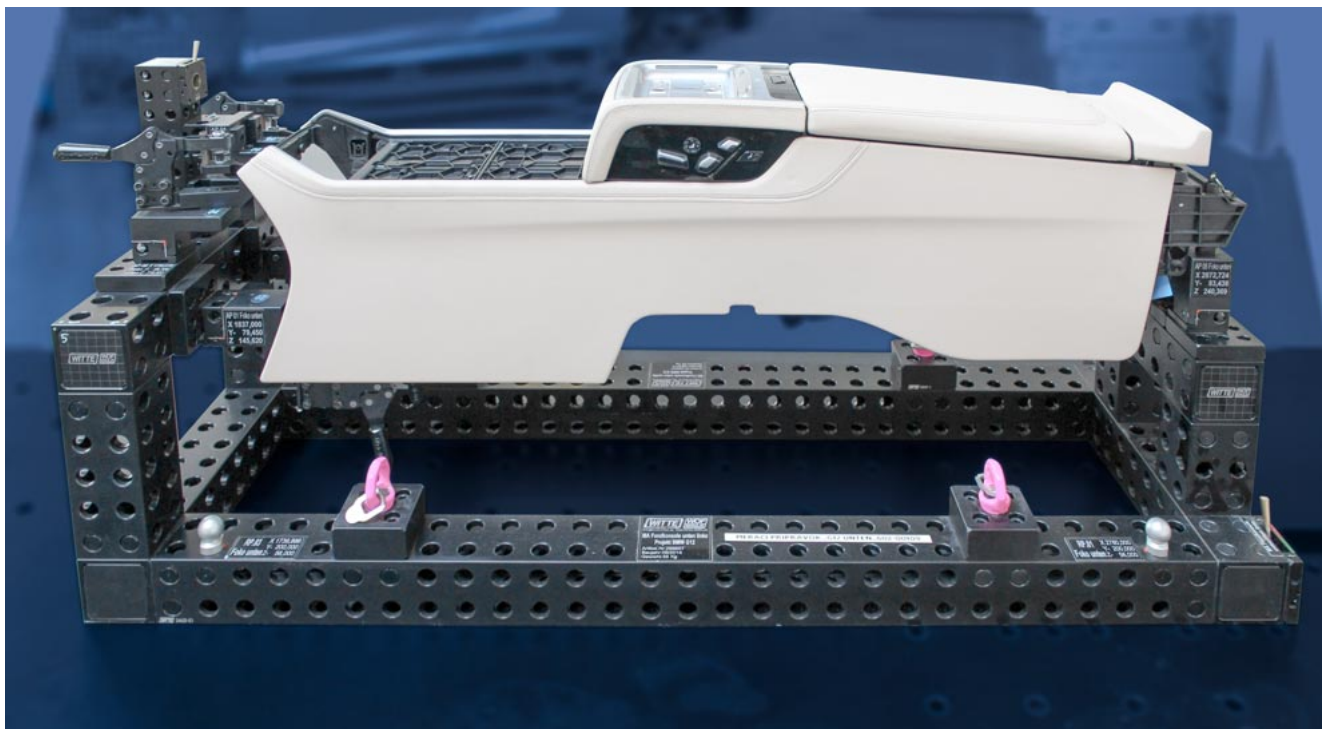
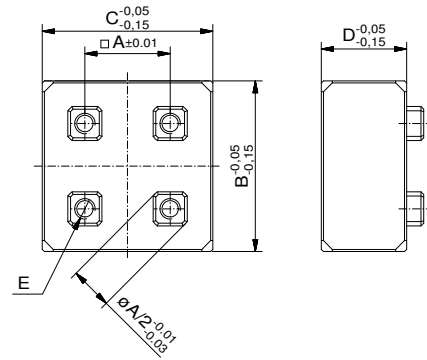
Nr.	A	B	C	D	E	⊗
89931-1	34	22	24	18	M8	50



Contour block

Preforms without surface protection,
Alufix 25 / 40 / 50

Nr.	A(AF)	B	C	D	E	
23366	25	25	25	25	M6	45
23367	25	25	50	25	M6	89
23368	25	50	50	25	M6	179
23617	25	50	75	25	M6	268
25312	25	25	50	50	M6	179
23369	25	50	50	50	M6	358
25314	25	50	75	50	M6	536
23618	25	100	100	50	M6	1.430
23630	40	40	40	40	M10	183
23631	40	40	80	40	M10	366
23632	40	80	80	40	M10	732
23633	40	80	120	40	M10	1.098
25313	40	40	80	80	M10	732
23634	40	80	80	80	M10	1.464
25315	40	80	120	80	M10	2.196
23635	40	160	160	80	M10	5.857
28049	50	50	50	50	M12	358
28050	50	50	100	50	M12	715
28051	50	100	100	50	M12	1.430
28052	50	100	150	50	M12	2.145
27537	50	50	100	100	M12	1.430
28053	50	100	100	100	M12	2.860
27367	50	100	150	100	M12	4.290
28054	50	200	200	100	M12	11.440



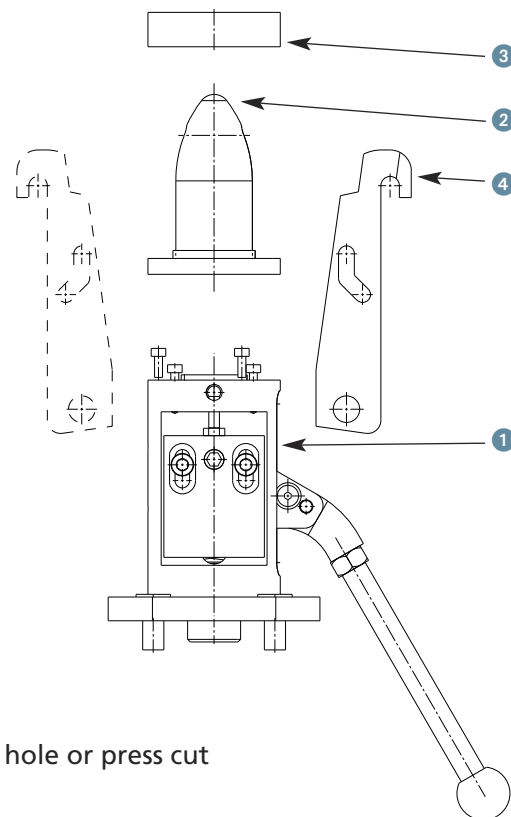
C·E ALUFIX preferred range
 Green: Item is available immediately.
 C: Classic version, E: Eco version, CE: Classic or Eco
 ■: color "black"

ALUFIX Hook clamps

Hook clamps are used when workpieces are positioned using holes and simultaneously clamped.

Further they are suitable for clamping points, which are so far away from workpiece edges that they are unreachable using toggle clamps.

Operation is by hand, hydraulic or pneumatic.



How to order:

Hook clamps are individually manufactured for every hole or press cut and comprise of four parts:

- ① Basic unit
- ② Top pin
- ③ Support ring
- ④ Hook (optional two hooks)

When ordering a hook clamp please attach a drawing or data of the support with details on centre pin diameter and the shape of the hole (round or slot).

Further we need details of clearance behind the hole, metal thickness, collar height and direction in which part has been stamped.

When ordering basic unit please also state required hook size

See also our inquiry form under

[www.witte-barskamp.de/Catalogues and Brochures/Additional information on Hook Clamps](http://www.witte-barskamp.de/Catalogues%20and%20Brochures/Additional%20information%20on%20Hook%20Clamps)

Hook Clamp Compact
Example dia 30

A	B	C	D	E	F	G	H	I	⊗
30	50	110	9	159	80	112	20	M8	1156

1 Hook Clamp Basic Unit compact

Nr.	for pin dia	⊗
281408-1	15-39	669

2 Top pin compact / compact mini

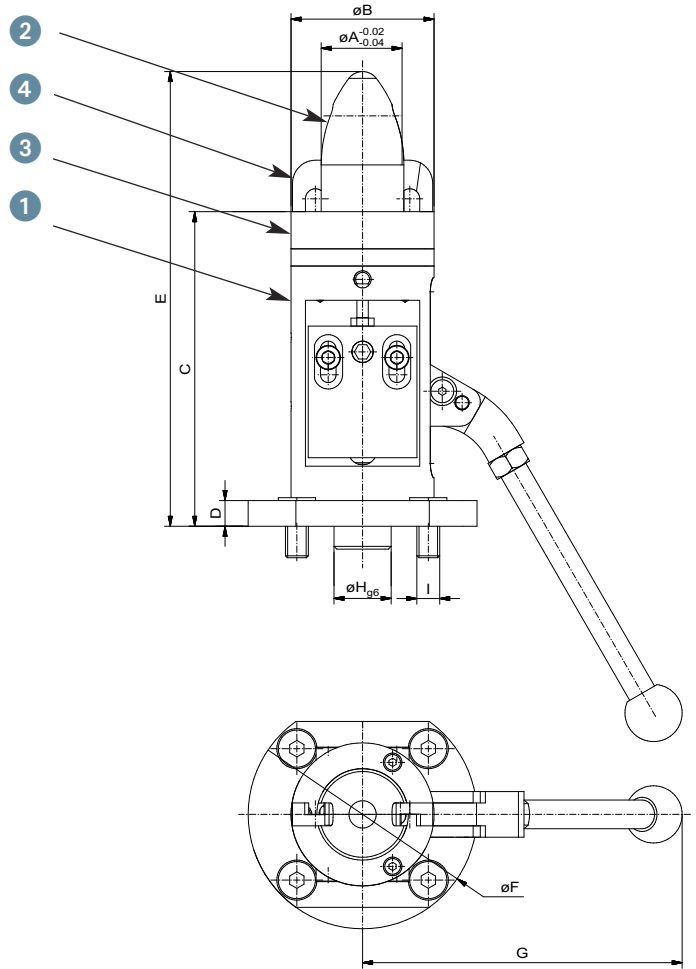
Nr.	pin dia	⊗
34389-1	15,0 ^{-0,02mm}	108
51512-1	20,0 ^{-0,02mm}	145
391436-1	25,0 ^{-0,02mm}	201
34388-1	30,0 ^{-0,02mm}	254
54120-1	40,0 ^{-0,02mm}	456

3 Support ring compact / compact mini

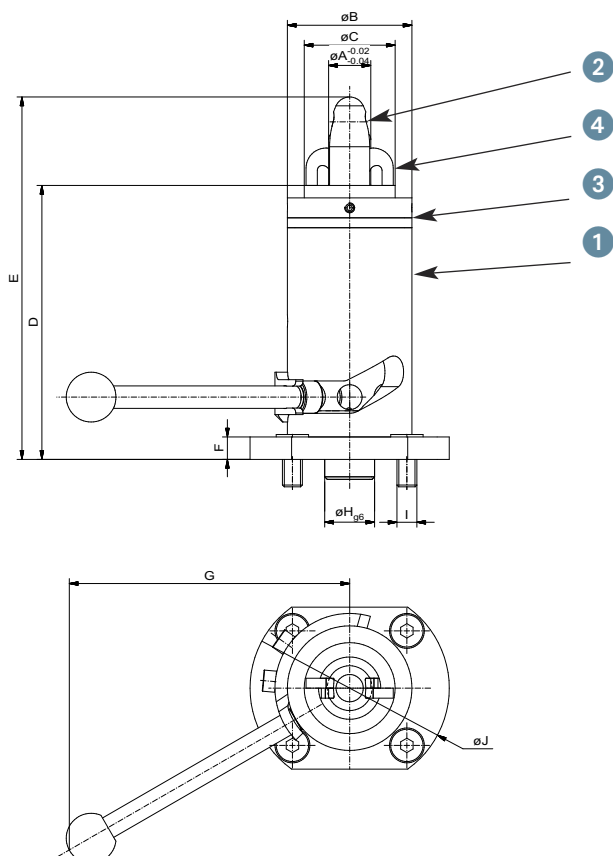
Nr.	Surface dia	⊗
53384-1	30 mm	106
56036-1	35 mm	112
26589-1	40 mm	128
390548-1	45 mm	106
26592-1	50 mm	110
33020-1	55 mm	152
397265-1	60 mm	182

4 Hook compact

Nr.	clamping width	⊗
30759-1	30 mm	80
394903-1	35 mm	88
28399-1	40 mm	94
30760-1	45 mm	100
28400-1	50 mm	122



Internal excenter lever, top pin and support ring are 100% compatible (outer dimensions same as existing hook clamps). Sideways activation possible via hex key.



Hook Clamp compact flexible

Example dia 30

A	B	C	D	E	F	G	H	I	J	\varnothing
18	50	36,5	110	145,5	9	112	20	M8	80	991

1 Hook Clamp Basic Unit compact flexible

Nr.	Base height	\varnothing
281886-1	110 mm (low-standard)	700
281887-1	160 mm (high)	1047

2 Top pin compact flexible

Nr.	pin dia	\varnothing
306051-1	$\varnothing 18-0,02$ mm	159
306052-1	$\varnothing 20-0,02$ mm	169
309929-1	$\varnothing 25-0,02$ mm	199
306053-1	$\varnothing 30-0,02$ mm	245
304272-1	$\varnothing 40-0,02$ mm	410

3 Ring compact / compact mini

Nr.	surface dia	\varnothing
311718-1	$\varnothing 30$ mm	88
311720-1	$\varnothing 35$ mm	98
306056-1	$\varnothing 40$ mm	104
311722-1	$\varnothing 45$ mm	101
306057-1	$\varnothing 50$ mm	116
311739-1	$\varnothing 55$ mm	100
304273-1	$\varnothing 60$ mm	145

4 Hook compact flexibel

Nr.	clamping width	\varnothing
311717-1	30 mm	26
306058-1	35 mm	36
306059-1	40 mm	38
306060-1	45 mm	40
306061-1	50 mm	46
311738-1	55 mm	48
304274-1	60 mm	50



Picture shows high base unit version #281887. Special lengths on request.

Tolerances in workpiece thickness of up to $\pm 0,3$ mm are evened out. Fast adjustment according to workpiece thickness possible.

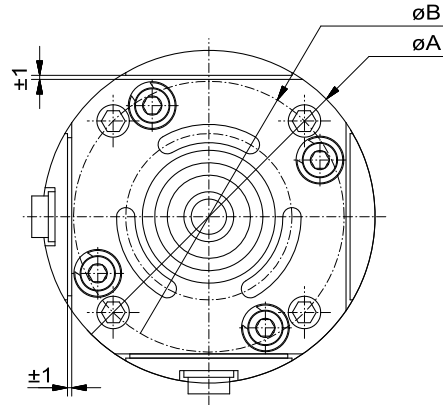
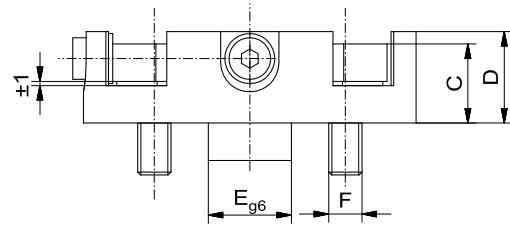
More space between operating lever and clamping surface = more freedom of movement and less part collision due to horizontal lever movement.

Hook alignment independent of lever orientation, infinite rotary movement 360° .

Support ring infinite rotary movement 360°

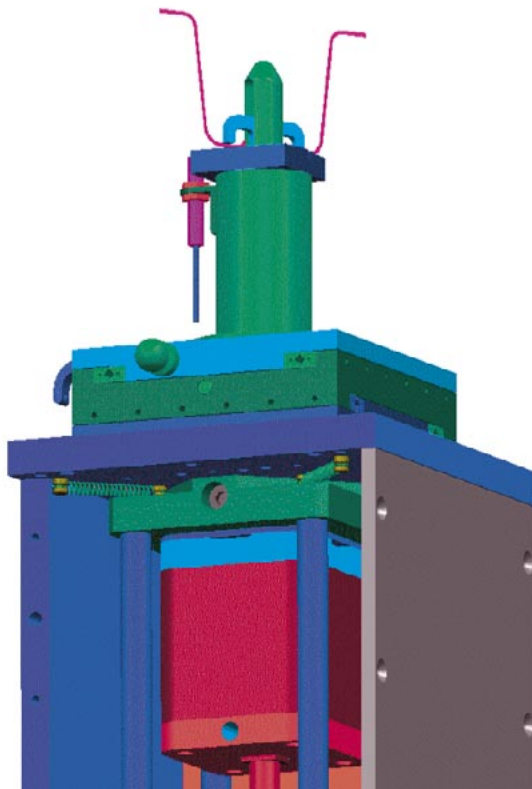
Foot for hook clamps
xyz shimmable including shim foils

Nr.	A	B	C	D	E	F	g
281407-1	80	65	19	22	20	M8	286

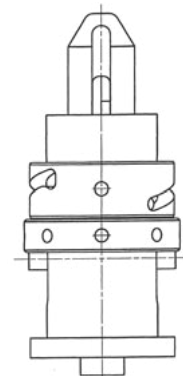


Additional hook clamps

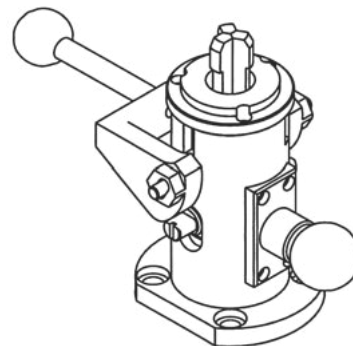
Previously supplied hook clamps are still available. Details and availability on request.



Pneumatisch betätigte Ausführung.
Darstellung mit eingelegtem Werkstück.



Hook clamp with excenter movement and adjustment for workpiece thickness

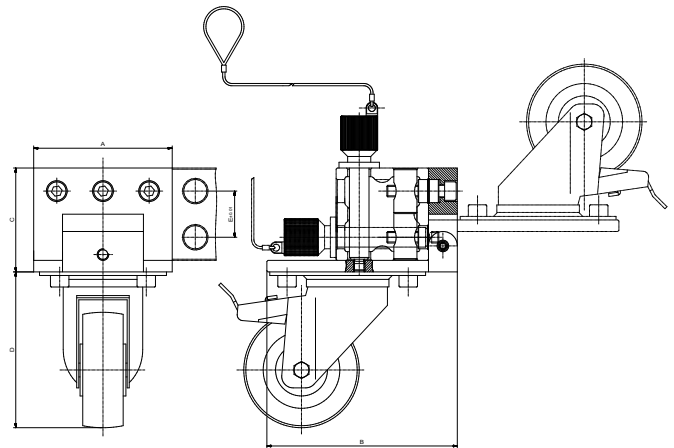


xyz hook clamp, self centering

Castor, fold up single



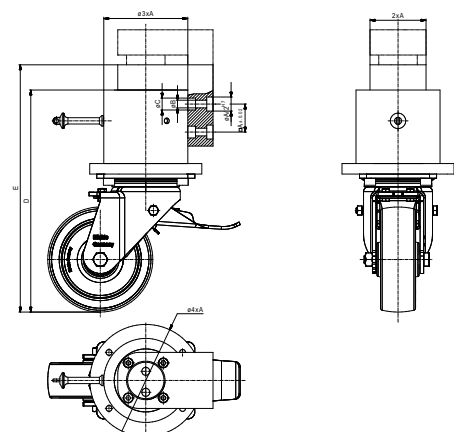
Nr.	System	Type	for Bar	A	B	C	D	E	⚖
93315-1	40	steerable	80x80	120	165	90	135	10	1.600
93399-1	40	fixed	80x80	120	165	90	135	10	1.600
92627-1	40	steerable	120x120	120	165	130	135	10	2.200
92628-1	40	fixed	120x120	120	165 <td 130	135	10	2.200	
92593-1	50	steerable	100x100	150	165	110	135	10	2.750
92594-1	50	fixed	100x100	150	165	110	135	10	2.750



Castor Set
with hydraulic height adjustment, lift 50 mm.
Set of four including pump.

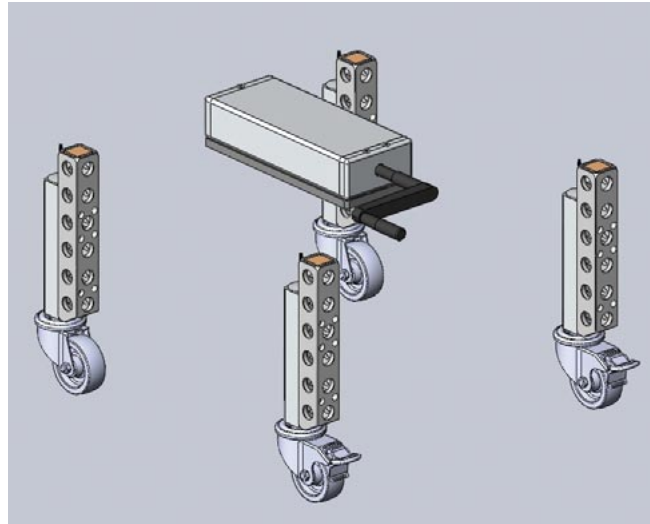
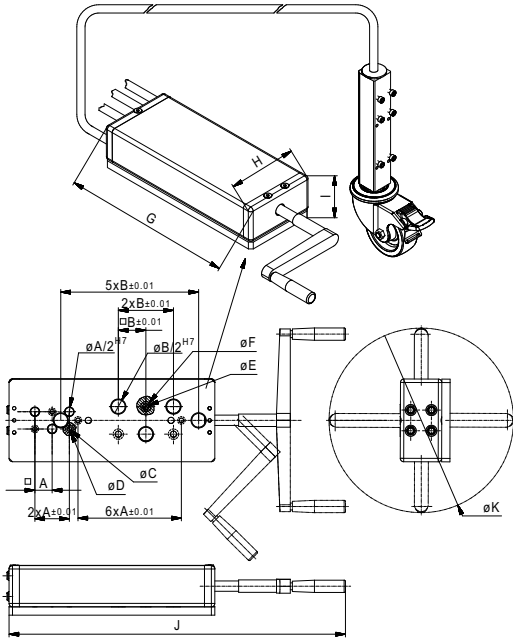
Nr.	A	B	C	D	E	⚖
281955-1	40	11	17	317	353	20.000

An hydraulic foot pump #16539 is included in supply. Connection material, which has to be configured for fixture, is available on request



Castor Set for AF 25 and AF40
 4 steerable castors with hydraulic height adjustment. Manually operated pump with crank handle

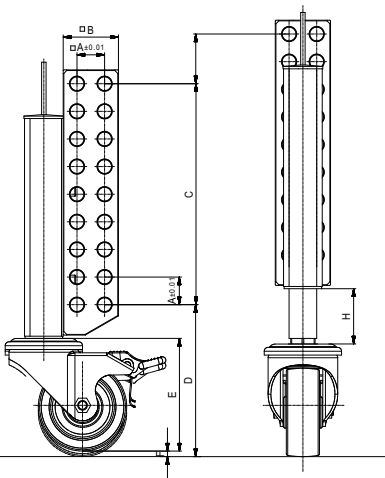
Nr.	A	B	C	D	E	F	G	H	I	J	K	kg
282479-1	25	40	6,6	11	9	15	299	120	73	488	270	13,8

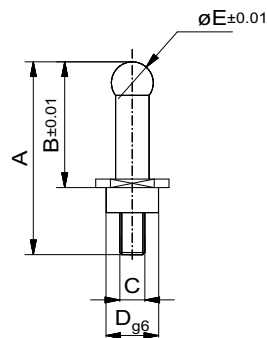
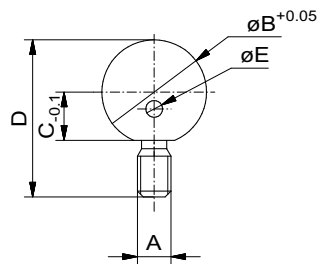
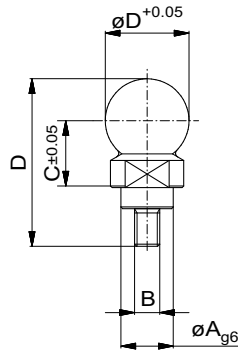


The castor set is for fixtures up to a weight of 350 kg. Lift is max 150mm. 3m of pre-configured hydraulic connection material per castor is included with supply. Profiles shown below are recommended for connection.

Profiles AF for castors
 for hydraulic height adjustment

Nr.	A(AF)	B	C	D	E	F	H	⊘
310548-1	25	50	200	137	102	5	50	535
310549-1	40	40	200	140	102	5	50	445





Reference ball for Alufix bore

Nr.	A	B	C	D	$\varnothing D$	Material	
28403-1	12,5	M6	16	39	18	Aluminum	15
33035-1	12,5	M6	16	39	18	Steel	90
33516-1	20	M10	24	59,5	27	Aluminum	80
33517-1	20	M10	24	59,5	27	Steel	150
83117-1	25	M12	32	60,5	36	Aluminum	140
84344-1	25	M12	32	60,5	36	Steel	340

Reference ball with thread

Nr.	A	B	C	D	E	Material	
34150-1	M8	25	11,5	37,5	4	Steel	64

Reference ball

Nr.	A	B	C	D	E	Material	
25130-1	46	30	M6	12,5	10	Steel	24

ALUFIX preferred range
 Green: Item is available immediately.
 C: Classic version, E: Eco version, CE: Classic or Eco
 ■: color "black"

Information:

- Weights mentioned in the catalogue are non-committal and approximate, and can deviate considerably i.e. through technical changes.
- We reserve the right to make technical changes.
- Where differences between photos and parts lists exist, the parts lists are decisive.
- Due to fluctuations of copper content in aluminum - alloy colour deviations may occur during anodizing.
- All Alufix components are anodized black e.g. for use with optical measuring systems. Exceptions are standard hard anodized items such as pins, connection elements in steel etc. These items maintain their usual characteristics but can be changed on request.
- All details on our products in this catalogue, especially illustrations, drawings, dimensions and statements on performance are to be regarded as approximate average values.
- We reserve the right to change design, technical data, dimensions and weights.
- The indicated standards, similar technical regulations as well as technical details, descriptions and illustrations are valid at time of printing.
- Our general trading conditions are valid.
- Our quotations are decisive.

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D-21354 Bleckede
Germany
Tel.: +49 (0)5854/89-0
Fax: +49 (0)5854/89-40
E-mail:
info@witte-barskamp.de
www.witte-barskamp.de

Asia
Witte Far East Pte Ltd
20 Boon Lay Way # 01 – 170
Singapore 609967
Singapore
Tel.: +65-6248 5961
Fax: +65-6898 4542
E-mail:
info@witteasia.com
www.witteasia.com

USA & Canada
Witte LP
2220 Northmont Pkwy, Suite 250
Duluth, Georgia 30096
USA
Phone: +1 (770) 982 99 32
Fax: +1 (770) 982 99 28
E-mail:
info@witteamerica.com
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Mexico
Horst Witte de Mexico
S.A. de C.V., c/o Linco
Paseo Opera 4 Int 112-2
Lomas de Angelopolis San Andres
Cholula, Puebla 72830, Mexico
Phone: +52 (222)563-7929
E-mail:
info@wittemexico.com
www.wittemexico.com