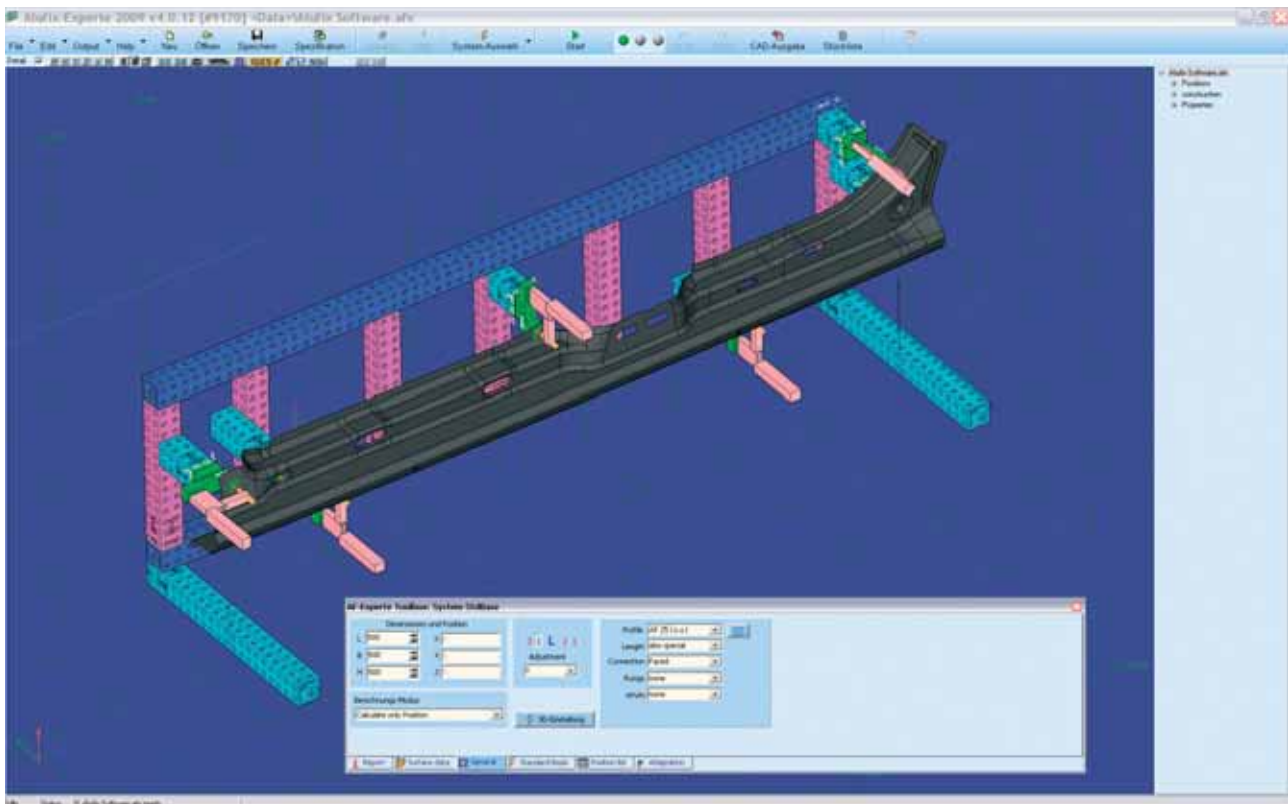


Alufix Expert 2014

3D Design Software #85344

Alufix Expert software makes automatic designs for fixtures with corresponding partlists. You choose the 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 impor-

ted. 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 Autocad.




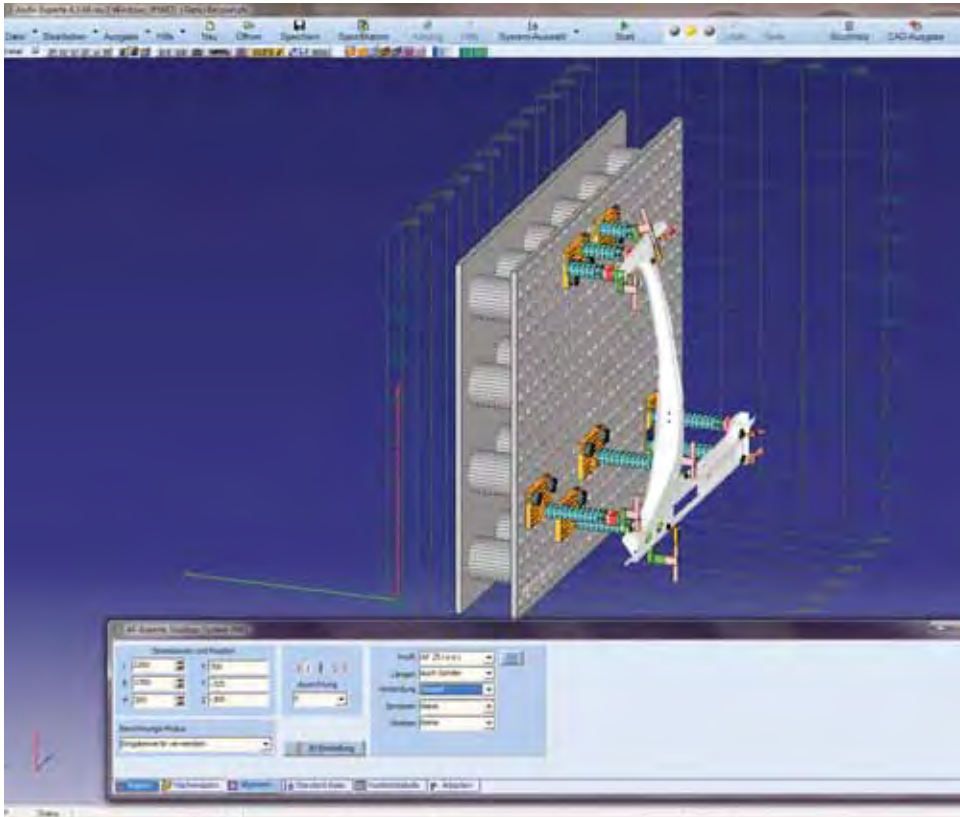
Partlist for C:\Dokumente und Einstellungen\roeber\Eigene Dateien\...

Pos.	Qty	No.	Description	AF	Dimensions	Weight
1	1	20426	Bar Light	25	50	360
2	2	22950	Bar Light	25	50	2400
3	2	24245	Bar Light	25	50	360
4	2	24811	Bar Light	25	50	7560
5	2	25375	Bar Light	25	50	480
6	2	25658	Bar Light	25	50	800
7	7	26745	Bar Light	25	50	8170
8	7	Sonder	Special	25	Special	2306
9	1	Sonder	Special	0	Special	141
10	1	Sonder	Special	0	Special	151
11	1	Sonder	Special	0	Special	153
12	1	Sonder	Special	0	Special	5

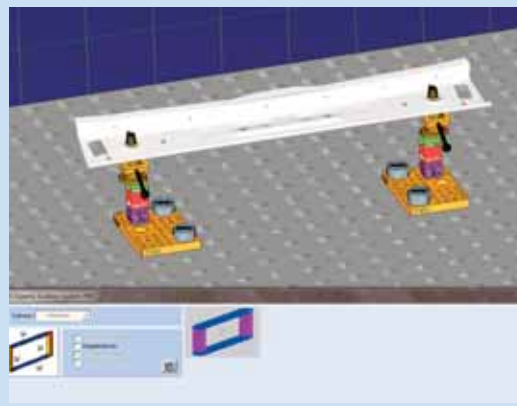
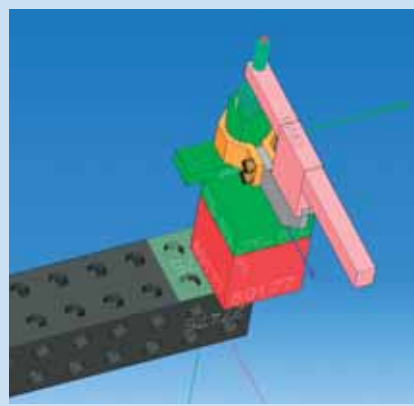
Buttons: Print, Save, Quick-connectors, No connectors, Screw connectors

The part is positioned in car line using Alufix 25. The software can export parts lists (see left), pictures (JPEG), data (IGES, STL, VRML) or CAD data (Catia, Unigraphics). For direct import of surface data a license is required for the corresponding format.

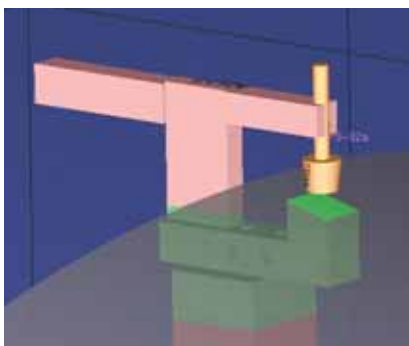
 Individual training is available in house or it can take place on customer's premises under agreement against surcharge



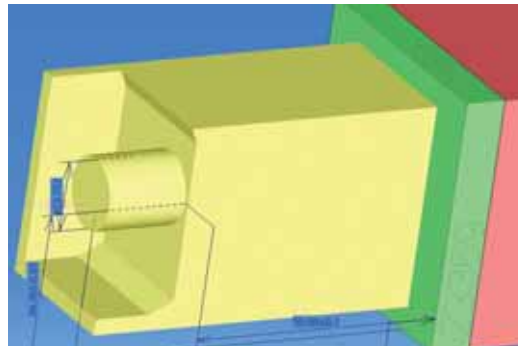
The input menu can be positioned freely on the surface and switch to show or hide in the format as required. The software accesses all common Witte Alufix systems. Even grid plates as shown left, are optionally used for clamping.



Different colouring shows the user in which modus the software currently is (definition/presentation). The parts marked orange have just been selected for editing, dark components are either already calculated or have been changed in a different programme module (inactive)



Complementary module: Surface cut for contour part



Complementary module: Adapter dimensioning

i System requirements EXPERT 2014:
 Pentium® PC, 2MB RAM, 1GB free disk space,
 Operating system Microsoft® Vista®, Windows7®, Windows8®



FIXMES

Alufix 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

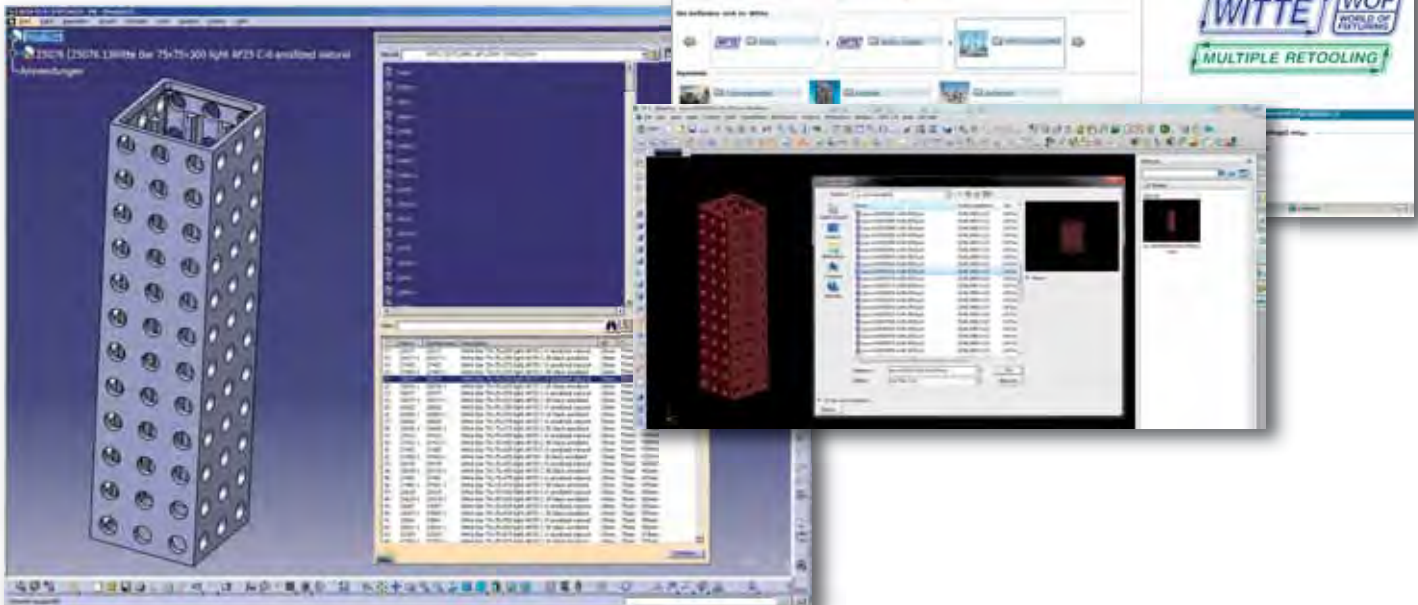
Alufix elements stored with attachment *.igs

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.



Assembly simulation

Macro programme from CATIA V5, #98098

CATIA V5 module assembly simulator works complementary to Expert software 2011 and Fixmes parts libraries.

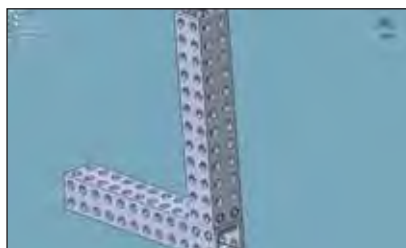
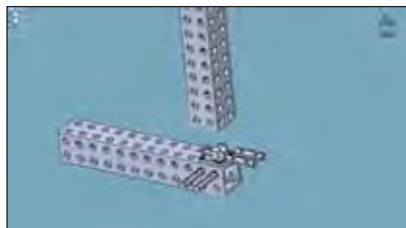
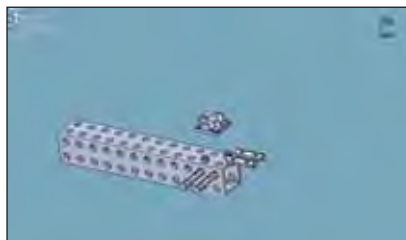
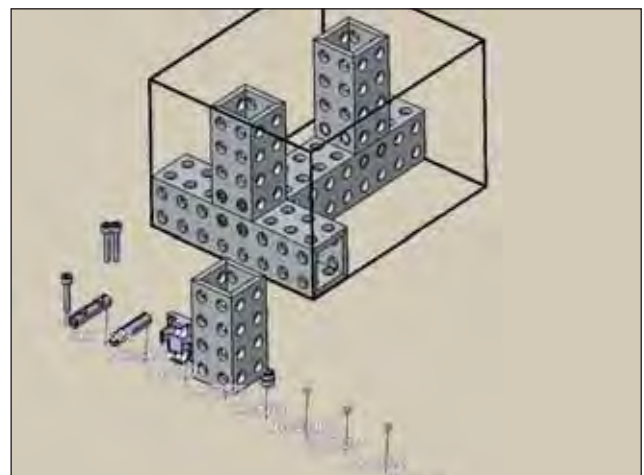
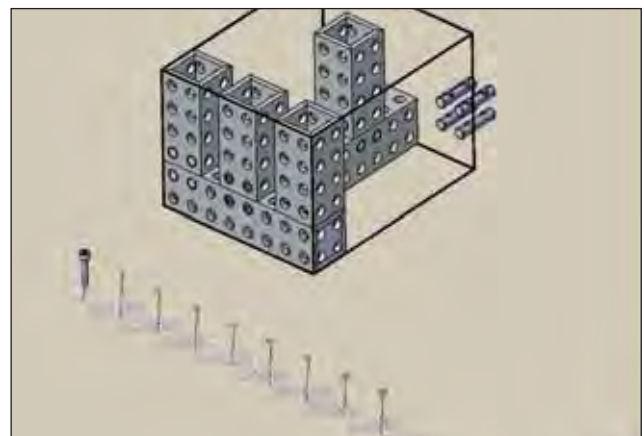
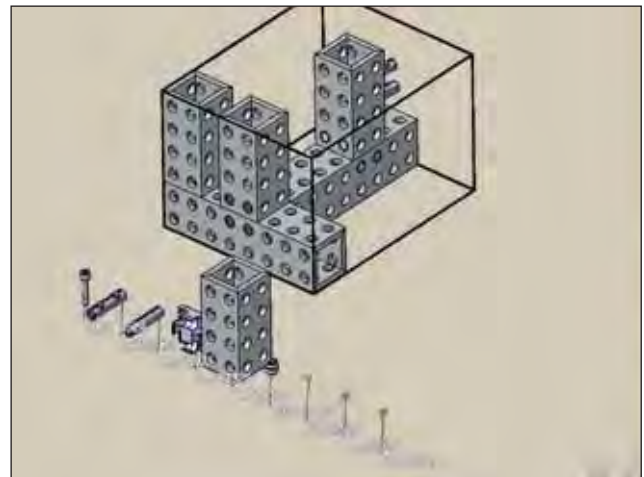
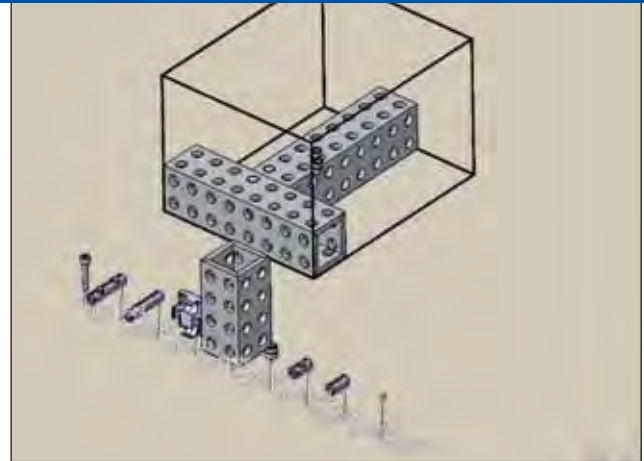
To simplify assembly this module shows the user step by step how and in which sequence single Alufix components are put together in an optimal way after registration

First of all the macro investigates all characters and positions of components, which are available for a connection.

On the basis of this information connection elements are automatically proposed. The user can change quantity and position of those elements or exchange for other elements.

Secondly the software calculates the optimal assembly sequence for the basic items including connection elements. As documentation or operation manual the complete process can be saved as a graphic simulation and shown again and again.

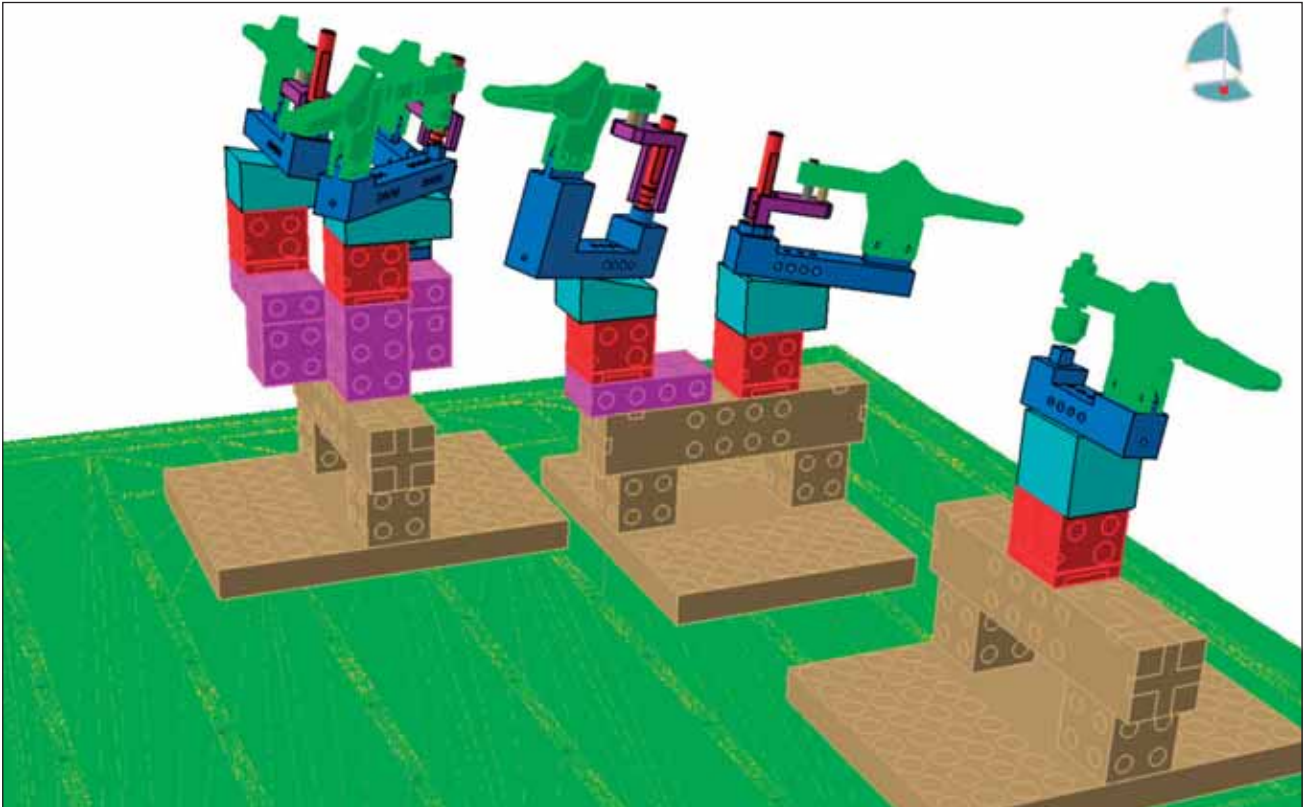
Fixture building is considerably speeded up and simplified especially with regard to various connection elements.



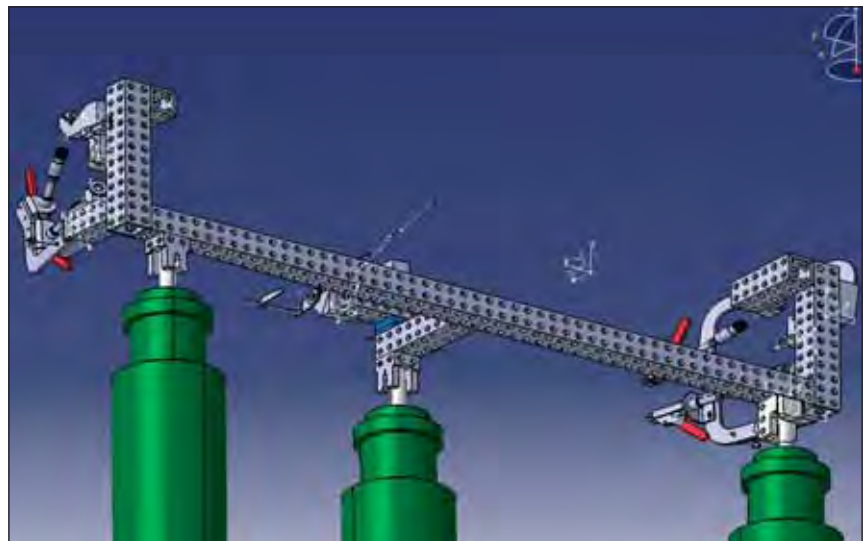
ALUFIX

Cross System Solutions

Alufix can be combined with other systems such as BMW, DEA Five etc. There are a variety of special parts and adapters available.



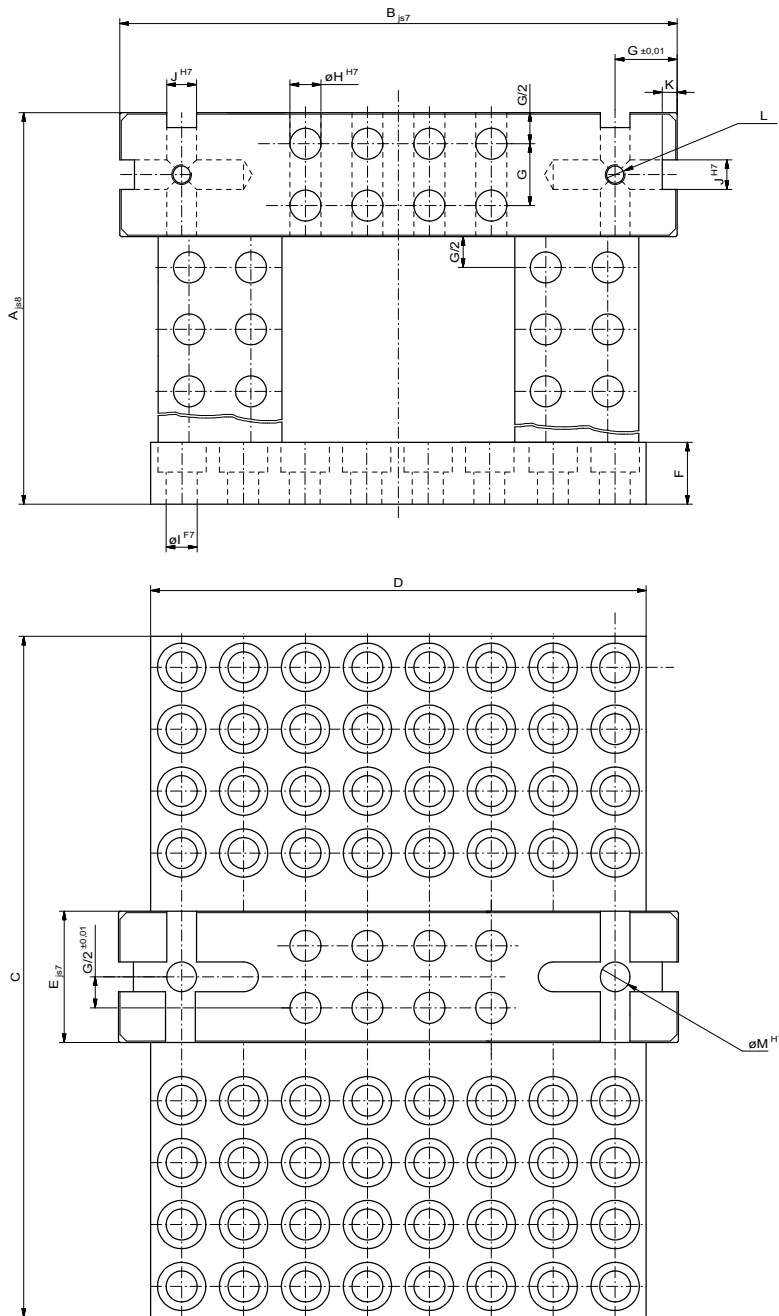
 Detailed information on request



Support

BMW / ALUFIX 25

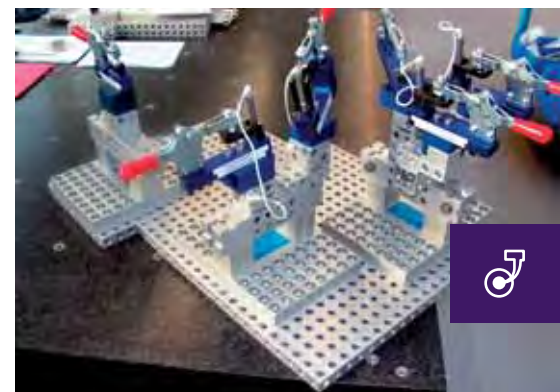
Nr	A	B	C	D	E	F	G	H	I	J	K	L	M	\bar{g}
82585	125	225	275	200	50	25	25	12,5	12	12	5	M8	12	2.800
82586	225	225	275	200	50	25	25	12,5	12	12	5	M8	12	3.100
82587	325	225	275	200	50	25	25	12,5	12	12	5	M8	12	1.570
82588	425	225	275	200	50	25	25	12,5	12	12	5	M8	12	3.500
82589	525	225	275	200	50	25	25	12,5	12	12	5	M8	12	4.320



These supports (including a base plate with grid 25) are used on grid plates with a 100 grid.

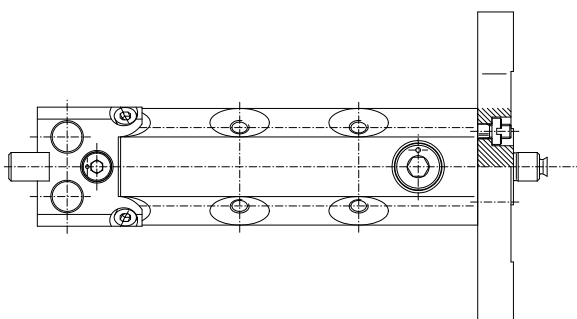
They are positioned on grid plate with the help of grid bores spaced at 25mm. Adaptation to BMW system is possible on top surface (left and right) and at face ends.

Alufix can be mounted in the middle.



ALUFIX CLASSIC elements can be anodized in different colours. The colour natural is standard, black (-1) is available as an alternative. Other colours on request.

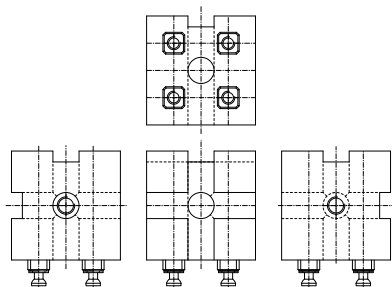
Other versions on request



Support

BMW-Alufix 25

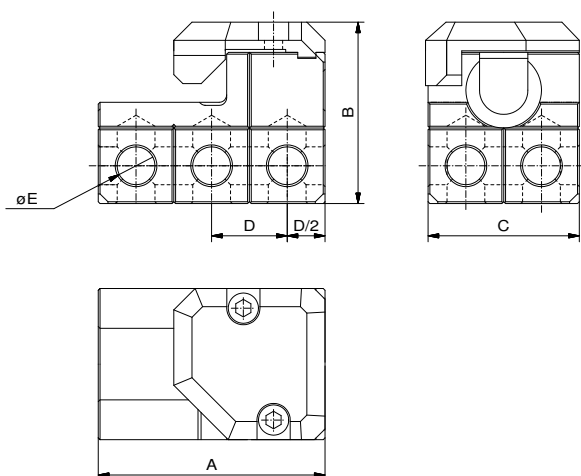
Supports #90589 to #90592 are still available on request



Adapter AF 25

BMW-Alufix 25

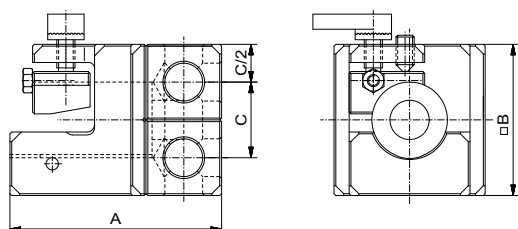
Adapter #82614 is still available on request



DEA Five Adapter

V1

Nr.	System	A	B	C	D	E	
82416	AF16	80	55	48	16	8	250
82425	AF25	75	60	50	25	12,5	320
82440	AF40	120	80	80	40	20	1.040



DEA Five Adapter

V2

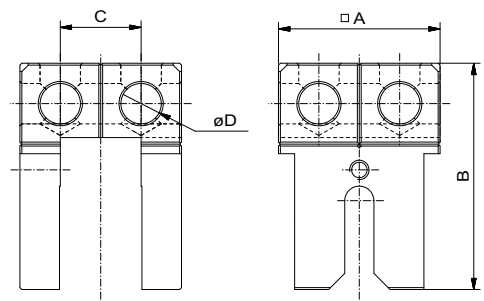
Nr.	System	A	B	C	
82454	AF25	70	50	25	260
82962	AF40	80	80	40	950



DEA Five Adapter

adjustable

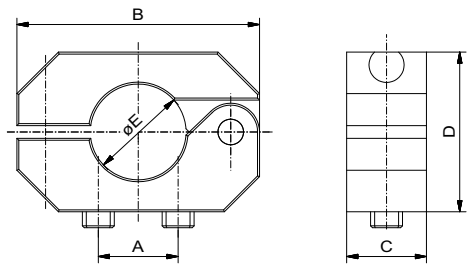
Nr.	System	A	B	C	D	
92190	AF25	50	70	25	12,5	220



DEA Five Column clamp

for Adapter V2

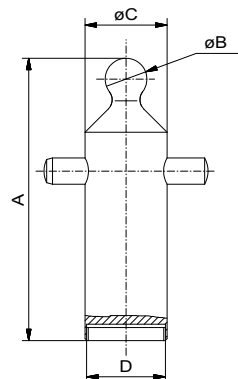
Nr.	A (AF)	B	C	D	E	
90638	25	76	25	50	30	180
90490	25	76	25	50	40	180
90492	40	76	25	65	30	190
95821	40	76	25	65	40	190



ALUFIX – DEA Five Adapter

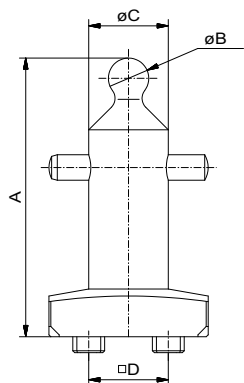
tip, with thread

Nr.	System	A	B	C	D	
82032	AF25	86	12,7	25	M24x1	145



ALUFIX CLASSIC elements can be anodized in different colours. The colour natural is standard, black (-1) is available as an alternative. Other colours on request.

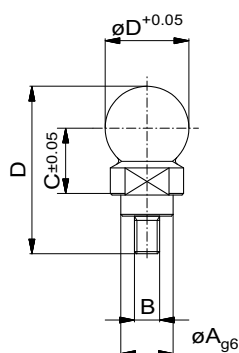
Other versions on request



ALUFIX – DEA Five Adapter

tip, with nub connection

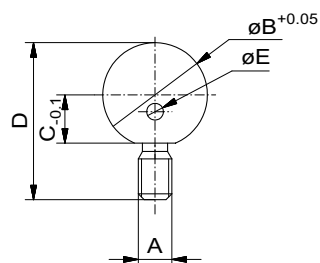
Nr.	System	A	B	C	D	
97439	AF25	87,5	12,5	25	25	210



Reference ball

for Alufix bore

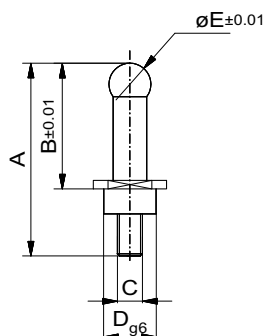
Nr.	A	B	C	D	$\varnothing D$	Material	
28403	12,5	M6	16	39	18	Aluminium	15
33035	12,5	M6	16	39	18	Steel	90
33516	20	M10	24	59,5	27	Aluminium	80
33517	20	M10	24	59,5	27	Steel	150
83117	25	M12	32	60,5	36	Aluminium	140
84344	25	M12	32	60,5	36	Steel	340



Reference ball

with thread

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



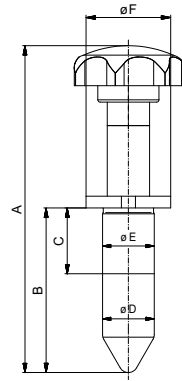
Support ball

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

Positioning pin

for plate or bracket with positioning or excenter sleeves

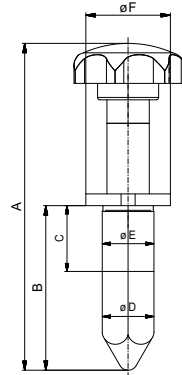
Nr.	A	B	C	D	E	F	
92213	139	70	28	22 ^{-0.1} _{-0.2}	22 _{g6}	36	135
92214	144	75	-	-	20 ^{-0.03} _{-0.05}	49	145
92215	139	70	28	22 ^{-0.1} _{-0.2}	22 _{g6}	36	180
92216	144	75	-	-	22 _{g6}	49	145



Positioning pin, sword-shaped

for plate or bracket with positioning or excenter sleeves

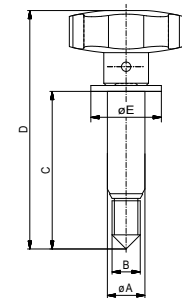
Nr.	A	B	C	D	E	F	
92217	139	70	28	22 ^{-0.1} _{-0.2}	22 _{g6}	36	135
92218	144	75	28	-	20 _{-0.01}	49	145
92219	139	70	25	22 ^{-0.1} _{-0.2}	22 _{g6}	36	180
92220	144	50	28	-	22 _{g6}	49	95
92221	144	75	28	-	22 _{g6}	49	145



Fitting screw

for plate or bracket with with positioning or excenter sleeves

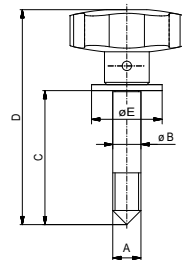
Nr.	A	B	C	D	E		
82342	ø16h6	M12	67	102	30		125
82225	ø16h6	M12	79,5	114	30		145
92488	ø15,98 _{-0.02}	M12	67	102	30		125
82489	ø15,98 _{-0.02}	M12	79,5	114	30		145



Clamp screw

for plate or bracket with positioning or excenter sleeves

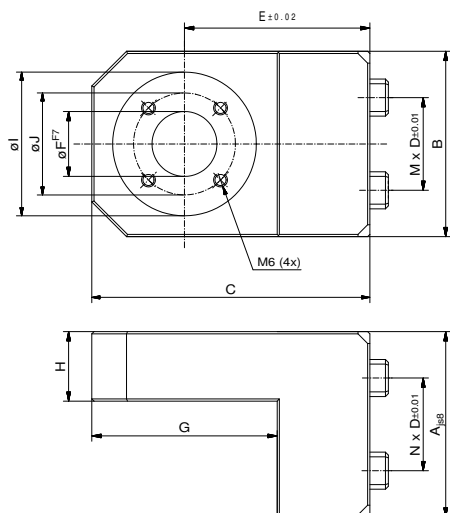
Nr.	A	B	C	D	E		
82343	M12	12	67	102	30		110
82341	M12	12	79,5	114	30		140



ALUFIX CLASSIC elements can be anodized in different colours. The colour natural is standard, black (-1) is available as an alternative. Other colours on request.

Other versions on request

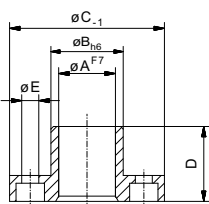




Positioning plate

for face connection

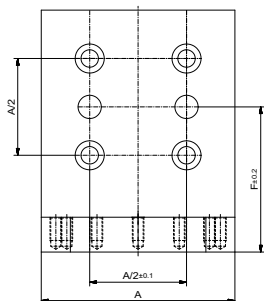
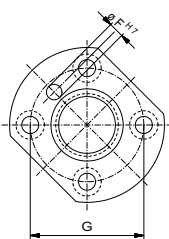
Nr.	A	B	C	D(AF)	E	F	G	H	I	J	M	N	g
27649	50	100	75	25	50	28	50	20	-	44	3	1	580
26890	80	80	120	40	80	28	80	30	62x10	44	1	1	1.120
30507	50	100	115	50	75	28	90	30	62x10	44	1	0	1.520



Sleeve

for positioning plate

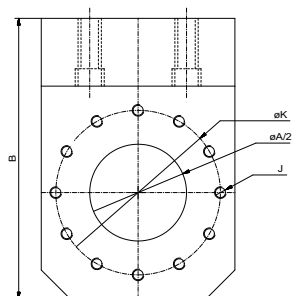
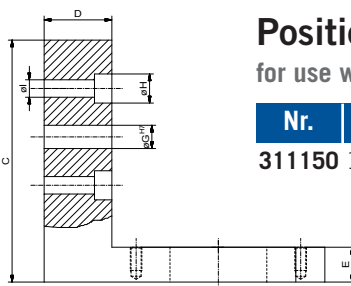
Nr.	A	B	C	D	E	F	G	g
31255	22	28	60	29	6,6	6	44	170
32631	20	28	60	29	6,6	6	44	195
26238	16	28	60	29	6,6	6	44	220



Positioning bracket

for use with excenter sleeve

Nr.	A	B	C	D	E	F	G	H	I	J	K	g
311150	100	145	125	35	18	75	12	15	9	M6	85	1.500



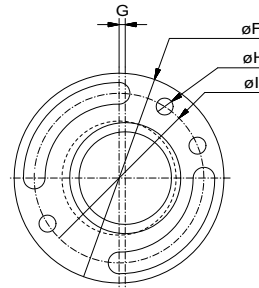
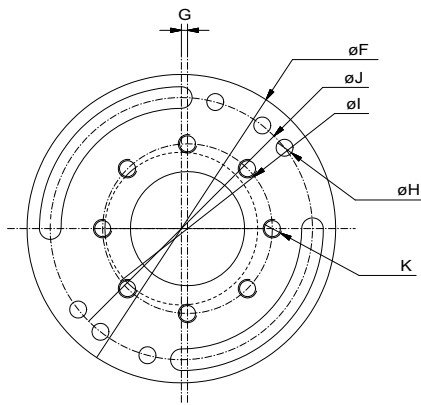
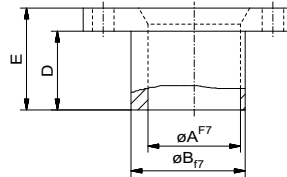
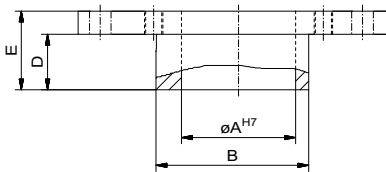
See page 242 for application example



Excenter Sleeve

for use with positioning bracket

Nr.	A	B	C	D	E	F	G	H	I	J	K	
311146	37	49,5	25	18	25,5	100	2	5,5	55	85	M6	520
311147	30	37	40	25,5	33	68	2	5,5	55	-	-	250



311146

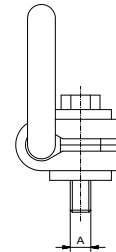
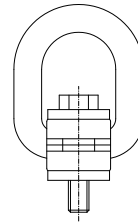


311147

Hook eye

in bright colour, including connecting screw

Nr.	A	max. load / kg	
14858	M10	500	320
14859	M12	750	330
14860	M12	1000	330
12892	M16	1500	550
14861	M20	2500	1.300
14862	M24	3000	1.500



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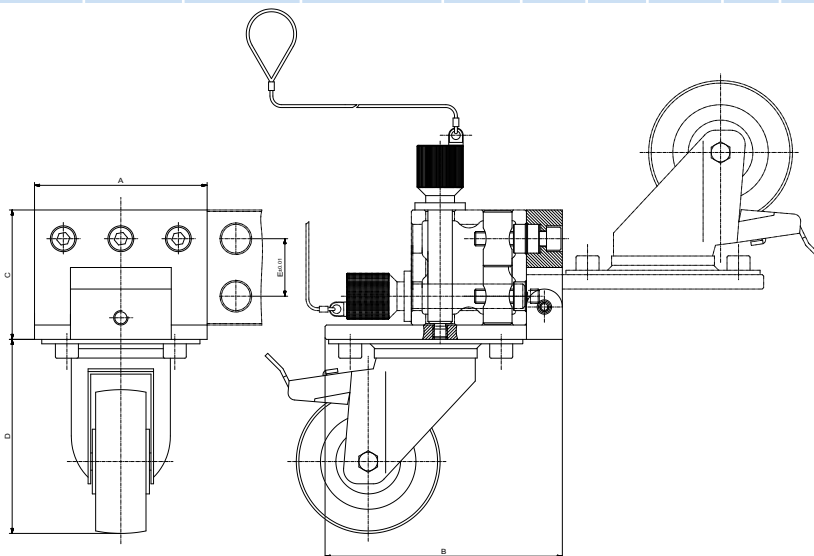
Other versions on request



Castor, fold up

single

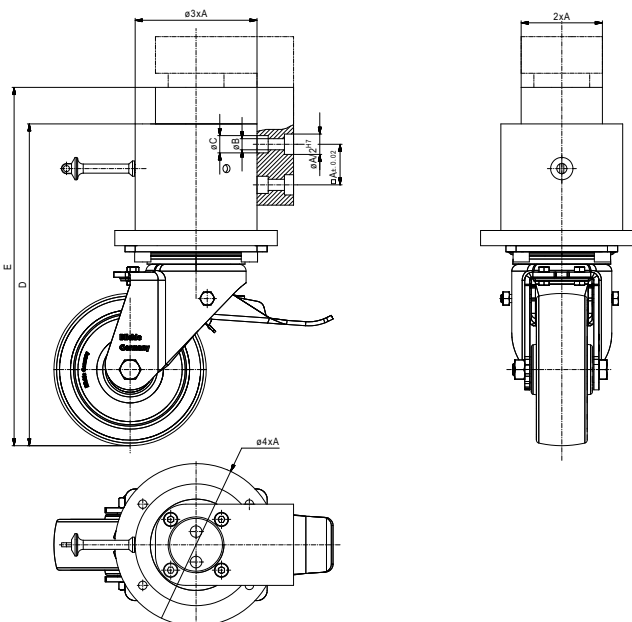
Nr.	System	Type	For bar	A	B	C	D	E	g
93315	AF 40	steerable	80x80	120	165	90	135	10	1.600
93399	AF 40	fixed	80x80	120	165	90	135	10	1.600
92627	AF 40	steerable	120x120	120	165	130	135	10	2.200
92628	AF 40	fixed	120x120	120	165	130	135	10	2.200
92593	AF 50	steerable	100x100	150	165	110	135	10	2.750
92594	AF 50	fixed	100x100	150	165	110	135	10	2.750



Castor Set

with hydraulic height adjustment.
Set of four including pump.

Nr.	A	B	C	D	E	g
281955	40	11	17	317	353	20.000



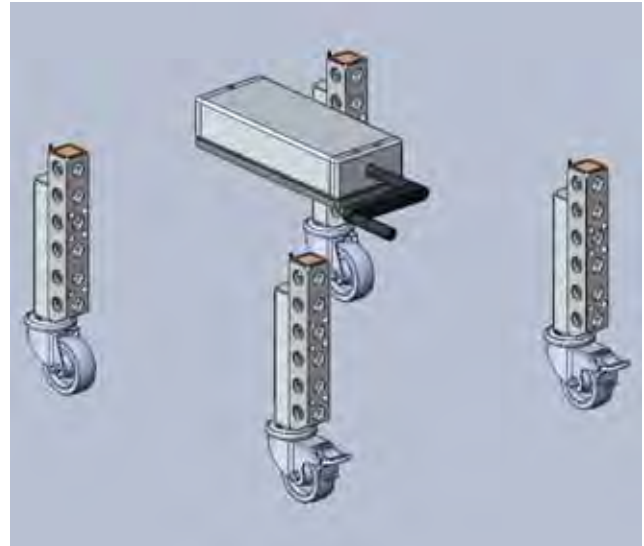
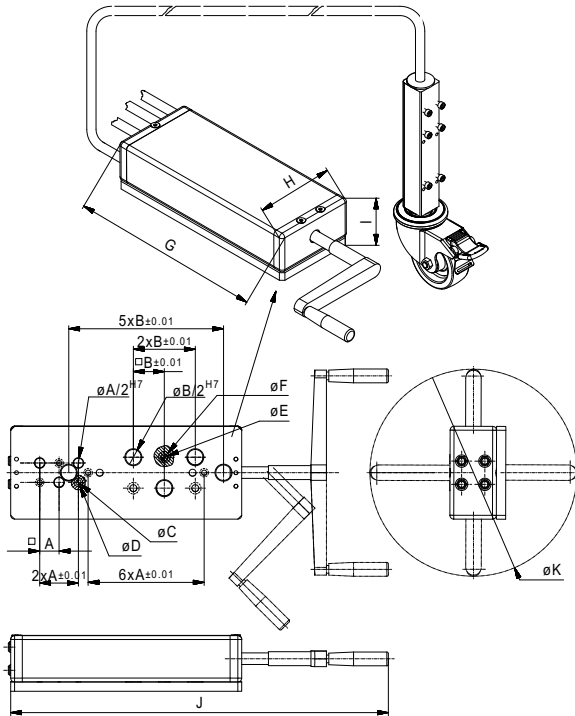
i An hydraulic foot pump #16539 is included in supply.
Connection material, which has to be configured for fixture,
is available on request



Castor Set for AF 25 and AF40

4 steerable castors with hydraulic height adjustment
Manually operated pump with crank handle

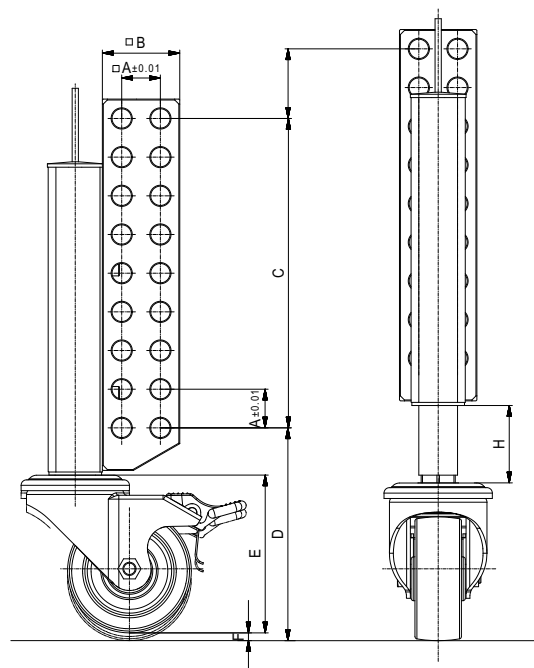
Nr.	A	B	C	D	E	F	G	H	I	J	K	kg
282479	25	40	6,6	11	9	15	299	120	73	488	270	13,8



The castor set is for fixtures up to a weight of 350kg. 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	G	H	kg
310548	25	50	200	137	102	5	45	50	535
310549	40	40	200	140	102	5	45	50	445





Trolley dimensions
 Length 2200mm
 Width 1025mm
 Height 1960mm
 Weight without load 170kg

Trolley, mobile

various versions

Space saving folding function
 for transport



Trolley,
 mobile with shelves



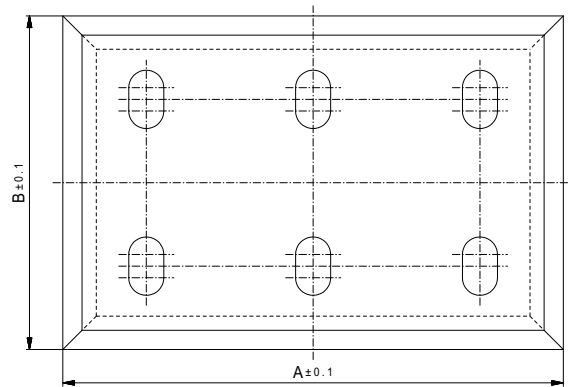
Table type
 trolleys for storage
 or transport



Protection frame

wooden, for Witte PPS/PWS plate

Nr.	System	A	B	C	
13010	AF 25	300	200	34,5	770
13011	AF 40	300	225	34,5	800
13012	AF 50	325	225	34,5	940



Custom made
EUROFIX hydraulic
scissor trolley
with aluminium
hovercraft plate for
heavy loads



ALUFIX CLASSIC elements can be anodized in different colours. The colour natural is standard, black (-1) is available as an alternative. Other colours on request.

Other versions on request