

MOCOKIT®

Modular Construction Kit

The efficient solution for your component test lab



UNIVERSAL MODULAR CONSTRUCTION KIT FOR STATIC AND DYNAMIC TEST SETUPS

Are you operating your own test lab for component testing or planning a new test lab?

Apart from servo-hydraulic components like linear actuators and rotary actuators do you also need appropriate devices to mount simply actuators and test-specimens flexible and safely? In order to keep down investment cost, modular solutions are especially useful when test setups are frequently modified.

With our universal modular construction kit **MOCOKIT®** we provide you with the flexibility you need in your daily business – high quality at affordable prices.

MOCOKIT® is specially customized to suit the demands of component tests and fulfils the demands of to up-to-date test lab in terms of rigidity, mounting and versatility.

Linear actuators and rotary actuators as well as test specimens can easily be mounted by means of specific adaptor plates, which you can either manufacture yourself or which can be supplied by us. Various sizes, graded by their maximum permissive static load, allow you to construct test frames for static forces up to 600 kN. We supply dynamic load values on request.

Only by a few tools you can modify the configuration according to a new test arrangement.

The basis for the construction of **MOCOKIT®** systems are basic plates with T-nutes. To ensure the transmission of force, for

MOCOKIT® 25 T-slots of the size 18,
MOCOKIT® 65 T-slots of the size 22,
MOCOKIT® 250 and **400** T-slots of the size 28,
MOCOKIT® 600 T-slots of the size 36 -are required.

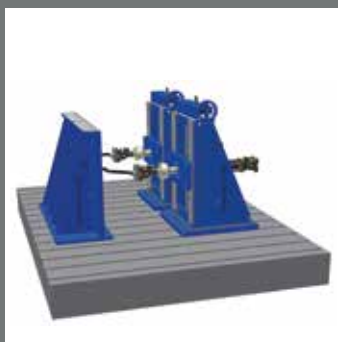
Corresponding base plates made of cast iron or steel are also part of the wide **CFM Schiller** product range.

We also look forward to assisting you in the selection of the required components for your particular test configuration.

Test arrangement with Dummy



Test arrangement



Implementation **MOCOKIT® 250**



Test arrangement





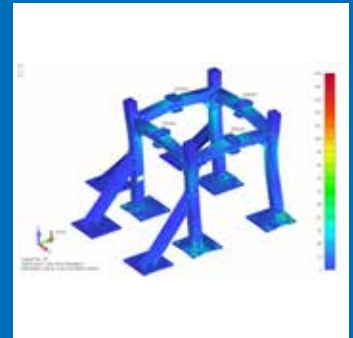
FEA CALCULATION

On request, we offer to FE-analysis of your specific test configuration. As mentioned before, we can provide you with customized flange and adaptor plates for all servohydraulic actuators available on the market.

The following sizes are available as standard:

MOCOKIT® Available standard sizes:		
Series	Max. load actuators up to:	Adjustability
MOCOKIT® 25	≈ 25 kN (static) ≈ 18 kN (dynamic)	stepless
MOCOKIT® 65	≈ 65 kN (static) ≈ 46,8 kN (dynamic)	75 mm grid / stepless *
MOCOKIT® 65 SE		stepless
MOCOKIT® 250	≈ 250 kN (static) ≈ 180 kN (dynamic)	100 mm grid / stepless*
MOCOKIT® 250 SE		stepless
MOCOKIT® 400	≈ 400 kN (static) ≈ 288 kN (dynamic)	200 mm grid
MOCOKIT® 600	≈ 600 kN (static) ≈ 432 kN (dynamic)	250 mm grid

*stepless adjustable by clamping plate



Example for a FEA calculation



Mounting **MOCOKIT®** beam



Fabrication of a **MOCOKIT®** beam



Weld for a **MOCOKIT®** beam

GENERAL DESCRIPTION & APPLICATION EXAMPLES

The universal modular construction kit **MOCOKIT®** is to erectorset consisting of beams, supports, brackets, adjustable units and other components. The system allows nearly flexible and easy mounting of test-rig components in unlimited configurations.

The complete **MOCOKIT®** system is manufactured inhouse of CFM Schiller GmbH. We manufacture the universal modular construction kit series **MOCOKIT® 65**, **65 SE**, **250**, **250 SE**, **400** and **600** as a welded steel structure. All surfaces are rectangular and parallel to each other and are equiped with bores on the top and bottom and tapped holes on the sides. All not machined surfaces are painted light grey in the colour RAL 7035.

The **MOCOKIT® 25** is made of structural square tubing without threaded holes and is galvanized. The **MOCOKIT® 65 SE** and **MOCOKIT® 250 SE** (Simple Edition) are made similar to **MOCOKIT® 65** and **MOCOKIT® 250** but without threaded holes. Fixation through clamping only.

Furthermore **MOCOKIT®** is designed for a first resonance frequency of 8-10 Hz. Please note that significantly higher resonance frequencies can be achieved using specific configurations.

6-axial truck-cabin bearing test



A multi axial test configuration



MOCOKIT® 250 components



Basic safety measures:

- ⚠ Principles of statics and dynamics have to be considered and checked in any **MOCOKIT®** application!
- ⚠ It is forbidden to mount the cross beam as a cantilever!
- ⚠ The joining of beams or cross beams for obtaining longer dimensions is prohibited!



MOCOKIT® 250 for 3-axial elastomere test rig

MOCOKIT® performs via:

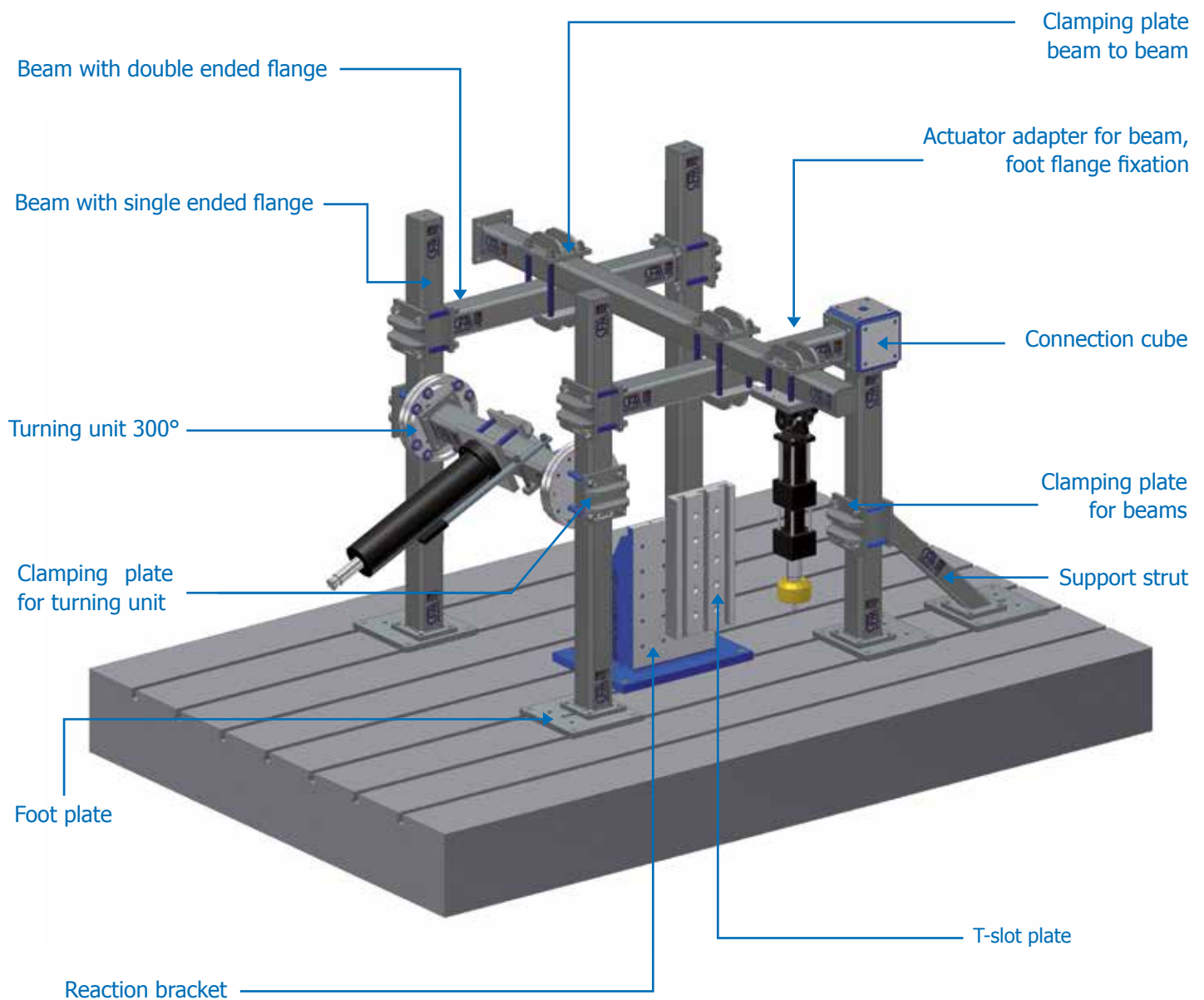
- Unlimited number of test configurations possible
- Short re-built times for different test configurations
- Test configurations vary from single axis test up to multi axis tests
- All **MOCOKIT®** parts are interchangeable
- Additional **MOCOKIT®** components can be purchased due to accomodate growing testing needs
- Choose the **MOCOKIT®** specification suited for your specific range of test load



Fixation of height adjustable clamping bracket by means of a bolted connection

EXAMPLE TEST RIG DESIGN COMPONENT LAYOUT

MOCOKIT® 25





	BEAM WITH SINGLE ENDED FLANGE			
	The beam with single ended flange is used for vertical column application or horizontal beam. Width x height: 100 x 100 mm Mounting plate: 160 x 160 mm			
	Application	Sizes Length [mm]	Weight ~ [kg]	Order-No. VPK ...
	Column and lateral beam	1 000	29	002 494
		1 500	43	000 361
	Column	2 000	56	000 360
		2 500	70	001 835
		3 000	84	002 495
		3 500	97	002 001

	BEAM WITH DOUBLE ENDED FLANGE			
	The beam with double ended flange for vertical column application or horizontal beam. Width x height: 100 x 100 mm Mounting plate: 160 x 160 mm			
	Application	Sizes Length [mm]	Weight ~ [kg]	Order-No. VPK ...
	Column and lateral beam	750	25	002 496
		1 000	32	000 362
		1 500	45	002 463
	Column	2 000	59	002 002
		2 500	72	001 836

	SUPPORT STRUT			
	The support strut is used for stiffening of loadframes.			
	Application	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	Support strut for beams	500 x 160 x 500	16	000 367
610 x 160 x 1000		24	000 526	

 For the fixation of support struts to vertical beams, the clamping plate for beams/support struts (see page 8) is required.

	TURNING UNIT 300°			
	The turning unit is used for the adjustment of the angles of horizontal beams. Adjustment according to angle scale reading. Every individual application has to be checked by CFM Schiller.			
	Application	Sizes [mm]	Weight ~ [kg]	Order-No. VPK ...
	for beam with double ended flange	Turning unit ø 300 x 50 Hand lever 30 x 600 x 135	54	002 120

 The turning unit to be used in combination with support strut only.
 A beam with double ended flange is not scope of supply. (see page 7)
 For the fixation of the turning unit on beams, a clamping plate for the turning unit (see next) is necessary.

	CLAMPING PLATE FOR TURNING UNIT 300°			
	The clamping plate for turning unit is used for the fixation (clamping) of the turning unit on vertical beams, which are used as columns. Anchor bolt : M16			
	Application	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	for turning unit	180 x 180 x 190	6	000 527

	CLAMPING PLATE FOR BEAMS / SUPPORT STRUT			
	The clamping plate for beams / support strut is used for the fixation of horizontal beams on vertical beams, which are used as columns. Anchor bolt: M16			
	Application	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	for beams / support strut	180 x 180 x 210	8	000 517

	CLAMPING UNIT BEAM TO BEAM			
	The clamping unit beam to beam is used for the fixation of a pair of stacked beams. Anchor bolt: M16			
	Application	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	Beam to beam	180 x 180 x 330	12	000 363



ACTUATOR FIXATION UNIT FOR FOOT FLANGE FIXATION

The actuator fixation unit is used for the fixation of the actuators via foot plate fixation.
Anchor bolt: M16

Technical remark	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
-	210 x 210 x 190	16	000 364



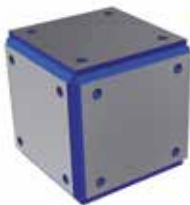
The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



FOOT PLATE

The foot plate is used for the adaption of support struts and beams as columns on a base plate.

for T-slots distance [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
150	350 x 300 x 20	16	000 928
200	250 x 300 x 20	12	000 929
250	325 x 300 x 20	15	000 365
individual			000 930



CONNECTION CUBE

The connection cube is used for the connection of several beams.

Technical remark	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
-	190 x 190 x 190	19	002 094



T-SLOT PLATE

The T-slot plate is used for the fixation of actuator or test specimens, it cto be secured to the Universal reaction bracket.

T-slot: 18H12 to DIN 650
T-slot distance: 90 mm

Technical remark	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
3 T-slots	250 x 500 x 58	47	000 359

	UNIVERSAL REACTION BRACKET WITH MOUNTING THREAD			
	The universal reaction bracket with mounting thread is used for the fixation of actuators or test specimen.			
	Hole matrix: 90 x 90 mm		Thread: M16	
	for T-slots distance [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	150	550 x 400 x 550	160	003 097
	200			003 102
	250			000 366

 For the fixation of actuators or test specimens a T-slot plate can be used (see page 9).

	ACTUATOR SUPPORT BRACKET WITH VERTICAL ADJUSTMENT FOR TURNABLE ACTUATORS				
	The actuator support bracket with vertical adjustment for turnable actuators is used for the horizontal clamping of actuator.				
	The actuator is rotatable in a range of $\pm 25^\circ$ at middle height. Minimal position: 250 mm				
	for T-slots distance [mm]	Height adjustment range [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	150	± 350	850 x 625 x 1 401	511	003 096
	200				003 101
	250				002 093

 The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.

	ACTUATOR SUPPORT BRACKET WITH VERTICAL ADJUSTMENT				
	The actuator support bracket with vertical adjustment is used for the horizontal clamping of actuator.				
	Minimal position: 250 mm				
	for T-slots distance [mm]	Height adjustment range [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	150	± 350	850 x 625 x 1 401	480	003 098
	200				003 103
	250				002 882

 The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



ACTUATOR SUPPORT BRACKET WITH VERTICAL ADJUSTMENT FOR TURNABLE ACTUATORS ON ROTATION PLATE

The actuator support bracket with vertical adjustment for turnable actuators on rotation plate is used for the horizontal clamping of actuator.

The turning adjustment range is 90°.

The actuator is rotatable in a range of ±25° at middle height.

Minimal position: 250 mm

for T-slots distance [mm]	Height adjustment range [mm]	Sizes [mm] Diameter x height	Weight ~ [kg]	Order-No. VPK ...
150	±350	Ø 940 x 1 450	805	003 099
200				003 104
250				002 902



The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



ACTUATOR SUPPORT BRACKET WITH VERTICAL ADJUSTMENT ON ROTATION PLATE

The actuator support bracket with vertical adjustment on rotation plate is used for the horizontal clamping of hydraulic actuator.

The turning adjustment range is 90°.

Minimal position: 250 mm

for T-slots distance [mm]	Height adjustment range [mm]	Sizes [mm] Diameter x height	Weight ~ [kg]	Order-No. VPK ...
150	±350	Ø 940 x 1 450	775	003 100
200				003 105
250				002 901

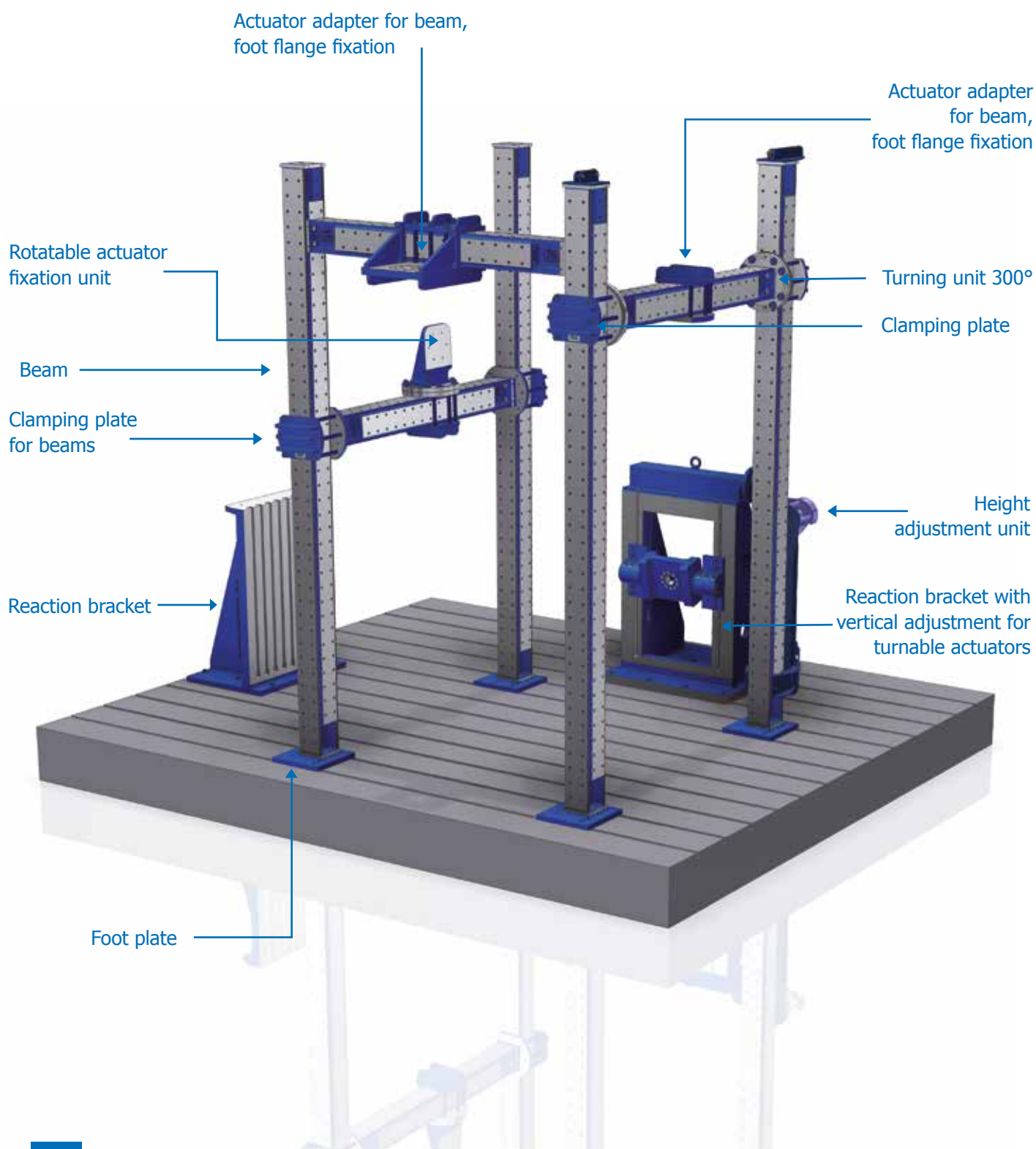


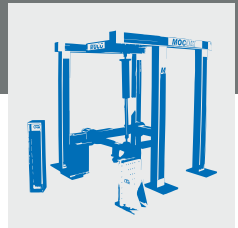
The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.

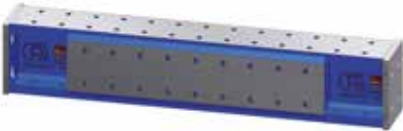
MOUNTING MATERIAL	Description	Details	Order-No. VPK ...
	Collar nut	DIN 6331 M16 Property class 10	VKT 000 410
	T-slot nut	DIN 508 M16 x 18 M16 x 22	see page 53
	Socket head cap screw	DIN EN ISO 4762 M16 Property class 10.9	see page 49

EXAMPLE TEST RIG DESIGN COMPONENT LAYOUT

MOCOKIT® 65





BEAM WITH MOUNTING THREAD			
	The beam with mounting thread is used for vertical column application or horizontal beam. Width x height: 155 x 155 mm Hole matrix: 75 x 75 mm Thread: M16		
	Application	Sizes Length [mm]	Weight ~ [kg]
	Column and lateral beam	600	46
		750	60
		1 050	88
		1 500	129
	Column	2 250	198
		2 550	225
		3 000	267
		3 750	335
		4 500	404
	Order-No. VPK ...		

BEAM WITHOUT MOUNTING THREAD (<i>SE</i> DESIGN)			
	The beam without mounting thread is used for vertical column application or horizontal beam. Width x height: 155 x 155 mm		
	Application	Sizes Length [mm]	Weight ~ [kg]
	Column and lateral beam	600	46
		750	62
		1 050	90
		1 500	132
	Column	2 250	203
		2 550	231
		3 000	274
		3 750	344
		4 500	415
	Order-No. VPK ...		

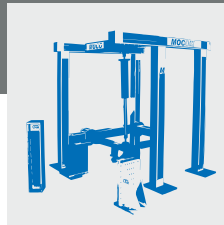


For fixation purpose of steel beam to steel beam *SE* type, the clamping flange for beams (see page 17) needs to be used.

	BEAM WITH SLOT FOR PISTON ROD			
	The beam with slot for actuator rod is used for vertical column application or horizontal beam. Width x height: 155 x 155 mm Hole matrix: 75 x 75 mm Width of guidance slot: 53 mm Thread: M16			
	Max. traverse path [mm]	Sizes Length [mm]	Weight ~ [kg]	Order-No. VPK ...
	600	1 050	87	002 782
	1 050	1 500	123	002 783
 For fixation purpose of steel beam to steel beam SE type, the clamping flange for beams (see page 17) needs to be used. Actuator rod enlargement necessary.				

	BEAM WITH SLOT FOR PISTON ROD (SE DESIGN)			
	The beam with slot for actuator rod is used for vertical column application or horizontal beam. Width x height: 155 x 155 mm Width of guidance slot: 53 mm			
	Max. traverse path [mm]	Sizes Length [mm]	Weight ~ [kg]	Order-No. VPK ...
	600	1 050	89	003 812
	1 050	1 500	125	003 813
 For fixation purpose of steel beam to steel beam SE type, the clamping flange for beams (see page 17) needs to be used. Actuator rod enlargement necessary.				

	CROSS BEAM WITH SLOT FOR PISTON ROD			
	The cross beam with slot for actuator rod is used for horizontal beam. Width x height: 155 x 310 mm Hole matrix: 75 x 75 mm Width of guidance slot: 53 mm Thread: M16			
	Max. traverse path [mm]	Sizes Length [mm]	Weight ~ [kg]	Order-No. VPK ...
	1 600	2 100	227	002 784
 For fixation purpose of steel beam to steel beam SE type, the clamping flange for beams (see page 17) needs to be used. Actuator rod enlargement necessary.				



	CROSS BEAM WITH SLOT FOR PISTON ROD (SE DESIGN)			
	The cross beam with slot for actuator rod is used for horizontal beam. Width x height: 155 x 310 mm Width of guidance slot: 53 mm			
	Max. traverse path [mm]	Sizes Length [mm]	Weight ~ [kg]	Order-No. VPK ...
	1 600	2 100	232	003 814
 For fixation purpose of steel beam to steel beam SE type, the clamping flange for beams (see page 17) needs to be used. Actuator rod enlargement necessary.				

	CROSS BEAM WITH MOUNTING THREAD			
	The cross beam with mounting thread is used for horizontal beam.			
	Width x height: 155 x 310 mm Hole matrix: 75 x 75 mm Thread: M16			
	Application	Sizes Length [mm]	Weight ~ [kg]	Order-No. VPK ...
	Cross beam	2 100	304	002 092
2 550		383	002 179	
3 000		455	003 430	
 For fixation purpose of steel beam to steel beam SE type, the clamping flange for beams (see page 17) needs to be used.				

	CROSS BEAM WITHOUT MOUNTING THREAD (<i>SE</i> DESIGN)			
	The cross beam without mounting thread is used for horizontal beam. Width x height: 155 x 310 mm			
	Application	Sizes Length [mm]	Weight ~ [kg]	Order-No. VPK ...
	Cross beam	2 100	311	002 117
		2 550	392	002 366
3 000		465	003 431	
 For fixation purpose of steel beam to steel beam <i>SE</i> type, the clamping flange for beams (see page 17) needs to be used.				

	SUPPORT STRUT FOR BEAMS WITH MOUNTING THREAD			
	The support strut for beams with mounting thread is used for stiffening of load frames. Width: 180 mm			
	Application	Sizes [mm] Length x height	Weight ~ [kg]	Order-No. VPK ...
	for 1 050 mm beam	508 x 850	70	003 172
	for 1 500 mm beam	508 x 1 300	99	003 173
	for 2 250 mm beam	708 x 2 050	155	003 174
	for 2 550 mm beam	708 x 2 350	174	003 175
	for 3 000 mm beam	708 x 2 800	203	003 176
	for 3 750 mm beam	908 x 3 550	259	003 177
	for 4 500 mm beam	908 x 4 300	306	003 178



SUPPORT STRUT FOR BEAMS WITHOUT MOUNTING THREAD (SE DESIGN)

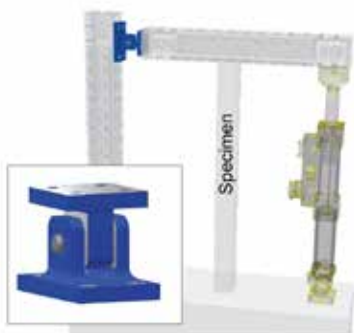
The support strut for beams without mounting thread is used for stiffening of load frames.

Width: 280 mm

Application	Sizes [mm] Length x height	Weight ~ [kg]	Order-No. VPK ...
for 1 050 mm beam	508 x 850	77	003 179
for 1 500 mm beam	508 x 1 300	105	003 108
for 2 250 mm beam	708 x 2 050	160	003 181
for 2 550 mm beam	708 x 2 350	180	003 182
for 3 000 mm beam	708 x 2 800	209	003 183
for 3 750 mm beam	908 x 3 550	265	003 184
for 4 500 mm beam	908 x 4 300	311	003 185



For the fixation of support struts to vertical beams of **SE** type, the clamping flange for beams (see page 17) is required.



PIVOT JOINT FOR BEAM

The pivot joint for beam is used for the connection of straight beams and vertical columns.

To be used under the condition of:

Max. load: 50 kN

The specimen to be fixed in the center of the straight beam.

The actuator to be fixed at one end of the straight beam.

For length of lateral beam max. [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
2 550	125 x 200 x 150	12	003 522



Max. load: 50 kN



STIFFENING BRACKET 45°

The stiffening bracket is used for stiffening purpose of load frames, especially for cantilever arm application.

Technical remark	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
-	580 x 155 x 580	43	000 293



SUPPORT ANGLE 90°

The support angle is used for stiffening purpose of load frames, especially for cantilever arm application.

Technical remark	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
-	188 x 155 x 145	8	000 294



	ANGLE SECTION (PAIR)			
	The angle section is used for the diagonal application for beams as stiffening strut. Can be used as stiffener support as well.			
	Description	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	Angle section: 45° + 45°	each 171 x 155 x 212	each 14	002 079
	Angle section: 22,5° + 67,5°	160 x 155 x 360 175 x 155 x 185	18 15	002 080

	TURNING UNIT 300°			
	The turning unit is used for the adjustment of the angles of horizontal beam or cross beam. Adjustment according to angle scale reading. Every individual application has to be checked by CFM Schiller!			
	Technical remark	Sizes [mm]	Weight ~ [kg]	Order-No. VPK ...
	for beam	Turning unit each $\varnothing$ 300 x 50 Hand lever 40 x 705 x 235	56	002 118
	for cross beam	Turning unit each $\varnothing$ 450 x 50 Hand lever 36 x 600 x 21	124	002 104



The turning unit to be used in combination with support strut only.

For the fixation of the turning unit to vertical beams without mounting thread or for stepless height adjustment, the clamping plate (see next) is required.

	CLAMPING PLATE			
	The clamping plate is used for the fixation of the turning unit and braces on vertical beams of SE type, which are used as column. Anchor bolt: M16			
	Application	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	for beam	278 x 210 x 250	16	000 910
	for cross beam	270 x 320 x 250	21	002 434

	CLAMPING UNIT			
	The clamping unit is used for the fixation of a pair of stacked beams. Anchor bolt: M16			
	Application	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	for beam to beam	210 x 280 x 450	28	000 525
	for beam to cross beam	210 x 280 x 605	30	002 218
	for Cross beam to cross beam	210 x 280 x 760	32	002 407

	CLAMPING FLANGE (PAIR)			
	The clamping flange is used for the fixation of horizontal beams or cross beams on vertical beams of SE type, which are used as column. Anchor bolt: M16			
	Application	Sizes [mm] Diameter x length	Weight ~ [kg]	Order-No. VPK ...
	for beam	each 300 x 250	each 29	001 657
	for cross beam	each 400 x 250	each 37	002 090

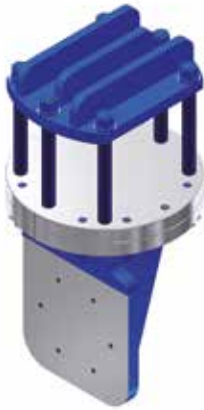
HEIGHT ADJUSTMENT UNIT

The height adjustment unit is used for vertical adjustment of beams or cross beams, i.e. in case of non-availability of a roof crane.
Step- or stepless adjustment according to specification.

Application	Load max. [kg]	Technical remark	Weight ~ [kg]	Order-No. VPK ...
stepless via crank lever bracket	500	The vertical adjustent unit with crank lever bracket enables the full height adjustment of lateral beams and beams.	55	002 927
stepless		Min. distance between clampingflange and manual winch: 850mm	35	002 928
stepp adjustment		Adjustment in the fixation grid	34	002 621

For stepless adjustment, the clamping flange for beam / cross beam (page 17) needs to be applied.

	ACTUATOR FIXATION UNIT FOR FOOT FLANGE ADAPTION			
	The actuator fixation unit is used for the fixation of the hydraulic actuators via base plate fixation. Anchor bolt: M16			
	Application	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	for beam	280 x 210 x 250	26	000 298
	for cross beam	280 x 210 x 405	28	002 217
 The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.				



ROTATABLE ACTUATOR FIXATION UNIT

The rotatable actuator fixation unit is used for angle adjustment of actuator mounted on a beam or cross beam via base plate fixation.
The adjustment according to angle scale reading. The horizontal adjustment is stepless.

Anchor bolt: M16

Every individual application has to be checked by **CFM Schiller!**

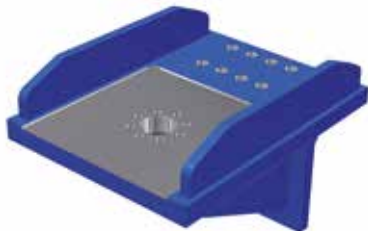
Application	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
for beam	590 x 300 x 300	62	001 003
for cross beam	890 x 450 x 450	99	002 408



The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



The rotatable actuator fixation unit is used in combination with support strut only.



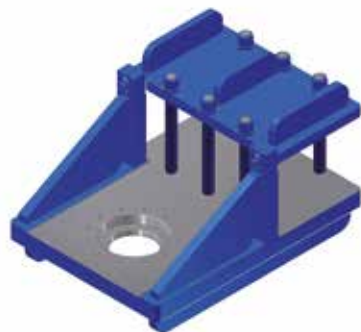
ACTUATOR FIXATION UNIT FOR HEAD FLANGE ADAPTION

The actuator fixation unit for head flange adaption is used for the fixation of an actuator via head flange fixation.

Application	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
for beam	590 x 300 x 300	62	002 423
for cross beam	620 x 400 x 440	70	002 424



The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



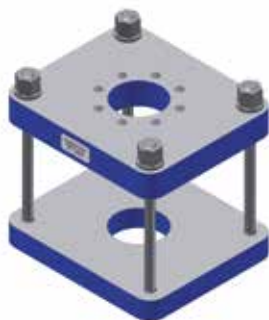
ACTUATOR FIXATION UNIT FOR HEAD FLANGE ADAPTION (STEPLESS)

The actuator fixation unit is used for the fixation of actuators via head flange fixation.
Anchor bolt: M16

Application	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
for beam	360 x 500 x 308	80	003 287
for cross beam	360 x 500 x 463	91	003 288



The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



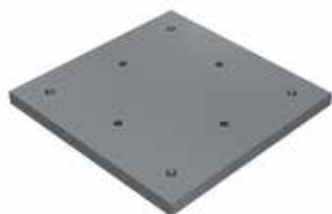
ACTUATOR FIXATION UNIT FOR BEAM WITH SLOT FOR ACTUATOR ROD HEAD FLANGE ADAPTION

The actuator fixation unit is used for the fixation of actuators via head flange fixation. The horizontal adjustment is stepless.

Anchor bolt: M16

Application	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
for beam	280 x 210 x 230	20	003 289
for cross beam	280 x 210 x 390	23	003 290

i The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



ACTUATOR PLATE FOR ACTUATOR FIXATION

The actuator plate is used for actuator fixation via base plate fixation.

for T-slot distance [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
150	400 x 400 x 25	31	003 282
200	500 x 500 x 25	49	003 283
250	600 x 600 x 25	70	003 284

i The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



FOOT PLATE

The foot plate is used for the adaption of support struts (as columns) on a base plate.

for T-slot distance [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
150	350 x 250 x 25	17	000 300
200	300 x 250 x 25	15	000 301
250	300 x 300 x 25	18	000 302
individual			000 288



CONNECTION CUBE

The connection cube is used to connect several beams.

Technical remark	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
-	155 x 155 x 155	12	002 081



SPACER (PAIR)				
The spacer is used for the adjustment of beams or cross beams.				
Application	Adjustment [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
for beam	50	each 155 x 155 x 25	each 5	001 648
	100	each 155 x 155 x 50	each 9	001 649
for cross beam	50	each 155 x 310 x 25	each 10	003 054
	100	each 155 x 310 x 50	each 18	003 055

UNIVERSAL REACTION BRACKET WITH T-SLOTS				
The universal reaction bracket with T-slots is used for the fixation of actuator or test specimens.				
T-slots: 18H12 to DIN 650			T-slot distance: 75 mm	
for T-slots distance [mm]	Sizes [mm] Length x width x Height	Weight ~ [kg]	Order-No. VPK ...	
150	600 x 400 x 550	230	003 106	
200			003 118	
250			001 807	
150	750 x 550 x 1 055	518	003 107	
200			003 119	
250			001 808	



For the fixation of actuators or test specimens a T-slot plate or an actuator plate (see page 20 or 23) is necessary.

UNIVERSAL REACTION BRACKET WITH MOUNTING THREAD				
The universal reaction bracket with mounting thread is used for the fixation of actuator or test specimens.				
Hole matrix: 75 x 75 mm			Thread: M16	
for T-slots distance [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...	
150	600 x 400 x 550	170	003 108	
200			003 120	
250			003 305	
150	750 x 550 x 1 055	412	003 109	
200			003 121	
250			000 306	



For the fixation of actuators or test specimens a T-slot plate or an actuator plate (see page 20 or 23) is necessary.



ACTUATOR SUPPORT BRACKET WITH VERTICAL ADJUSTMENT FOR TURNABLE ACTUATORS

The actuator support bracket with vertical adjustment for turnable actuators is used for the horizontal clamping of actuator.

The actuator is rotatable in a range of $\pm 25^\circ$ at middle height.
Minimal position: 350 mm

for T-slots distance [mm]	Height adjustment-range [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Oder-No. VPK ...
150	± 250	850 x 800 x 1311	800	003 110
200				003 122
250				002 904
150	± 500	850 x 850 x 1810	943	003 114
200				003 126
250				002 911



The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



ACTUATOR SUPPORT BRACKET WITH VERTICAL ADJUSTMENT

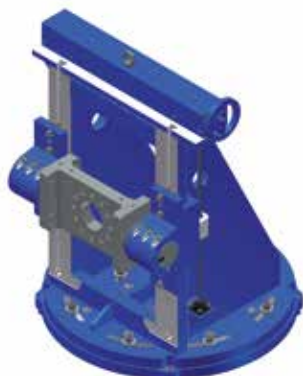
The actuator support bracket with vertical adjustment is used for the horizontal clamping of actuator.

Minimal position: 350 mm

for T-slots distance [mm]	Height adjustment-range [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
150	± 250	850 x 800 x 1311	731	003 111
200				003 123
250				002 903
150	± 500	850 x 850 x 1810	930	003 115
200				003 127
250				002 912



The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



ACTUATOR SUPPORT BRACKET WITH VERTICAL ADJUSTMENT FOR TURNABLE ACTUATORS ON ROTATION PLATE

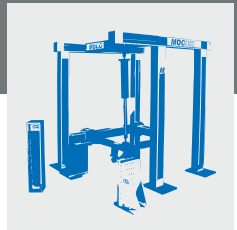
The actuator support bracket with vertical adjustment for turnable actuators on rotation plate is used for the horizontal clamping of actuator. The turning adjustment range is 90° .

The actuator is rotatable in a range of $\pm 25^\circ$ at middle position.
Minimal position: 350 mm

for T-slots distance [mm]	Height adjustment range [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Oder-No. VPK ...
150	± 250	$\emptyset$ 1095 x 1366	1 200	003 112
200				003 124
250				002 906
150	± 500	$\emptyset$ 1095 x 1868	1 700	003 116
200				003 128
250				002 913



The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



ACTUATOR SUPPORT BRACKET WITH VERTICAL ADJUSTMENT ON ROTATION PLATE

The actuator support bracket with vertical adjustment on rotation plate is used for the horizontal clamping of actuator.

The turning adjustment range is 90°.
Minimal position: 350 mm

for T-slots distance [mm]	Height adjustment range [mm]	Sizes [mm] diameter x height	Weight ~ [kg]	Order-No. VPK ...
150	±250	Ø 1095 x 1366	1000	003 113
200				003 125
250				002 905
150	±500	Ø 1095 x 1868	1500	003 117
200				003 129
250				002 914



The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



T-SLOT PLATE

The T-slot plate is used for the fixation of actuator or test specimens.
It can be secured to the universal reaction bracket.

T-slot: 18H12 to DIN 650

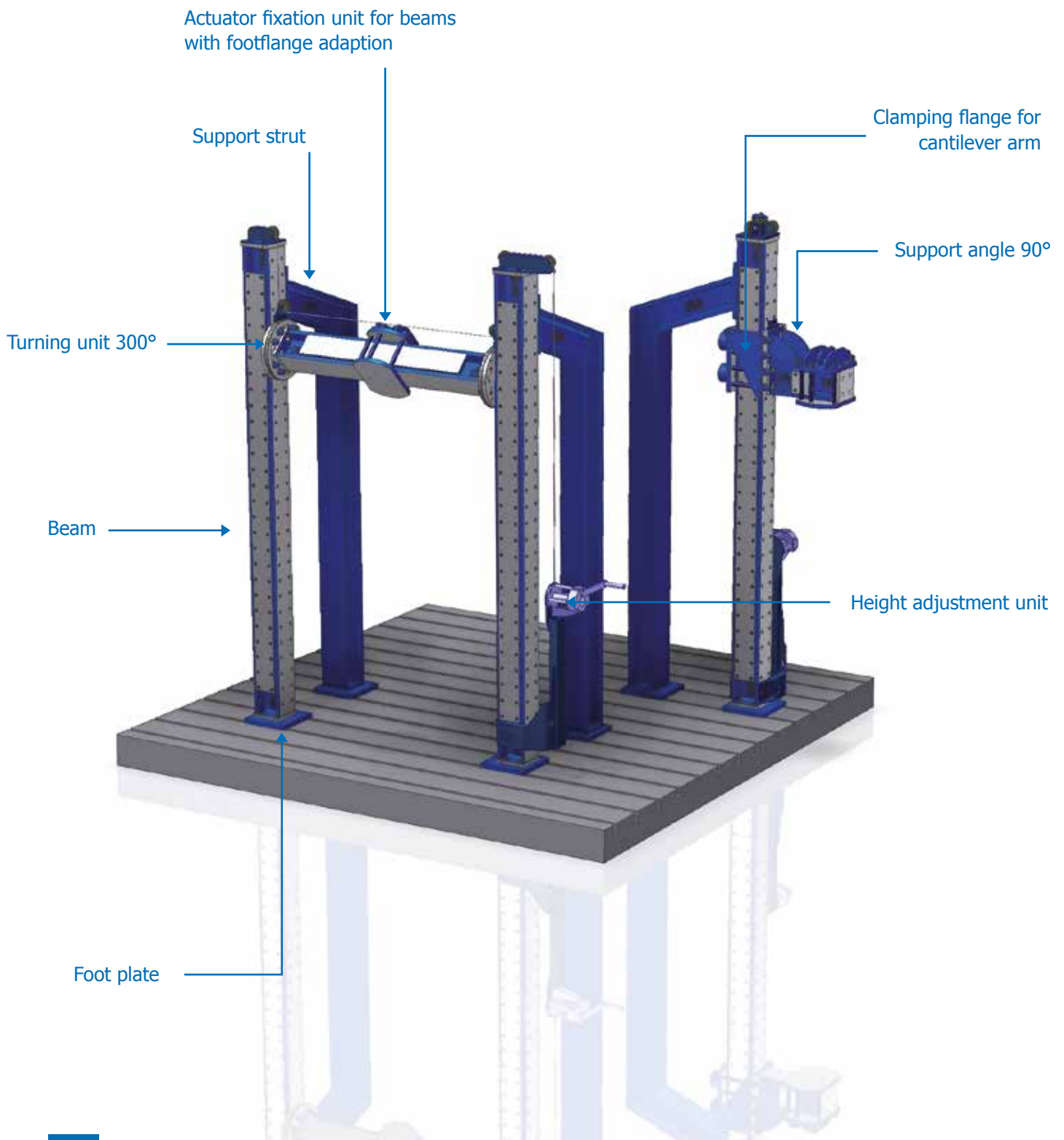
T-slot distance: 75 mm

Description	Technical remark	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
small	3 T-slots	500 x 300 x 58	56	000 303
large	9 T-slots	1 000 x 750 x 58	274	000 304

MOUNTING MATERIAL	Description	Technical remark	Details	Order-No. VPK ...
	Handling bar with ring eye bolt	For the safe transport and handling of beams via crane.	160 x 50 x 200 mm	000 520
	Collar nut	-	DIN 6331 - M16 Property class 10	VKT 000 410
	T-slot nut	-	DIN 508 M16 x 18 / 22 / 28	see Page 53
	Socket head cap screw	-	DIN EN ISO 4762 - M16 Property class 10.9	see Page 50

EXAMPLE TEST RIG DESIGN COMPONENT LAYOUT 1

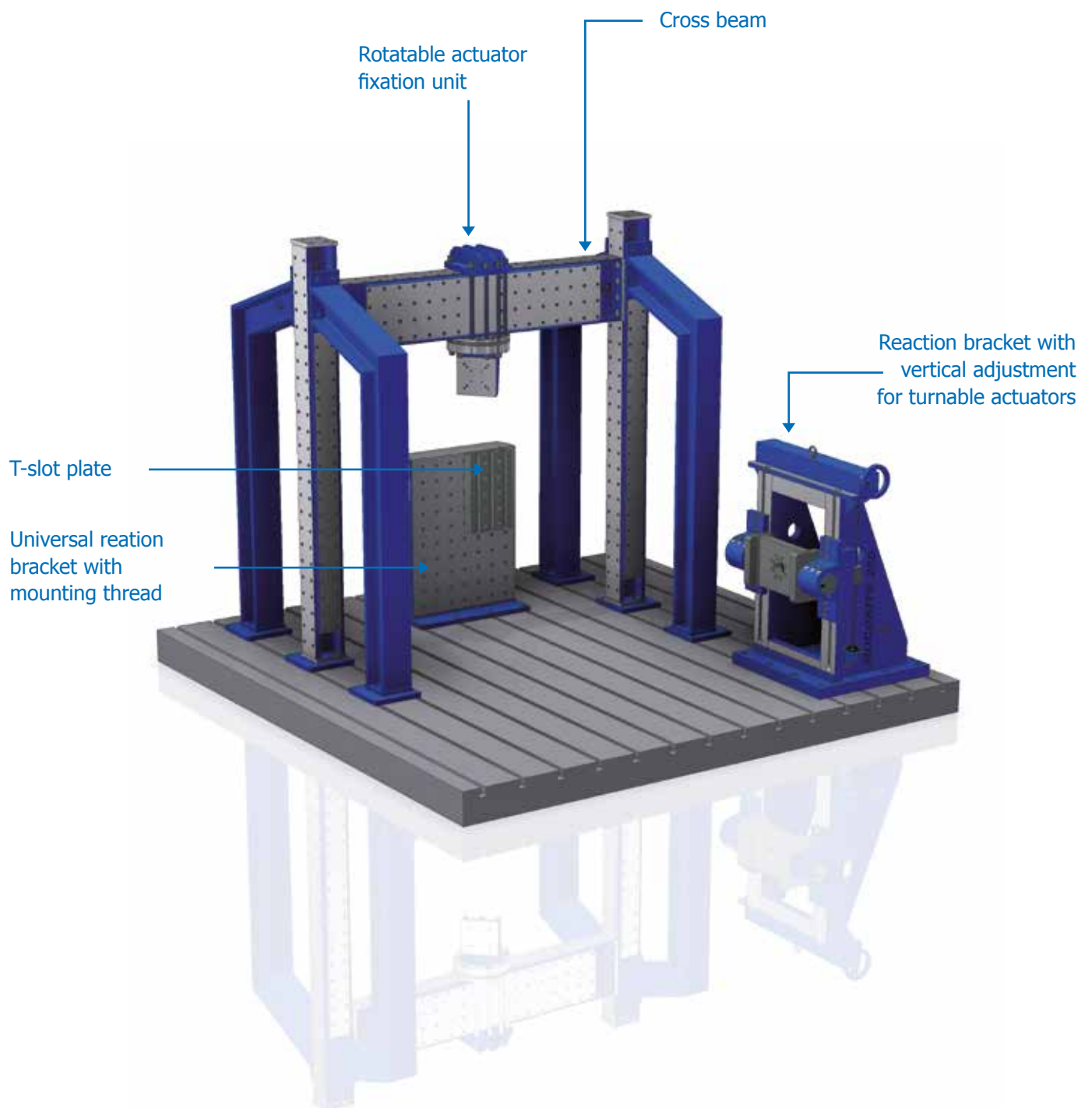
MOCOKIT® 250

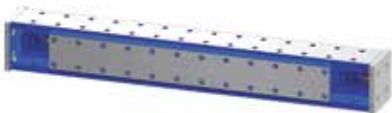




EXAMPLE TEST RIG DESIGN COMPONENT LAYOUT 2

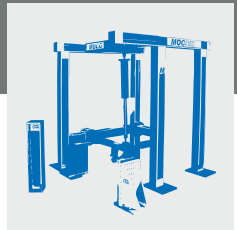
MOCOKIT® 250



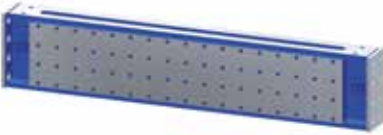
BEAM WITH MOUNTING THREAD			
	The beam with mounting thread is used for vertical column application or horizontal beam. Width x height: 195 x 195 mm Hole matrix: 100 x 100 mm Thread: M24		
	Application	Sizes Length [mm]	Weight ~ [kg] Order-No. VPK ...
	Column and lateral beam	500	58 000 314
		1 000	126 000 315
		1 500*	195 000 316
	Column	2 000	264 000 317
		2 500	332 000 318
		3 000	401 001 788
		3 500	470 001 789
		4 500	607 001 790
		5 500	744 002 234
⚠ * To be used as horizontal beam with max. static load 160 kN			

BEAM WITHOUT MOUNTING THREAD (SE DESIGN)			
	The beam without mounting thread is used for vertical column application or horizontal beam. Width x height: 195 x 195 mm		
	Application	Sizes Length [mm]	Weight ~ [kg] Order-No. VPK ...
	Column and lateral beam	500	62 001 633
		1 000	134 001 634
		1 500*	202 001 635
	Column	2 000	274 001 636
		2 500	345 001 637
		3 000	417 001 791
		3 500	488 001 792
		4 500	630 001 793
		5 500	774 002 237
⚠ For fixation purpose of steel beam to steel beam SE type, the clamping flange for beams (see page 30) needs to be used. * To be used as horizontal beam with max. static load 160 kN			

BEAM WITH SLOT FOR PISTON ROD			
	The beam with slot for actuator rod is used for vertical column application or horizontal beam. Width x height: 195 x 195 mm Hole matrix: 100 x 100 mm Width of guidance slot: 100 mm Thread: M24		
	Max. traverse path max. [mm]	Sizes Length [mm]	Weight ~ [kg] Order-No. VPK ...
	600	1 000	114 002 931
	1 000	1 500*	162 002 932
⚠ For fixation purpose of steel beam to steel beam SE type, the clamping flange for beams (see page 30) needs to be used. Actuator rod enlargement necessary. * To be used as lateral beam with max. static load 160 kN			



	BEAM WITH SLOT FOR PISTON ROD (SE DESIGN)			
	The beam with slot for actuator rod is used for vertical column application or horizontal beam.			
	Width x height: 195 x 195 mm		Width of guidance slot: 100 mm	
	Max. traverse path [mm]	Sizes Length [mm]	Weight ~ [kg]	Order-No. VPK ...
	600	1 000	117	003 815
	1 000	1 500*	173	003 816
 For fixation purpose of steel beam to steel beam SE type, the clamping flange for beams (see page 30) needs to be used. Actuator rod enlargement necessary. * To be used as lateral beam with max. static load 160 kN				

	CROSS BEAM WITH SLOT FOR PISTON ROD			
	The cross beam with slot for actuator rod is used for horizontal beam.			
	Width x height: 195 x 390 mm		Hole matrix: 100 x 100 mm	
	Width of guidance slot: 100 mm		Thread: M24	
	Max. traverse path [mm]	Sizes Length [mm]	Weight ~ [kg]	Order-No. VPK ...
	1 000	1 500	316	003 619
	1 500	2 000	416	002 933
 For fixation purpose of steel beam to steel beam SE type, the clamping flange for beams (see page 30) needs to be used. Actuator rod enlargement necessary.				

	CROSS BEAM WITH SLOT FOR PISTON ROD (SE DESIGN)			
	The cross beam with slot for actuator rod is used for horizontal beam.			
	Width x height: 195 x 390 mm		Width of guidance slot: 100 mm	
	Max. traverse path max. [mm]	Sizes Length [mm]	Weight ~ [kg]	Order-No. VPK ...
	1 000	1 500	326	003 817
	1 500	2 000	430	003 818
 For fixation purpose of steel beam to steel beam SE type, the clamping flange for beams (see page 30) needs to be used. Actuator rod enlargement necessary.				



CROSS BEAM WITH MOUNTING THREAD

The cross beam with mounting thread is used for horizontal application.

Width x height: 195 x 390 mm

Hole matrix: 100 x 100 mm

Thread: M24

Application	Sizes Length [mm]	Weight ~ [kg]	Order-No. VPK ...
Cross beam	1 500	330	002 786
	2 000	450	001 796
	2 500	569	002 032
	3 000	688	001 797



For fixation purpose of steel beam to steel beam **SE** type, the clamping flange for beams (see page 30) needs to be used.

	CROSS BEAM WITHOUT MOUNTING THREAD (SE DESIGN)			
	The cross beam without mounting thread is used for horizontal application. Width x height: 195 x 390 mm			
	Application	Sizes Length [mm]	Weight ~ [kg]	Order-No. VPK ...
	Cross beam	1 500	340	003 620
		2 000	471	001 798
		2 500	594	002 033
3 000		718	002 323	

 For fixation purpose of steel beam to steel beam **SE** type, the clamping flange for beams (see page 30) needs to be used.



For fixation purpose of steel beam to steel beam **SE** type, the clamping flange for beams (see page 30) needs to be used.

SUPPORT STRUT FOR BEAMS WITH MOUNTING THREAD			
	The support strut for beams with mounting thread is used for stiffening of load frames. Width: 200 mm		
	Application	Sizes [mm] Length x height	Weight ~ [kg]
	for 1 000 mm beam	558 x 745	99
	for 1 500 mm beam	558 x 1 245	144
	for 2 000 mm beam	558 x 1 745	188
	for 2 500 mm beam	758 x 2 245	245
	for 3 000 mm beam	758 x 2 745	289
	for 3 500 mm beam	958 x 3 245	347
	for 4 500 mm beam	958 x 4 245	435
	for 5 500 mm beam	958 x 5 245	529
Order-No. VPK ...			

SUPPORT STRUT FOR BEAMS WITHOUT MOUNTING THREAD (SE DESIGN)			
	The support strut for beams without mounting thread is used for stiffening of load frames. Width: 370 mm		
	Application	Sizes [mm] Length x height	Weight ~ [kg]
	for 1 000 mm beam	558 x 745	110
	for 1 500 mm beam	558 x 1 245	155
	for 2 000 mm beam	558 x 1 745	199
	for 2 500 mm beam	758 x 2 245	256
	for 3 000 mm beam	758 x 2 745	300
	for 3 500 mm beam	958 x 3 245	357
	for 4 500 mm beam	958 x 4 245	446
	for 5 500 mm beam	958 x 5 245	535
Order-No. VPK ...			



For the fixation of support struts to beams of **SE** type, the clamping flange for beams (see page 30) is required.



	PIVOT JOINT FOR BEAM (UNIAXIAL)			
	The pivot joint for beam is used for the connection of straight beams and vertical columns. To be used under the condition of: Max. Load: 100 kN The specimen to be fixed in the center of the straight beam. The actuator to be fixed at one end of the straight beam.			
	for length lateral beam max. [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	2 500	150 x 250 x 200	27	003 523
 Max. load: 100 kN				

	STIFFENING BRACKET 45°			
	The support angle 45° is used for stiffening purpose of MOCOKIT® 250 load frames, especially for cantilever arm application.			
	Description	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
		585 x 200 x 560	73	000 319

	SUPPORT ANGLE 90°			
	The support angle 90° is used for stiffening purpose of MOCOKIT® 250 load frames, especially for cantilever arm application.			
	Description	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
		245 x 193 x 201	14	000 320

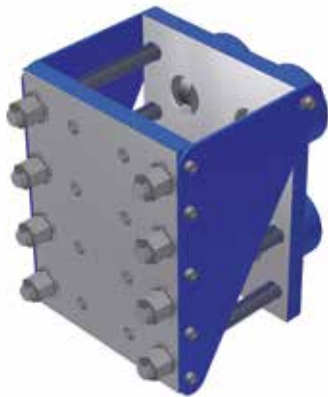
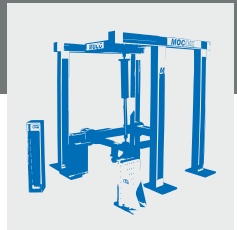
	ANGLE SECTION (PAIR)			
	The angle section is used for the diagonal application for beams as stiffening strut. Can be used as stiffener support as well.			
	Description	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	Angle section: 45° + 45°	each 211 x 195 x 302	each 26	002 097
	Angle section: 22,5° + 67,5°	200 x 195 x 388 220 x 195 x 249	27 30	002 098

	TURNING UNIT 300°			
	The turning unit is used for the adjustment of the angles of horizontal beam or cross beam. Adjustment according to angle scale reading. Every individual application has to be checked by CFM Schiller!			
	Application	Sizes [mm]	Weight ~ [kg]	Order-No. VPK ...
	for beam	Turning unit each $\varnothing$ 370 x 50 Hand lever 40 x 805 x 336	86	002 119
	for cross beam	Turning unit each $\varnothing$ 565 x 80 Hand lever 40 x 1505 x 488	306	002 103
 The turning unit to be used in combination with support strut only. For the fixation of the turning unit to vertical beams without mounting thread or for stepless height adjustment, the clamping plate (see next page) is required.				

	CLAMPING PLATE			
	The clamping plate is used for the fixation of the turning unit and braces on vertical beams without mounting thread which are used as column. Anchor bolt: M24			
	Application	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	for beam	275 x 380 x 340	36	001 007
	for cross beam	400 x 350 x 340	45	002 270

	CLAMPING UNIT			
	The clamping unit is used for the fixation of a pair of stacked beams or cross beam. Anchor bolt: M24			
	Application	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	for beam to beam	380 x 275 x 620	65	000 753
	for beam to cross beam	380 x 275 x 815	68	002 235
	for cross beam to cross beam	380 x 275 x 1 010	72	002 209

	CLAMPING FLANGE (PAIR)			
	For the fixation of horizontal beams and cross beams on vertical beams of SE type, which are used as column. Anchor bolt: M24			
	Application	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	for beam	each 380 x 370 x 340	each 61	001 658
	for cross beam	each 340 x 350 x 459	each 76	001 979



CLAMPING AND ADJUSTMENT UNIT FOR CANTILEVER ARM

The clamping and adjustment unit is used for the fixation of cantilever arms.
Cantilever arm: Beam 500 mm with support angle 90°

Anchor bolt: M24

Technical remark	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	370 x 310 x 400	93	003 214



HEIGHT ADJUSTMENT UNIT FOR CANTILEVER ARM

The height adjustment unit is used for vertical adjustment (stepless) of cantilever arms.

Technical remark	Load max. [kg]	Weight ~ [kg]	Order-No. VPK ...
The adjustability is possible on full column length.	500	52	003 215



HEIGHT ADJUSTMENT UNIT

The height adjustment unit is used for vertical adjustment of beams or cross beams, i.e. in case of non-availability of a roof crane.
Step- or stepless adjustment according to specification.

Application	Load max. [kg]	Technical remark	Weight ~ [kg]	Order-No. VPK ...
stepless via crank lever bracket	1 600	The vertical adjustment unit with crank lever bracket enables the full height adjustment of lateral beams and beams.	63	002 934
stepless		Min. distance between clamping flange and manual winch: 850mm	44	002 935
stepp adjustment		Adjustment in the fixation grid	44	002 622



For stepless adjustment, the clamping plate for cross beams and beams (see page 30) needs to be applied..



ACTUATOR FIXATION UNIT FOR FOOT FLANGE ADAPTION

The actuator fixation unit is used for the fixation of the hydraulic actuators via base plate fixation. The horizontal adjustment is stepless.

Anchor bolt: M24

Application	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
for beam	380 x 275 x 340	58	000 324
for cross beam	380 x 275 x 535	63	000 337



The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



ROTATABLE ACTUATOR FIXATION UNIT

The rotatable actuator fixation unit is used for angle adjustment of actuator mounted on a beam or cross beam via base plate fixation.

Adjustment according to angle scale reading. The horizontal adjustment is stepless.

Anchor bolt M24

Installation of Rotatable actuator fixation unit under following requirements only:

Max. load: 100 kN

Application	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
for beam	405 x 380 x 690	167	001 004
for cross beam	405 x 380 x 885	175	002 452



The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



Max. load: 100 kN

The rotatable actuator fixation is used in combination with support strut only..



ACTUATOR FIXATION FOR HEAD FLANGE

The actuator fixation unit is used for the fixation of actuator via head flange mounting. Installation of actuator fixation unit via head flange under following requirements only:

Max. load: 100 kN

Application	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
for beam	550 x 420 x 325	98	002 116
for cross beam	550 x 420 x 520	122	002 368



The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



Max. load: 100 kN



ACTUATOR FIXATION UNIT VIA HEAD FLANGE (STEPLESS)

The actuator fixation unit is used for the fixation of actuators via head flange fixation. The horizontal adjustment is stepless.

Anchor bolt: M24

Installation of actuator fixation unit via head flange under following requirements only:

Max. load: 100 kN

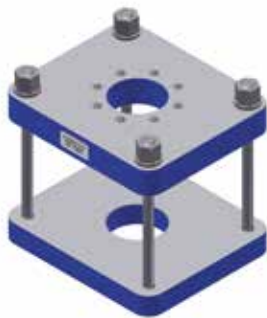
Application	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
for beam	360 x 590 x 348	103	003 297
for cross beam	650 x 420 x 520	120	003 298



The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



Max. load: 100 kN



ACTUATOR FIXATION UNIT VIA HEAD FLANGE WITH GUIDANCE

The actuator fixation unit is used for fixation of actuators via head flange fixation. The horizontal adjustment is stepless.

Anchor bolt: M24

Application	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
for beam	335 x 335 x 335	63	003 300
for cross beam	335 x 335 x 485	64	003 301



The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



ACTUATOR PLATE FOR ACTUATOR FLANGE

The actuator plate is used for fixation of actuator on a universal reaction bracket or on a base plate via base plate fixation.

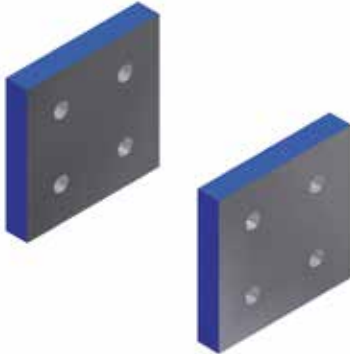
for T-slots distance [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
150	400 x 400 x 30	37	003 292
200	500 x 500 x 30	58	003 293
250	600 x 600 x 30	84	003 294



The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.

	FOOT PLATE			
	The foot plate is used for the adaption of support struts and beams (as columns) on a base plate.			
	for T-slots distance [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	150	350 x 350 x 30	28	000 326
	200	450 x 350 x 30	36	000 327
	250	300 x 300 x 30	20	000 328
individual				000 334

	CONNECTION CUBE			
	The connection cube is used to connect several beams.			
	Technical remark	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
		195 x 195 x 195	24	002 099

	SPACER (PAIR)				
	The spacer is used for adjustment of beams or cross beams.				
	Application	Adjustment [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	for beam	50	each 195 x 195 x 25	each 7	001 650
		100	each 195 x 195 x 50	each 14	001 651
	for cross beam	50	each 195 x 390 x 25	each 14	003 056
		100	each 195 x 390 x 50	each 28	003 057



UNIVERSAL REACTION BRACKET WITH T-SLOTS

The universal reaction bracket is used for the fixation of actuator or test specimens.

T-slots: 28H12 to DIN 650

T-slot distance: 100 mm

for T-slots distance [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
150	800 x 550 x 550	327	003 130
200			003 134
250			001 800
150	800 x 580 x 1.055	628	003 131
200			003 135
250			001 801



For the fixation of actuators or test specimens a T-slot plate (see page 37) or an actuator plate (see page 33) is necessary



UNIVERSAL REACTION BRACKET WITH MOUNTING THREAD

The universal reaction bracket is used for the fixation of actuator or test specimens.

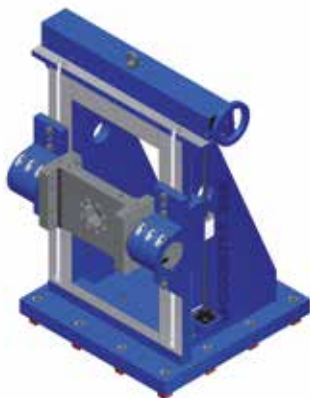
Hole matrix: 100 x 100 mm

Thread: M24

for T-slots distance [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
150	800 x 550 x 550	240	003 132
200			003 136
250			000 331
150	800 x 580 x 1.055	429	003 133
200			003 137
250			000 332



For the fixation of actuators or test specimens a T-slot plate (see page 37) or an actuator plate (see page 33) is necessary



REACTION BRACKET WITH VERTICAL ADJUSTMENT FOR TURNABLE ACTUATORS

The reaction bracket is used for the horizontal clamping of actuator.

The actuator is rotatable in a range of $\pm 25^\circ$ at middle height.

Minimal position: 400 mm

for T-slots distance [mm]	Height adjustment range [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
150	± 250	1 060 x 850 x 1 420	1 210	003 138
200				003 142
250				002 102
150	± 500	1 060 x 850 x 1 900	1 405	003 146
200				003 150
250				002 915



The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.

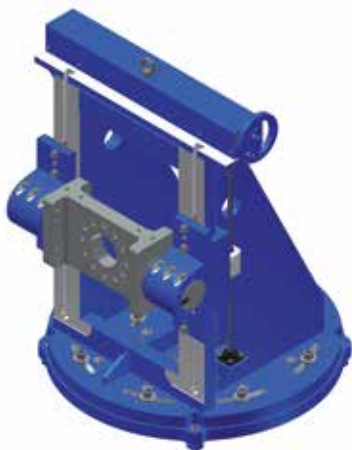


REACTION BRACKET WITH VERTICAL ADJUSTMENT

The reaction bracket is used for the horizontal clamping of actuator.
Minimal position: 400 mm

for T-slots distance [mm]	Height adjustment range [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
150	±250	1 060 x 850 x 1 420	1 355	003 139
200				003 143
250				002 907
150	±500	1 060 x 850 x 1 900	1 400	003 147
200				003 151
250				002 916

i The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



REACTION BRACKET WITH VERTICAL ADJUSTMENT FOR TURNABLE ACTUATORS ON ROTATION PLATE

The reaction bracket is used for the horizontal clamping of actuator.
The turning adjustment range is 90°.
The actuator is rotatable in a range of ±25° at middle height.
Minimal position: 400 mm

for T-slots distance [mm]	Height adjustment range [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
150	±250	ø 1 100 x 1 450	1 565	003 140
200				003 144
250				002 908
150	±500	ø 1 100 x 1 950	1 769	003 148
200				003 152
250				002 917

i The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



REACTION BRACKET WITH VERTICAL ADJUSTMENT ON ROTATION PLATE

The reaction bracket is used for the horizontal clamping of actuator.
The turning adjustment range is 90°.
Minimal position: 400 mm

for T-slots distance [mm]	Height adjustment range [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
150	±250	ø 1 100 x 1 450	1 250	003 141
200				003 145
250				002 909
150	±500	ø 1 100 x 1 950	1 790	003 149
200				003 153
250				002 918

i The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.

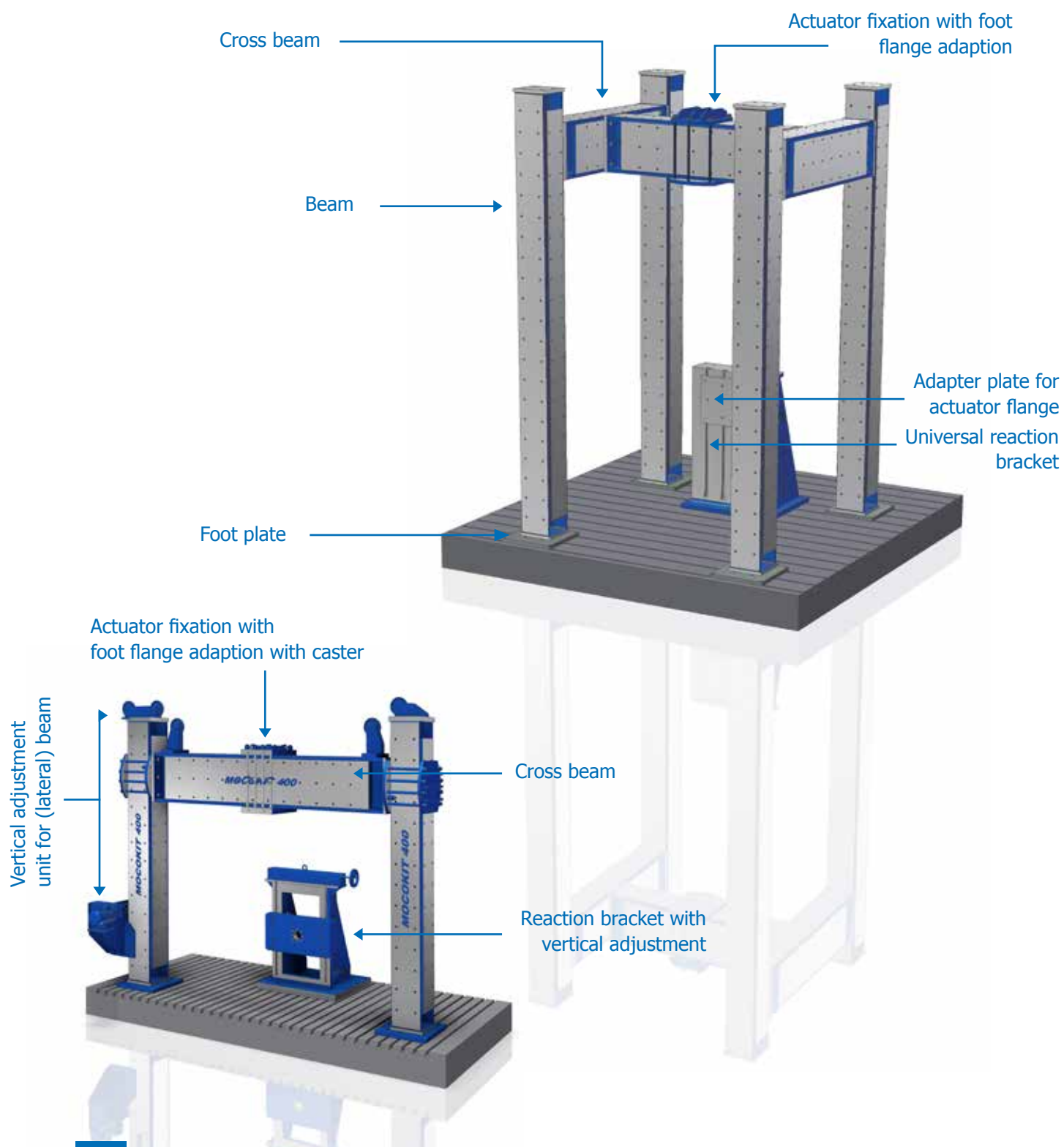


	T-SLOT PLATE				
	The T-slot plate is used for the fixation of actuator or test specimen. It can be secured to the universal reaction bracket. T-slot: 28H12 to DIN 650 T-slot distance: 100 mm				
	Description	Technical remark	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	small	3 T-slots	500 x 300 x 80	69	000 329
	large	9 T-slots	1 000 x 750 x 80	333	000 330

MOUNTING MATERIAL	Description	Technical remark	Details	Order-No. VPK ...
	Handling bar with ring eye bolt	For the safe transport and handling of beams via crane.	180 x 50 x 219 mm	000 522
	Collar nut	-	DIN 6331 - M24 Property class 10	VKT 000 410
	T-slot nut	-	DIN 508 M24 x 28	see Page 53
	Socket head cap screw	-	DIN EN ISO 4762 - M24 Property class 10.9	see Page 51

EXAMPLE TEST RIG DESIGN COMPONENT LAYOUT

MOCOKIT® 400

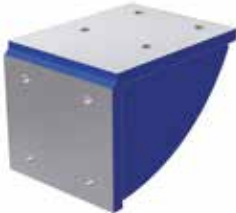




BEAM WITH MOUNTING THREAD			
	The beam is used for vertical column application. Width x height: 350 x 350 mm Hole matrix: 200 x 200 mm Thread: M24		
	Application	Sizes Length [mm]	Weight ~ [kg]
	Column	2 000	766
		2 400	924
		3 000	1 158
		3 400	1 316
		4 000	1 550
		4 400	1 708
		5 000	1 942
		5 400	2 100
		6 000	2 335
	Order-No. VPK ...		

CROSS BEAM WITH MOUNTING THREAD			
	The cross beam is used for horizontal beam. Width: 350 mm Hole matrix: 200 x 200 mm Thread: M24		
	Application	Sizes Height x length [mm]	Weight ~ [kg]
	Cross beam	550 x 1000	528
		550 x 2000	1 070
		750 x 3000	2 085
		750 x 4000	2 749
	Order-No. VPK ...		

SUPPORT STRUT FOR BEAM WITH MOUNTING THREAD			
	The support strut is used for stiffening of loadframes. Width: 309 mm		
	Application	Sizes height x length [mm]	Weight ~ [kg]
	for 2 000 mm beam	855 x 1 740	548
	for 2 400 mm beam	855 x 2 140	644
	for 3 000 mm beam	855 x 2 740	791
	for 3 400 mm beam	855 x 3 140	889
	for 4 000 mm beam	855 x 3 740	1 039
	for 4 400 mm beam	955 x 4 140	1 150
	for 5 000 mm beam	955 x 4 740	1 297
	for 5 400 mm beam	1 055 x 5 140	1 412
	for 6 000 mm beam	1 055 x 5 740	1 561
	Order-No. VPK ...		

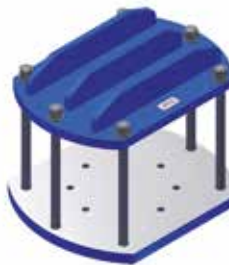
	SUPPORT STRUT 45°			
	The support strut 45° is used for stiffening purpose of load frames.			
	Technical remark	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
		1 250 x 309 x 1 250	392	001 786
		2 250 x 309 x 2 250	743	002 275
	STIFFENING BRACKET 45°			
	The stiffening bracket 45° is used for stiffening purpose of load frames, especially for cantilever arm application.			
	Technical remark	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
		840 x 309 x 840	255	001 567
	SUPPORT ANGLE 90°			
	The support angle 90° is used for stiffening purpose of loadframes or beams. For hole matrix: 200 x 200 mm Thread: M24			
	Technical remark	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
		456 x 350 x 380	107	001 564
	ANGLE SECTION (PAIR)			
	The angle section is used for the diagonal application for beam as stiffening strut. Can be used as stiffener support as well.			
	Technical remark	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	Angle section: 45° + 45°	each 350 x 350 x 469	each 125	002 105
	CLAMPING FLANGE (PAIR)			
	The clamping flange is used for the fixation of horizontal beams or cross beams on vertical beams which are used as column or height adjustment unit. Anchor bolt: M24 Installation of clamping flange (pair) under following requirements only: Max. load: 300 kN at center load.			
	Technical remark	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	for cross beam 550 mm	each 519 x 507 x 550	each 155	001 966
	for cross beam 750 mm	each 507 x 518 x 750	each 190	003 819
 Max. load: 300 kN				



HEIGHT ADJUSTMENT UNIT

The height adjustment unit is used for vertical adjustment of cross beams.

Application	Load max. [kg]	Technical remark	Weight ~ [kg]	Order-No. VPK ...
steppless	3 400	Min. distance between clampingflange and manual winch: 100mm	434	002 983
Stepp by stepp		Adjustment in the hole matrix	434	003 222



ACTUATOR FIXATION FOR FOOT FLANGE ADAPTION

The actuator fixation is used for the fixation of actuators via base plate fixation. The horizontal adjustment is steppless.

Anchor bolt: M24

for height of cross beam [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
550	615 x 440 x 700	149	002 453
750	615 x 440 x 900	155	003 524

i The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



ACTUATOR FIXATION FOR FOOT FLANGE ADAPTION WITH CASTERS

The actuator fixation is used for fixation of actuators via base plate fixation. The carriage is equipped with a spring loaded bearing unit located at the upper side. After untightening of the anchor bolts it is possible to move the carriage including the actuator very easily by hand on the horizontal beam.

Anchor bolt: M24

for height of cross beam [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
550	350 x 543 x 737	194	003 209
750	350 x 543 x 937	197	003 525

i The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



ADAPTER PLATE FOR ACTUATOR FLANGE

The adapter flange is used for the fixation of actuator on a universal reaction bracket or on a base plate via base plate fixation.

Description	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
small	500 x 500 x 40	78	001 593
large	700 x 700 x 40	153	001 594

i The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.

FOOT PLATE				
	The foot plate is used for the adaption of support struts and beams (as columns) on a base plate.			
	Application	for T-slots distance[mm]	Sizes [mm] Length x width x height	Weight ~ [kg]
	for beam / support strut	200	450 x 450 x 40	62
		250	550 x 550 x 40	93
	for support strut 45°	200	680 x 450 x 40	95
		250	700 x 550 x 40	120
	Order-No. VPK ...			

	UNIVERSAL REACTION BRACKET WITH T-SLOTS			
	The universal reaction bracket is used for the fixation of actuator or test specimens. T-slots: 28H12 to DIN 650 T-slot distance: 200 mm			
	for T-slots distance [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	250	1 060 x 700 x 985	1 088	001 805
		1 060 x 810 x 1 385	1 523	001 806
1 060 x 900 x 1 500		1 720	002 109	
1 060 x 1 060 x 1 800		2 187	002 110	
 For the fixation of actuators or test specimens a T-slot plate (see page 43) or an actuator plate (see page 41) is necessary.				

UNIVERSAL REACTION BRACKET WITH MOUNTING THREAD

The universal reaction bracket is used for the fixation of actuator or test specimens.

Hole matrix: 200 x 200 mm

Thread: M24

for T-slots distance [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
250	1 060 x 700 x 985	964	001 562
	1 060 x 810 x 1 385	1 344	001 563
	1 060 x 900 x 1 500	1 527	002 107
	1 060 x 1 060 x 1 800	1 956	002 108

For the fixation of actuators or test specimens a T-slot plate (see page 43) or an actuator plate (see page 41) is necessary.



REACTION BRACKET WITH VERTICAL ADJUSTMENT

The Reaction bracket is used for the horizontal clamping of actuator.

Minimal position: 400 mm

for T-slots distance [mm]	Height adjustment range [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
250	±250 mm	1 060 x 900 x 1 392	1 749	003 206
	±500 mm	1 160 x 1 000 x 1 992	2 223	003 207



The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



T-SLOT PLATE

The T-slot plate is used for fixation of actuator or test specimens.
It can be secured to the universal reaction bracket.

T-slot: 28H12 to DIN 650

T-slot distance: 200 mm

Description	Technical remark	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
small	3 T-slots	900 x 700 x 90	400	001 565
large	4 T-slots	1 300 x 900 x 90	838	001 566



GUIDING GIB (SET)

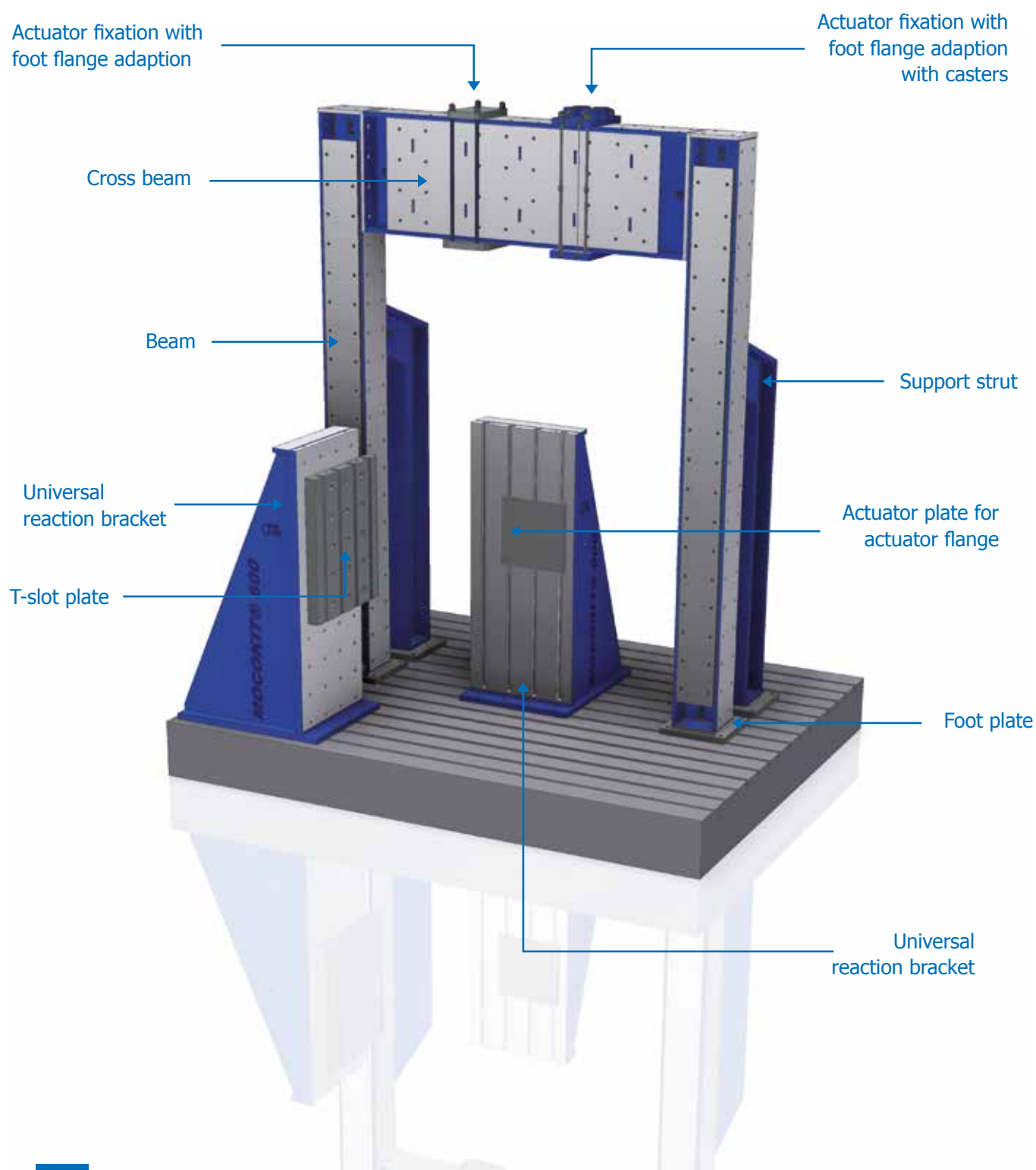
The guiding gib is used for the horizontal guiding of cross beams. (4 off guiding gib)

Description	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	450 x 15 x 75	each 2	001 592

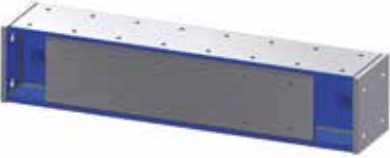
MOUNTING MATERIAL	Description	Technical remark	Details	Order-No. VPK ...
	T-slot nut	-	DIN 508 M24 x 28	see Page 53
	Socket head cap screw	-	DIN EN ISO 4762 - M24 Property class 10.9	see Page 52

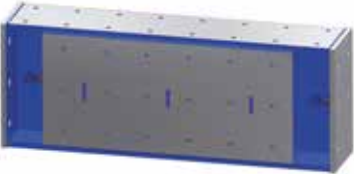
EXAMPLE TEST RIG DESIGN COMPONENT LAYOUT

MOCOKIT® 600





	BEAM WITH MOUNTING THREAD			
	The beam with mounting thread is used for vertical application as a column. Width x height: 415 x 415 mm Hole matrix: 250 x 250 mm Thread: M30			
	Application	Sizes Length [mm]	Weight ~ [kg]	Order-No. VPK ...
Column		2 500	1 170	002 583
		3 000	1 412	002 584
		4 000	1 895	002 585
		5 000	2 382	002 586

	CROSS BEAM WITH MOUNTING THREAD			
	The cross beam is used for horizontal application. Width: 415 mm Hole matrix: 250 x 250 mm Thread: M30			
	Application	Sizes Length x height [mm]	Weight ~ [kg]	Order-No. VPK ...
Cross beam		1 000 x 750	696	002 587
		2 000 x 750	1 431	002 588
		3 000 x 1 000	2 771	002 589

	SUPPORT STRUT FOR BEAM WITH MOUNTING THREAD			
	The support strut is used to amplify a load frame. Width x Length: 330 x 850 mm			
	Technical remark	Sizes Length [mm]	Weight ~ [kg]	Order-No. VPK ...
		1 925	588	002 590
		2 425	716	002 591
		3 425	971	002 592

	ACTUATOR FIXATION FOR FOOT FLANGE ADAPTION			
	The Actuator fixation is used for fixation of vertical actuators via base plate fixation. Anchor bolt: M30			
	Height of cross beam [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	750	430 x 540 x 920	202	002 593
	1 000	430 x 540 x 1 170	209	003 520

i The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



ACTUATOR FIXATION FOR FOOT FLANGE ADAPTION WITH CASTERS

The actuator fixation is used for fixation of vertical actuators via base plate fixation. The carriage is equipped with a spring loaded bearing unit located at the upper side. After untightening of the anchor bolts it is possible to move the carriage including the actuator very easily by hand on the horizontal beam.

Anchor bolt: M30

height of cross beam	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
750	350 x 644 x 937	233	003 210
1 000	350 x 644 x 1 187	237	003 521

i The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



ACTUATOR PLATE FOR ACTUATOR FIXATION

The adapter flange is used for the fixation of actuator on a universal reaction bracket or on a base plate via base plate fixation.

description	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
small	600 x 600 x 40	112	002 610
large	950 x 950 x 40	226	002 611

i The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.



FOOT PLATE

The foot plate is used for the adaption of support struts and beams (as columns) on the base plate.

for T-slots distance [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
250	600 x 600 x 55	152	002 609



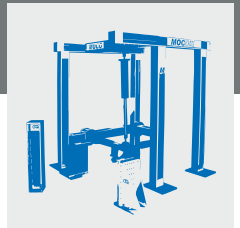
UNIVERSAL REACTION BRACKET WITH T-SLOTS

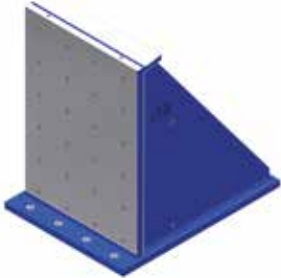
The universal reaction bracket with T-slots is used for fixation of actuator or test specimens.

T-slots: 36H12 to DIN 650

T-slot distance: 250 mm

for T-slots distance [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
250	1 060 x 1 400 x 1 500	2 601	002 598
	1 060 x 1 400 x 2 500	3 973	002 602
	1 060 x 1 400 x 3 000	4 606	002 606



	UNIVERSAL REACTION BRACKET WITH MOUNTING THREAD			
	The universal reaction bracket with mounting thread is used for the fixation of actuator or test specimens.			
	Hole matrix: 250 x 250 mm		Thread: M30	
	for T-slots distance [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	250	1 060 x 1 400 x 1 500	2 414	002 596
1 060 x 1 400 x 2 500		3 634	002 600	
1 060 x 1 400 x 3 000		3 175	002 604	

 For the fixation of actuators or test specimens a T-slot plate (see below) or an actuator plate is necessary.

	REACTION BRACKET WITH VERTICAL ADJUSTMENT				
	The reaction bracket is used for the horizontal clamping of actuator. Minimal position: 300 mm				
	for T-slots distance [mm]	Height adjustment range [mm]	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
	250	±450 mm	1 100 x 850 x 1 392	2 036	003 692

 The hole pattern of the hydraulic actuator has to be provided by the customer in case of ordering.

T-SLOT PLATE				
	The T-slot plate is used for the fixation of actuator or test specimens. It can be secured to the universal reaction bracket. T-slot: 36H12 to DIN 650 T-slot distance: 250 mm			
	Description	Technical remark	Sizes [mm] Length x width x height	Weight ~ [kg]
	small	3 T-slots	1 250 x 1 000 x 100	858
	large	4 T-slots	2 500 x 1 000 x 100	1 719

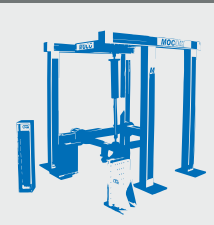
MOUNTING MATERIAL	Description	Technical remark	Details	Order-No. VPK ...
	Collar nut	-	DIN 6331 - M30 Property class 10	VKT 000 410
	T-slot nut	-	DIN 50: M24 x 28, M30 x 36	see Page 52
	Socket head cap screw	-	DIN EN ISO 4762: M24, M30 Property class 10.9	see Page 52

	ADAPTER PIECE (PAIR) MOCOKIT® 65/250			
	For adaption of MOCOKIT® 65 beam to MOCOKIT® 250 column. For hole matrix: 75 x 75 mm, Thread: M16 Hole matrix: 100 x 100 mm, Thread: M24			
	Technical remark	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
		each 190 x 155 x 125	each 13	002 095
 The MOCOKIT® 65 crossbeam set a limit of 65 kN for the maximum static load and 46,8 kN for the maximum dynamic load.				

	ADAPTER PIECE (PAIR) MOCOKIT® 250/400			
	For adaption of MOCOKIT® 250 beam to MOCOKIT® 400 column. For hole matrix: 100 x 100mm, Thread: M24 Hole matrix: 200 x 200mm, Thread: M24			
	Technical remark	Sizes [mm] Length x width x height	Weight ~ [kg]	Order-No. VPK ...
		each 295 x 275 x 125	each 23	002 096
 The MOCOKIT® 250 crossbeam set a limit of 250 kN for the maximum static load and 180 kN for the maximum dynamic load.				

	BELL-CRANK 90°		
	For load redirectioning 90°. Ratio: 1:1 / 1:1,5 / 1:2 (according to position of adapter plate)		
	Hole matrix [mm]	Order-No. VPK ...	Technical remark
	75 x 75	002 924.075	Application 25 kN bis 65 kN
	100 x 100	002 924.100	Application 100 kN bis 250 kN
 For fixation of joints or test specimens 2 adapter plates for bell-crank 90° (see page 51) are necessary. The hole pattern of the plates has to be provided by the customer in case of ordering.			

	ADAPTER PLATE FOR BELL-CRANK 90°		
	For fixation of a joint to the bell-crank 90°.		
	Fixation ø [mm]	Order-No. VPK ...	Technical remark
	ø 100	002 925.025	Application up to 25 kN
	ø 145	002 925.065	Application up to 65 kN
	ø 185	002 925.100	Application up to 100 kN
ø 235	002 925.250	Application up to 250 kN	



CONNECTION ROD

For load introduction (length without ball joints).
Connection to ball joint via clamped thread.

Sizes Length [mm]	Order-No. VPK ...	Technical remark
250	002 919.025	Application up to 25 kN
500	002 919.050	
750	002 919.075	
1 000	002 919.100	
250	002 920.025	Application up to 65 kN
500	002 920.050	
750	002 920.075	
1 000	002 920.100	
250	002 921.025	Application up to 100 kN
500	002 921.050	
750	002 921.075	
1 000	002 921.100	
500	002 922.050	Application up to 160 kN
750	002 922.075	
1 000	002 922.100	
500	002 923.050	Application up to 250 kN
750	002 923.075	
1 000	002 923.100	

SOCKET HEAD CAP SCREW

Additional information about their application - No. of required screws

MOCOKIT® 25

all screws M16
with Property class = 10.9
tightening torque = 290 Nm

VKT 000 181 ...

.030 .035 .040 .045 .055 .060 .065 .070 .075 .080 .085

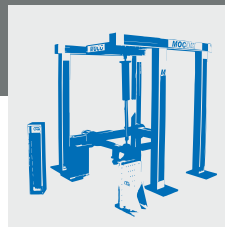
M16, Length ... [mm]

30 35 40 45 55 60 65 70 75 80 85

MOCOKIT® 25

Beam on foot plate		4									
Beam on turning unit			4								
Support strut on foot plate		4									
Beam on connection cube		4									
T-slot plate on universal reaction bracket							10				
Foot plate on base plate with T-slot 18H12				4							
Foot plate on base plate with T-slot 22H12					4						
Universal reaction bracket on base plate with T-slot 18H12					4						
Universal reaction bracket on base plate with T-slot 22H12						4					
Reaction bracket with vertical adjustment on Base plate with T-slot 18H12						12					
Reaction bracket with vertical adjustment on Base plate with T-slot 22H12								12			
Reaction bracket with vertical adjustment for turnable actuators on rotation plate on base plate with T-slot 18H12 18H12						10					
Reaction bracket with vertical adjustment for turnable actuators on rotation plate on base plate with T-slot 22H12								10			

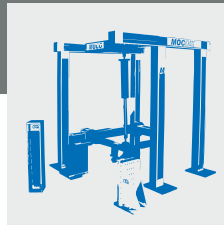
SOCKET HEAD CAP SCREW Additional information about their application - No. of required screws MOCOKIT® 65 and 65 SE all screws M16 with Property class = 10.9 tightening torque = 290 Nm	VKT 000 181 ...										
	.030	.035	.040	.045	.055	.060	.065	.070	.075	.080	.085
	M16, Length ... [mm]										
	30	35	40	45	55	60	65	70	75	80	85
MOCOKIT® 65											
Beam/ cross beam on beam		4/8									
Beam on foot plate		4									
Beam/ cross beam on turning unit		4/8									
Beam/ cross beam on clamping flange		4/8									
Support strut on beam		4									
Support strut on foot plate			4								
Pivot joint on beam (Column)			4								
Pivot joint on cross beam		4									
Stiffening bracket on beam / cross beam		4									
Support angle on beam / cross beam		4									
Angle section (pair) on beam		4									
Angle section (pair) on foot plate			4								
Beam on connection cube	4										
Actuator fixation unit via head flange (stepless) on beam / cross beam			12/18								
Actuator plate on universal reaction bracket				4							
T-slot plate small l/ large on universal reaction bracket								28/78			
T-slot plate small / large on beam						14/26					
Actuator plate on base plate with T-slot 22H12						4					
Actuator plate on base plate with T-slot 28H12								4			
Foot plate on base plate with T-slot 22H12						4					
Foot plate on base plate with T-slot 28H12								4			
Universal reaction bracket 550/1055 on base plate with T-slot 22H12							6/9				
Universal reaction bracket 550/1055 on base plate with T-slot 28H12									6/9		
Reaction bracket with vertical adjustment on base plate with T-slot 22H12								16			
Reaction bracket with vertical adjustment on base plate with T-slot 28H12										16	
Reaction bracket with vertical adjustment for turnable actuators on rotation plate on base plate with T-slot 22H12									16		
Reaction bracket with vertical adjustment for turnable actuators on rotation plate on base plate with T-slot 28H12											16



SOCKET HEAD CAP SCREW Additional information about their application - No. of required screws MOCOKIT® 250,250 SE all screws M24 with Property class = 10.9 tightening torque = 970 Nm	VKT 000 182 ...							
	.040	.045	.055	.070	.075	.080	.090	.100
	M24, Length ... [mm]							
	40	45	55	70	75	80	90	100
MOCOKIT® 250								
Beam / cross beam on beam		4/8						
Beam on foot plate		4						
Beam on turning unit	4							
Cross beam on turning unit			8					
Beam / cross beam on clamping flange		4/8						
Support strut on beam / foot plate		4						
Pivot joint on beam (column)			4					
Pivot joint on cross beam			4					
Stiffening bracket on beam / cross beam		4						
Support angle on beam	4							
Angle section (Pair) on beam / Foot plate	4							
Beam on connection cube	4							
Actuator fixation unit via head flange (stepless) on Beam / Cross beam			12/18					
Actuator plate on universal reaction bracket					4			
T-slot plate small / large on universal reaction bracket								10/72
T-slot plate small / large on beam						10/18		
Actuator plate on base plate with T-slot 28H12					4			
Foot plate on base plate with T-slot 28H12					4			
Universal reaction bracket on base plate with T-Slot 28H12					12			
Reaction bracket with vertical adjustment on base plate with T-Slot 28H12							16	
Reaction bracket with vertical adjustment for turnable actuators on rotation plate on base plate with T-Slot 28H12				16				

SOCKET HEAD CAP SCREW Additional information about their application - No. of required screws MOCOKIT® 400 all screws M24 with Property class = 10.9 tightening torque = 970 Nm	VKT 000 182 ...						
	.065	.070	.085	.090	.95	.100	.110
	M24, Length ... [mm]						
	65	70	85	90	95	100	110
MOCOKIT® 400							
Cross beam 550/750 on Beam small / large	6/8						
Beam to foot plate	4						
Support strut on beam	4						
Support strut on foot plate	4						
Stiffening bracket on beam / cross beam	4						
Support angle on beam / cross beam	4						
Angle section (Pair) on beam	4						
Angle section (Pair) on foot plate		4					
Actuator plate on universal reaction bracket			4				
T-slot plate small / large on universal reaction bracket							16/18
T-slot plate small / large to beam					8/12		
Actuator plate on base plate with T-slot 28H12			4				
Foot plate on base plate with T-slot 28H12			4				
Universal reaction bracket 985/1385 & 1500/1800 on base plate with T-slot 28H12					12/17/21		
Reaction bracket with vertical adjustment on base plate with T-Slot 28H12				20			

SOCKET HEAD CAP SCREW Additional information about their application - No. of required screws MOCOKIT® 600 all screws M30 with Property class = 10.9 tightening torque = 1950 Nm	VKT 000 183 ...				
	.065	.080	.100	.110	.120
	M30, Length ... [mm]				
	65	80	100	110	120
MOCOKIT® 600					
Cross beam 750 / 1000 on beam	6/8				
Beam to foot plate		4			
Support strut on beam	4				
Support strut on foot plate		4			
Actuator plate on universal reaction bracket			4		
T-slot plate small / large on universal reaction bracket					15/27
T-slot plate small / large on Beam			10/18		
Actuator plate on base plate with T-slot 36H12				4	
Foot plate on base plate with T-slot 36H12				4	
Universal reaction bracket on base plate with T-slot 36H12				24	
Reaction bracket with vertical adjustment on base plate with T-Slot 36H12			20		



T-slot nuts DIN 508

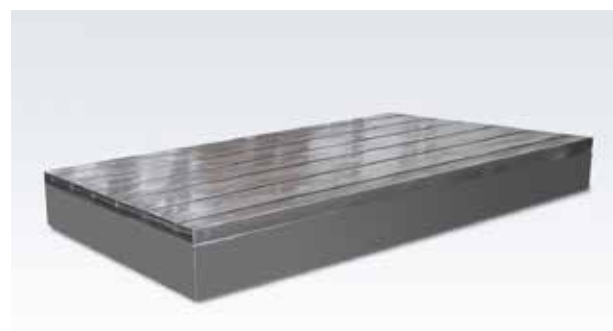
Additional information about their application

T-slot nut DIN 508	MOCOKIT®					Order-No. VKT 000 376 ...
M16 x 18	25	65				.001
M16 x 22	25	65				.002
M16 x 28		65				.003
M24 x 28			250	400	600	.004
M30 x 36					600	.005

Base plates

Any test bench configuration starts on a robust and flexible baseplate. This plate guarantees a very stable and reproducible installation of the **MOCOKIT®** single components. Made of special steel casting the plates are available in different dimensions. We can install the plate onto the ground floor or at a specified working height.

Furthermore **CFM Schiller** offers different vibration isolation systems with defined natural frequencies to react on the required applications and test conditions. The standard dimensions are listed below, but in case of special requirements concerning baseplate specification, please contact us for immediate support and an individual quote.



Base plate for **MOCOKIT®**

Maintenance & corrosion protection auxiliary material

Untreated and functional areas must be covered at all times with a thin wax film. Herefore we offer:

MOCOKIT® transparent protective wax:
For cleaning and corrosion protection.

Volume: 400 ml
Order-No.: VKT 000 450



Sizes [mm]	T-slot- DIN 650	MOCOKIT®					Order-No.: VKT ...
3 000 x 2 000	18H12	25	65				002 111.018
	22H12	25	65				002 111.022
	28H12		65	250	400		002 111.028
	36H12					600	002 111.036
3 000 x 3 000	18H12	25	65				002 112.018
	22H12	25	65				002 112.022
	28H12		65	250	400		002 112.028
	36H12					600	002 112.036
4 000 x 3 000	18H12	25	65				002 113.018
	22H12	25	65				002 113.022
	28H12		65	250	400		002 113.028
	36H12					600	002 113.036
4 000 x 4 000	18H12	25	65				002 114.018
	22H12	25	65				002 114.022
	28H12		65	250	400		002 114.028
	36H12					600	002 114.036
6 000 x 5 000	18H12	25	65				002 115.018
	22H12	25	65				002 115.022
	28H12		65	250	400		002 115.028
	36H12					600	002 115.036

TOOLS CATALOGUE **MOCOKIT®**

Tools	Order-No.	MOCOKIT®				
		25	65	250	400	600
Torque spanner, Torque 520 - 1000 Nm, 3/4"	33214			X	X	X (for M24)
Slip-on ratchet for Torque spanner 3/4"	33217			X	X	X (for M24)
Torque spanner, Torcofix K 60 - 300 Nm, 1/2"	33215	X	X	X (turnable / actuator junction)	X (actuator junction)	
Torque spanner, Torcofix K 100 - 550 Nm, 3/4"	33216	X (for M20 T-slot)	X (for M20 T-slot)			
Ring spanner SW 13	33218		X			
Ring spanner SW 22	33219			X		
Ring spanner extremely long SW 24	33220	X	X			
Ring spanner extremely long SW 36	33221			x	X (option)	
Ring spanner extremely long SW 46	33222					X (option)
Set of socket spanners 1/2"	33223	X	X	X	X (actuator junction)	
Set of socket spanners 3/4"	33224			X	X	X (option)
Screwdriver-bit 3/4" for hexagon socket SW 17	33211	X (for M20 T-slot)	X (for M20 T-slot)	X	X	
Screwdriver-bit 3/4" for hexagon socket SW 19	33212			X	X	X
Screwdriver-bit 3/4" for hexagon socket SW 22	33213					X (option)
Set of cranked wrench key with ball end Zg	33579	X	X	X	X	
Key for hexagon socket screws SW 14	33225	X (option)	X (option)			
Key for hexagon socket screws SW 17	33226			X (option)	X (option)	
Key for hexagon socket screws SW 19	33227			X (option)	X (option)	
Key for hexagon socket screws SW 22	33228					X (option)
Screwdriver-bit 3/4" for hexagon socket SW 22 Force	33584					X
Servo screw driver 3/4" SW 46 Force	33598					X
 Torque spanner must be calibrated !						



UNIVERSAL MODULAR FIXING SYSTEM FOR ACTUATOR FIXATION

Devices from the **MOCOKIT®**- supplementary program
for static und dynamic applikations

Technical data / Application:

welded steel construction with various sizes and forces

Forces:

25 kN / 50 kN / 100 kN / 200 kN / 250 kN / 500 kN
according to used for test frequency up to 75Hz

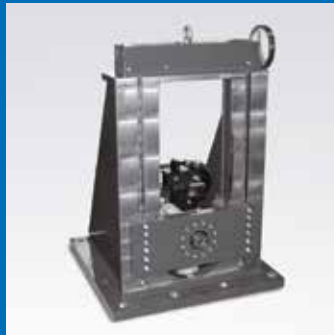
Vertical adjustment:

25 + 50 kN	▶	+/- 450 mm
100 + 200 kN	▶	+/- 450 mm
500 kN	▶	+/- 250 mm

actuator flange plate for swiveling support available



Reaction bracket with vertical adjustment and additional rotational axis.



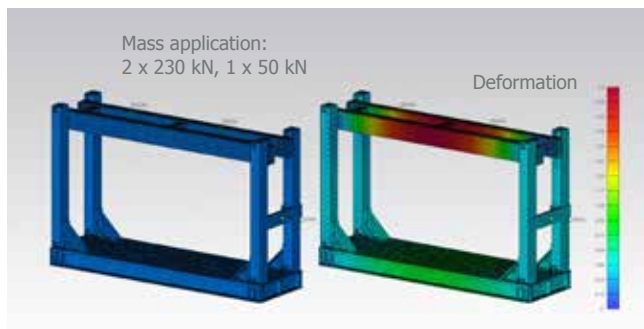
Actuator flange plate for fixed support



Base frame bracket. With and without vertical adjustment. The vertical adjustment is retrofittable.

INDIVIDUAL SOLUTIONS BASED ON **MOCOKIT®** COMPONENTS

We will check your specific **MOCOKIT®** system solution by means of FEA calculations



Example for a FEA calculation

If you have questions about the layout and dimensions of your test set-up, we will be happy to help you



Application of standard and special components

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