



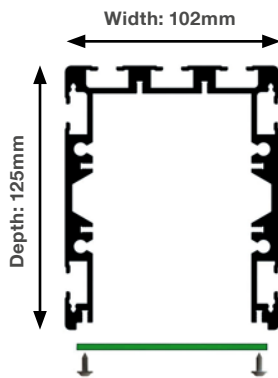
CHAPTER 9: INSTRUMENT RACKS FOR KP, EP, MP MODULES

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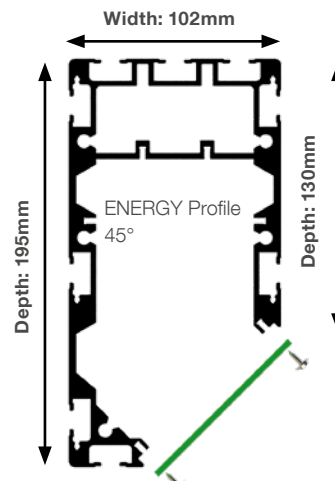


KP SYSTEM - VERTICAL OR HORIZONTAL

The ENERGY Profile with KP modules is the only channel which can be used either vertically or horizontally. It is the optimal solution if only circuit breakers, sockets or other small technology is required. It is also applicable if bundles of cables need to be routed. The ENERGY Profile 45° offers an ergonomic face-angle to the operator.



ENERGY Profile as extensions
equipped with KP modules



ENERGY Profile 45° horizontally mounted on bench
equipped with KP modules



PROFI ENERGY EXTENSIONS

- Two aluminium profiles ENERGY for the vertical assembly on PROFI - or EASY benches.
- Flexibly equipped with modules in KP raster.
- With surrounding profile slots for the flexible acceptance of PROFI shelves or racks.
- Durable powder coated according to RAL Code.



B Fixation

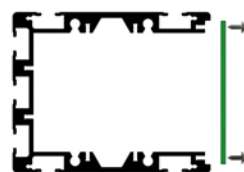
5 EASY Bench



6 PROFI Bench

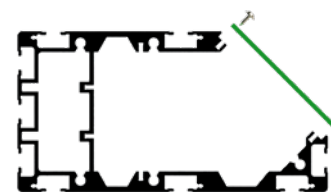


7 PROFI Bench w. Power Legs



A Version

0 ENERGY



5 ENERGY 45°

PROFI Extensions ENERGY			320.HH	B.9	A 0
HH Height (in 100mm Raster)			B Fixation		A Version
02 2x 4KP H: 200mm	07 2x 16KP H: 700mm	12 2x 29KP H: 1200mm	5 EASY Bench	0 ENERGY	
03 2x 6KP H: 300mm	08 2x 19KP H: 800mm	13 2x 31KP H: 1300mm	6 PROFI Bench	5 ENERGY 45°	
04 2x 9KP H: 400mm	09 2x 21KP H: 900mm	14 2x 34KP H: 1400mm	7 PROFI w. Power Legs		
05 2x 11KP H: 500mm	10 2x 24KP H: 1000mm	15 2x 36KP H: 1500mm	320.000.900 Fixing Bracket for one sided installation of ENERGY Extension		
06 2x 14KP H: 600mm	11 2x 26KP H: 1100mm				

EASY ENERGY PROFILE

- Aluminium profile, durable light grey powder coated.
- Front side prepared for the flexible acceptance of modules in KP raster.

ENERGY:

- With surrounding profile slots.
- Dimensions: 125 x 102mm (DxH).



ENERGY 45°:

- With surrounding profile slots.
- Dimensions: 195/130 x 102mm (DxH).



EASY ENERGY Profile			320.BBB.0 A 0	
BBB Width			A Version	
060 14KP W: 600mm	126 31KP W: 1260mm	160 39KP W: 1600mm	0 ENERGY	
080 19KP W: 800mm	129 32KP W: 1295mm	180 44KP W: 1800mm	5 ENERGY 45°	
090 22KP W: 900mm	148 36KP W: 1485mm	200 49KP W: 2000mm		
100 24KP W: 1000mm	150 37KP W: 1500mm	230 57KP W: 2303mm		
120 29KP W: 1200mm				

PROFI ENERGY PROFILE

- Aluminium profile, durable powder coated according to RAL Code.
- Front side prepared for the flexible acceptance of modules in KP raster.
- For the assembly between the PROFI extensions in flexible height.

ENERGY:

- With surrounding profile slots.
- Dimensions: 125 x 102mm (DxH).

ENERGY 45°:

- With surrounding profile slots.
- Dimensions: 195/130 x 102mm (DxH).



PROFI ENERGY Profile			320.BB.F.9 A 0			
BB Bench Width & Equipment (ENERGY Extensions)			F Extensions		A Version	
05 500mm 10KP (7KP)	10 1000mm 23KP (19KP)	16 1600mm 38KP (34KP)	3 SINGLE / MULTI	0 ENERGY		
06 603mm 13KP (9KP)	12 1200mm 28KP (24KP)	18 1800mm 43KP (39KP)	4 ENERGY	5 ENERGY 45°		
08 800mm 18KP (14KP)	13 1295mm 30KP (27KP)	20 2000mm 48KP (44KP)				
09 900mm 20KP (17KP)	15 1500mm 35KP (32KP)	23 2303mm 55KP (52KP)				

EP SYSTEM - IDEAL FOR MEDIUM COMPLEXITY

Our EP system for 3HU modules offers a great variety of modules for medium complexity, that can be integrated into all EP racks, no matter if the channel is with tilted front or electrically retractable. The EP system is very cost-effective and racks are available in wood and metal.

Under benchtop mounted racks can even replace the cable tray and the instruments are accessible by opening the cable flap.



MP SYSTEM - SUITABLE FOR HIGH COMPLEXITY

The MP system for 5HU modules can be installed either directly on the bench top or suspended between the extensions. The MP racks are available in wood and metal. Due to its 5HU size the MP racks offer sufficient height for complex instruments like high voltage testers or oscilloscopes.



THE **ALUBOARD**, FITS FOR KP, EP AND MP MODULES

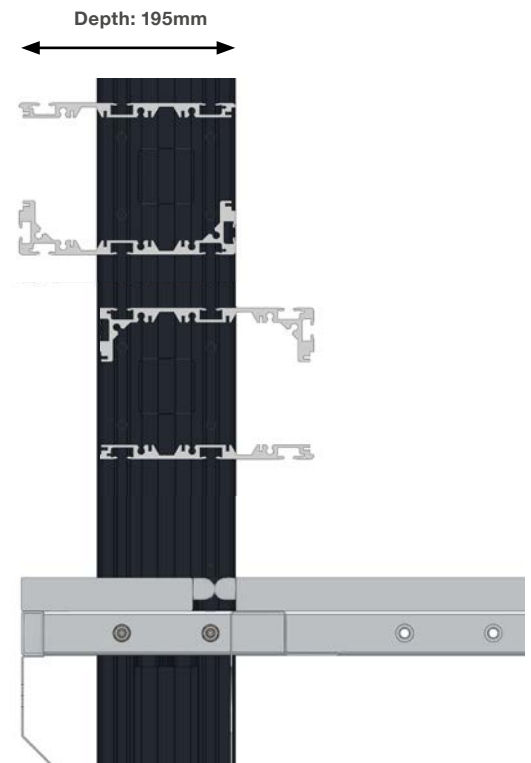
ALUBOARD

The Aluboard is applicable for KP, EP or MP modules. It can be equipped from both sides and is available either flat or in U-form if a slot for front- or rear side attachment is required. The profile can be installed between extensions or directly on the table top.

- Upper - and lower side with slotted profile for the flexible attachment of accessory.
- Front - and rear side for the flexible equipment with modules in KP, EP or MP raster.
- Depth: 195mm.
- Durable powder coated according to RAL-Code.

Available in different widths:

- For all bench widths.
- Between SINGLE/ MULTI Extensions (minus 80mm).
- Between ENERGY Extensions (minus 204mm).



A Version



PROFI: between the extensions, on variable height



EASY: on top of ENERGY extensions or bench top

S System



KP System:
Front Panel Height: 90mm



EP System:
Front Panel Height: 132mm (3HU)

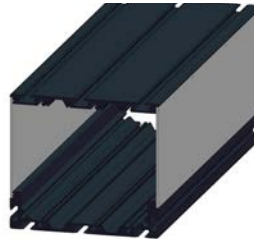


MP System:
Front Panel Height: 221mm (5HU)

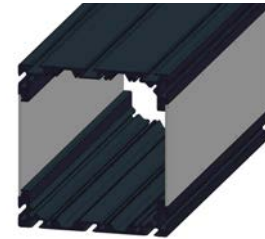
P Type



Total Height F/F
KP: 96mm
EP: 138mm
MP: 227mm



Total Height F/U
KP: 133mm
EP: 175mm
MP: 264mm



Total Height U/U
KP: 170mm
EP: 212mm
MP: 301mm

EASY / PROFI Aluboard

30 **A** **BBB** **S** **P** 0

A Version

BBB Width and Equipment (per side)

S System

P Profile

Version	Width	Equipment	Profile	System
5 PROFI	030 300mm	7KP 1EP 2MP	121 1215mm	2 KP
7 EASY	039 399mm	9KP 1EP 2MP	126 1260mm	3 EP (3HU)
	042 420mm	10KP 1,5EP 3MP	129 1296mm	4 MP (5HU)
	052 523mm	12KP 1,5EP 3MP	139 1396mm	
	056 567mm	13KP 2EP 4MP	142 1420mm	
	059 596mm	14KP 2EP 4MP	148 1485mm	
	069 696mm	17KP 2,5EP 5MP	150 1500mm	
	072 720mm	17KP 2,5EP 5MP	152 1520mm	
	079 796mm	19KP 2,5EP 5MP	159 1596mm	
	080 800mm	19KP 2,5EP 6MP	160 1600mm	
	082 820mm	20KP 3EP 6MP	172 1720mm	
	090 900mm	22KP 3EP 6MP	179 1796mm	
	092 920mm	22KP 3EP 6MP	180 1800mm	
	099 996mm	24KP 3,5EP 7MP	192 1920mm	
	100 1000mm	24KP 3,5EP 7MP	200 2000mm	
	109 1091mm	26KP 4EP 8MP	209 2099mm	
	112 1120mm	27KP 4EP 8MP	222 2223mm	
120 1200mm	29KP 4EP 8MP	230 2303mm		

Rear Panel 309 **BBB** **S00**

Rear panel with ventilation slots and cable outlet, made of durable powder coated sheet steel



ALUBOARD COMPACT IN VARIOUS DEPTH

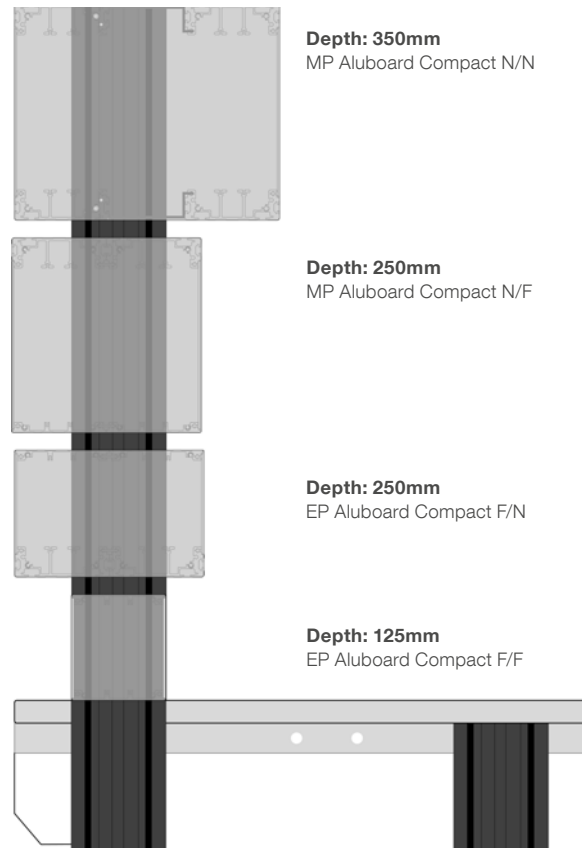
ALUBOARD COMPACT

The Aluboard Compact is made of aluminium extrusions and it is available in different heights and different depths to accommodate everything from little to heavy technology.

- Upper - and lower side with slotted profile for the flexible attachment of accessory.
- Front - and rear side for the flexible equipment with modules in KP, EP or MP raster.
- Depth: 125mm / 250mm / 350mm.
- Durable powder coated according to RAL-Code.

Available in different widths:

- For all bench widths.
- Between SINGLE/ MULTI Extensions (minus 80mm).
- Between ENERGY Extensions (minus 204mm).



T Depth



Depth: 125mm
F/N Profile



Depth: 250mm
F/N Profile



Depth: 350mm
F/N Profile


S System



KP System:
Front Panel Height: 90mm



EP System:
Front Panel Height: 132mm (3HU)



MP System:
Front Panel Height: 221mm (5HU)

A Type



Total Height F/F
KP: 98mm
EP: 140mm
MP: 229mm



Total Height F/N
KP: 128mm
EP: 170mm
MP: 259mm




Total Height N/N
KP: 150mm
EP: 192mm
MP: 281mm

EASY / PROFI Aluboard Compact		30 T BBB E A 0	
T Depth	BBB Width and Equipment (per side)	E System	A Type
4 125mm	030 300mm 7KP 1EP 2MP 121 1215mm 29KP 4,5EP 9MP	2 KP	0 F/F Profile
6 250mm	039 399mm 9KP 1EP 2MP 126 1260mm 31KP 4,5EP 9MP	3 EP (3HU)	1 F/F Profile for Shelf
8 350mm	042 420mm 10KP 1,5EP 3MP 129 1296mm 32KP 4,5EP 9MP	4 MP (5HU)	2 F/N Profile
	052 523mm 12KP 1,5EP 3MP 139 1396mm 34KP 5EP 10MP		3 F/N Profile for Shelf
	056 567mm 13KP 2EP 4MP 142 1420mm 35KP 5EP 10MP		4 N/F Profile for Shelf
	059 596mm 14KP 2EP 4MP 148 1485mm 36KP 5,5EP 11MP		5 N/N Profile
	069 696mm 17KP 2,5EP 5MP 150 1500mm 37KP 5,5EP 11MP		6 N/N Profile for Shelf
	072 720mm 17KP 2,5EP 5MP 152 1520mm 37KP 5,5EP 11MP		
	079 796mm 19KP 2,5EP 5MP 159 1596mm 39KP 5,5EP 11MP		
	080 800mm 19KP 2,5EP 6MP 160 1600mm 39KP 5,5EP 11MP		
	082 820mm 20KP 3EP 6MP 172 1720mm 42KP 6EP 12MP		
	090 900mm 22KP 3EP 6MP 179 1796mm 44KP 6,5EP 13MP		
	092 920mm 22KP 3EP 6MP 180 1800mm 44KP 6,5EP 13MP		
	099 996mm 24KP 3,5EP 7MP 192 1920mm 47KP 7EP 14MP		
	100 1000mm 24KP 3,5EP 7MP 200 2000mm 49KP 7EP 14MP		
	109 1091mm 26KP 4EP 8MP 209 2099mm 52KP 7,5EP 15MP		
	112 1120mm 27KP 4EP 8MP 222 2223mm 55KP 8EP 16MP		
	120 1200mm 29KP 4EP 8MP 230 2303mm 57KP 8,5EP 17MP		

Rear Panel **309.BBB.S00**

Rear panel with ventilation slots and cable outlet, made of durable powder coated sheet steel



ALUBOARD COMPACT 350 F/NF WITH INTEGRATED SOCKETS

- Upper side with flat profiles.
- Lower side with 2 slots for the attachment of equipment and a slanted sheet steel panel equipped with PE sockets, Type F (others on demand!).

W: 523 - 1091mm: 2x single socket
 W: 1120 - 1485mm: 2x double socket
 W: 1500 - 2303mm: 2x triple socket

- Front - and rear side prepared for the flexible acceptance of modules in KP, EP or MP raster.
- Height: 128mm (KP) / 170mm (EP) / 259mm (MP).
- Depth: 350mm.
- Terminal clamp for power cable and integration to inhouse emergency stop loop.
- Durable powder coated according to RAL Code.



Aluboard Compact 350 F/NF with Sockets 308.BBB.E70



FLEXIBLE ACCESSORY ATTACHMENT DUE TO SLOTTED PROFILES

The ENERGY profile and the aluboard are made with surrounding slots and thus support the attachment of various accessory in flexible or even movable position. This allows each user to arrange the workstation according to personal preferences and in a most ergonomic manner without much efforts.



TFT SUPPORT FOR ENERGY PROFILE AND ALUBOARD

- Movable support, durable light grey powder coated.
- VESA perforation (100x100 and 75x75mm) for attachment of TFT swivel heads or the TFT.

PROFI TFT Support for Profile Installation	
491.053.150	for rear sided assembly to ENERGY profile (width: 150mm / height: 360mm)
491.053.250	for top / bottom assembly to ENERGY profile or aluboard (width: 150mm / height: 360mm)

TFT Swivel Head for PROFITFT Support	
491.052.100	PLUS tilt -, swivel - and rotatable; silver (reach: 130mm; load: max. 15kg)
491.056.100	LC tilt -, swivel - and rotatable; black (reach: 65mm; load: max. 20kg)
491.057.100	TSS with ball joint and quick fastener (reach: 105mm; load: max. 15kg)



491.052.100



491.056.100



491.057.100

KEY BOARD SHELF FOR ENERGY PROFILE AND ALUBOARD

- Sheet steel shelf with front sided stop edge, durable light grey powder coated.
- Movable installed on bottom of the profile.
- Dimensions: 450 x 250mm (WxD).

Key Board Shelf for Profile Slots	320.009.600
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TRAY FOR ENERGY PROFILE AND ALUBOARD

- Sheet steel tray with surrounding stop edge, durable dissipative powder coated in light grey.
- Movable installed on top of the profile.
- Screw for position lock and earthing.



Tray for Profile Installation		320. B T 9.100
B Width	T Depth	
4 400mm	3 300mm	
5 500mm	4 400mm	
6 600mm		

TILTABLE TRAY FOR ENERGY PROFILE AND ALUBOARD

- Front and sides with 20mm stop edge, tiltable in 3 steps (0° / 5° / 10° / 15°).
- Made of sheet steel, durable dissipative powder coated in light grey.
- Movable installed on top of the profile.



Tiltable Tray for Profile Installation		320. B T 9.200
B Width	T Depth	
4 400mm	3 300mm	
5 500mm	4 400mm	
6 600mm		

PERFORATED PANEL FOR ENERGY PROFILE AND ALUBOARD

- Perforated panel (1,5mm thick) with surrounding reinforcement, durable powder coated in light grey.
- Movable installed in the profile slots.
- Screw for position lock and earthing.
- For the acceptance of various tool holders.

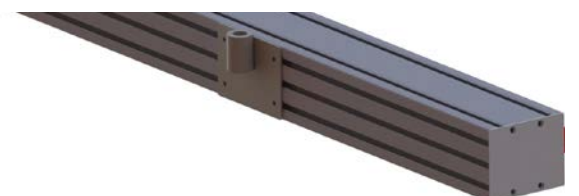


Version: installed in rear slots

Perforated Panel for Profile Slots			320. B H 9.4 A 0
B Width	H Height	A Version	
4 400mm	1 150mm	0	top / bottom
5 500mm	3 300mm	5	rear (only ENERGY profile)
6 600mm	4 400mm		

SLEEVE FOR ENERGY PROFILE AND ALUBOARD

- Sleeve for the modular acceptance of the different PROFI swivel arms and end pieces with fixing screw.
- Movable with four synthetic slides.



Sleeve for ENERGY Profile and Aluboard	320.009.700
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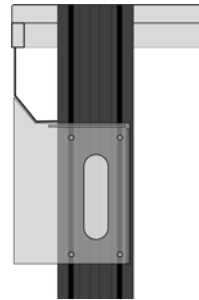
STORAGE OPTIONS FOR THE MODULAR IMOD FUNCTION-UNITS

One big advantage of the IMOD System is, that bench racks with complex electronics can be designed quite small. Powerful variacs, isolating transformers and lab power supplies can be located conveniently under the bench. Different options for ergonomic arrangements of the Function-Units are listed in following pages.



PROFI FUNCTION BOARD

- Durable powder coated sheet steel channel.
- Perforation at the rear side and bottom for air ventilation.
- Installed under the cable tray or directly under the bench frame.
- Upper side for the acceptance of modules in EP raster.
- Front side covered with blank panels in MP raster.
- Dimensions: 190 x 275/230mm (DxH).



PROFI Function Board		422.BB 0. F 21	
BB Width & Equipment (with Power Legs)		F Extensions	
08 800mm 2,5EP (2EP)	15 1500mm 5EP (4,5EP)	0 SINGLE / MULTI	
09 900mm 3EP (2,5EP)	16 1600mm 5,5EP (5EP)	2 Power Legs	
10 1000mm 3EP (2,5EP)	18 1800mm 6EP (5,5EP)		
12 1200mm 4EP (3,5EP)	20 2000mm 7EP (6,5EP)		
13 1295mm 4,5EP (4EP)	23 2303mm 8EP (7,5EP)		

SUSPENDED CONTAINER 11HE FOR IMOD

- Light grey body made of 19mm melamine resin covered chipboard with 2mm PP plastic edge.
- Robust organizable sheet steel drawers with single-drawer blocking system in HE raster (1HE=50mm).
- Pencil drawer 1HE with central lock (master-key-system) and 2 keys.
- Compartment for Function-Unit separated by shelfboard and detachable front.
- Rear side of Function-Unit compartment with perforation for airflow, cable outlet and cable duct.
- Height of Function-Unit compartment: 200mm.
- Container height: 585mm.



Suspended Container for IMOD (11HE)		43 A . EE T . F B 3		
A Version	EE Type	T Depth	F Form	B Width
1 Standard	28 1x 2HE + 1x 4HE + 1x FU-Compartment	0 580mm	0 Standard	0 420mm
3 ESD	38 3x 2HE + 1x FU-Compartment	1 680mm	2 DESIGN	6 600mm
		2 780mm		

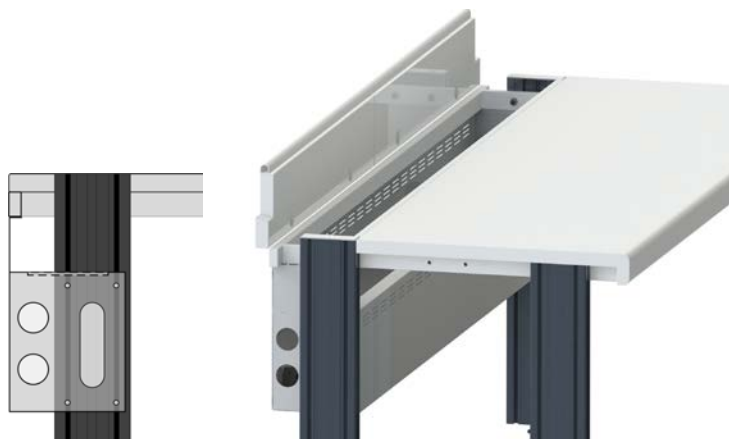
SHEETS STEEL BOARDS FOR VARIOUS POSITIONS

The sheet steel boards are available for EP and MP modules and can be installed directly on the bench top or suspended between the extensions. The boards are perforated for a most efficient air ventilation of the electric equipment and are well suited as stiffeners for shelves.



PROFI UNDER TOP ENERGY BOARD FOR EP

- Durable powder coated sheet steel channel.
- Perforation at the rear side and bottom for air ventilation.
- Installed between the bench legs and accessible at the cable flaps.
- Upper side for the acceptance of modules in EP raster.
- Terminal clamp for the connection of the power cable and an optional inhouse emergency off cable.
- Dimensions: 190 x 320/230mm (DxH).



PROFI Under Top Energy Board 422. **BB** 0. **F** 20

BB Width & Equipment (with Power Legs)

08	800mm	2,5EP	(2EP)	15	1500mm	5EP	(4,5EP)
09	900mm	3EP	(2,5EP)	16	1600mm	5,5EP	(5EP)
10	1000mm	3EP	(2,5EP)	18	1800mm	6EP	(5,5EP)
12	1200mm	4EP	(3,5EP)	20	2000mm	7EP	(6,5EP)
13	1295mm	4,5EP	(4EP)	23	2303mm	8EP	(7,5EP)

F Extensions

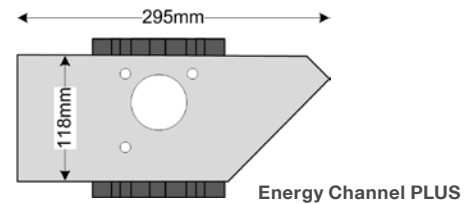
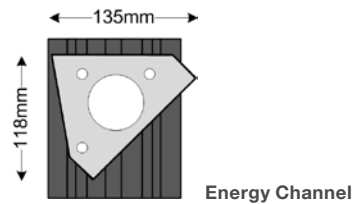
0	SINGLE / MULTI
2	Power Legs

PROFI ENERGY CHANNEL AND ENERGY CHANNEL PLUS FOR EP

- Ergonomically tilted sheet steel channel with 45° front, durable powder coated.
- High rigidity and thus ideal as support for shelf.
- Upper side with bores for the fixation of a shelf.
- Front side prepared for the acceptance of modules in EP raster.
- The Energy Channel PLUS is a suitable alternative for more technology (e.g. isolated transformers, power supplies, soldering / desoldering stations).



G Type



PROFI Channel 425. **BB** 0. **F** 1 **G**

BB Width & Equipment (ENERGY Profile)

F Extensions

G Type

03 270mm 1EP	13 1295mm 4EP (4EP)	0 SINGLE / MULTI	1 Energy Channel
06 603mm 1,5EP (1EP)	15 1500mm 5EP (4,5EP)	2 ENERGY	2 Energy Channel PLUS
08 800mm 2,5EP (2EP)	16 1600mm 5,5EP (5EP)		
09 900mm 3EP (2,5EP)	18 1800mm 6EP (5,5EP)		
10 1000mm 3EP (2,5EP)	20 2000mm 7EP (6,5EP)		
12 1200mm 4EP (3,5EP)	23 2303mm 8EP (7,5EP)		

PROFI Energy Channel Corner 425.5 **KL**.01 **G**

KL Edge Length Corner Element

G Type

00 1213 x 1213mm 5EP	12 1035 x 1035mm 3EP	20 1200 x 1000mm 4EP	1 Energy Channel
10 835 x 835mm 2,5EP	18 935 x 935mm 3EP	22 1000 x 1200mm 4EP	2 Energy Channel PLUS

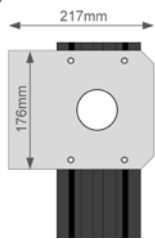


PROFI ENERGY BOARD AND MODULE BOARD FOR EP AND MP

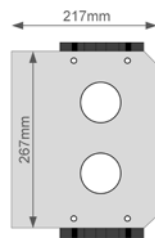
- Durable powder coated sheet steel channel.
- Perforation at the rear side and bottom for air ventilation.
- High rigidity and thus ideal as support for shelf.
- Upper side with bores for the fixation of a shelf.
- Front side prepared for the acceptance of modules in EP raster.
- Terminal clamp for the connection of the power cable and an optional inhouse emergency off cable.



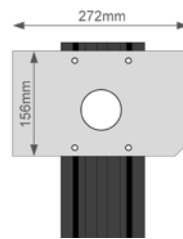
G Type



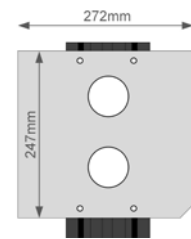
Energy Board (EP)



Module Board (MP)



Energy Board PLUS (EP)



Module Board PLUS (MP)

PROFI Energy Board and Module Board 422. **BB** 0. **F** 1 **G**

BB Width & Equipment (ENERGY Profile)

03 270mm 1EP/2MP	13 1295mm 4EP/8MP (4EP/8MP)
06 603mm 1,5EP/3MP (1EP/2MP)	15 1500mm 5EP/10MP (4,5EP/9MP)
08 800mm 2,5EP/5MP (2EP/4MP)	16 1600mm 5,5EP/11MP (5EP/10MP)
09 900mm 3EP/6MP (2,5EP/5MP)	18 1800mm 6EP/12MP (5,5EP/11MP)
10 1000mm 3EP/6MP (2,5EP/5MP)	20 2000mm 7EP/14MP (6,5EP/13MP)
12 1200mm 4EP/8MP (3,5EP/7MP)	23 2303mm 8EP/16MP (7,5EP/15MP)

F Extensions

0 SINGLE / MULTI
2 ENERGY

G Type

0 Energy Board
1 Energy Board PLUS
2 Module Board
3 Module Board PLUS

PROFI Energy Board Corner 422.5 **KL**.01 **G**

KL Edge Length Corner Element

00 1213 x 1213mm 5EP	12 1035 x 1035mm 3EP	20 1200 x 1000mm 4EP
10 835 x 835mm 2,5EP	18 935 x 935mm 3EP	22 1000 x 1200mm 4EP

G Type

0 Energy Board
2 Energy Board PLUS



EASY ENERGY CHANNEL 45° FOR EP

- Ergonomically tilted sheet steel channel with 45° tilted instrument front, durable powder coated for bench top installation.
- Dimensions: 150 x 150mm (DxH).
- Front side prepared for the acceptance of modules in EP raster.
- Bottom and rear side prepared for the fixation and cable access.
- Terminal clamp for the connection of the power cable and an optional inhouse emergency off cable.



EASY ENERGY Channel 45°			315.BBB.500											
BBB Width & Equipment														
030	300mm	1EP	080	800mm	2,5EP	112	1120mm	4EP	148	1485mm	5,5EP	180	1800mm	6,5EP
052	523mm	1,5EP	082	820mm	3EP	120	1200mm	4EP	150	1500mm	5,5EP	192	1920mm	7EP
059	596mm	2EP	090	900mm	3EP	121	1215mm	4,5EP	152	1520mm	5,5EP	200	2000mm	7EP
060	600mm	2EP	092	920mm	3EP	126	1260mm	4,5EP	159	1596mm	5,5EP	209	2099mm	7,5EP
069	696mm	2,5EP	099	996mm	3,5EP	129	1296mm	4,5EP	160	1600mm	5,5EP	222	2223mm	8EP
072	720mm	2,5EP	100	1000mm	3,5EP	139	1396mm	5EP	172	1720mm	6EP	230	2303mm	8,5EP
079	796mm	2,5EP	109	1091mm	4EP	142	1420mm	5EP	179	1796mm	6,5EP			



THE CLASSIC WOODEN BENCH RACKS

Wooden bench racks are available for the assembly on the bench top (EASY) or for the suspended assembly between extensions (PROFI). The bench racks are available in standard material or dissipative for ESD versions. The wooden bench racks are made of melamine resin covered chipboard in light grey.



PROFI ENERGY BOARD (EP) AND MODULE BOARD (MP), WOOD

- Light grey body, made of 19mm melamine resin covered chipboard.
- Sides with cutout for the extensions.
- Detachable powder coated rear panel with two cable glands.
- Front side prepared for the acceptance of modules in EP or MP raster.
- Terminal clamp for the connection of the power cable and an optional inhouse emergency off cable.
- Energy Board, height: 170mm.
- Module Board, height: 260mm.
- Depth: 300mm.



PROFI Energy Board and Module Board, Wood 422. **BB** **F** .51 **A**

BB Width & Equipment				F Extension		A Version			
06	603mm	2EP	4MP	15	1500mm 5EP 10MP	0	SINGLE / MULTI (Energy Board)	0	Standard
08	800mm	2,5EP	5MP	16	1600mm 5,5EP 11MP	1	SINGLE / MULTI (Module Board)	5	ESD
09	900mm	3EP	6MP	18	1800mm 6,5EP 13MP	2	ENERGY (Energy Board)		
10	1000mm	3,5EP	7MP	20	2000mm 7EP 14MP	3	ENERGY (Module Board)		
12	1200mm	4EP	8MP	23	2303mm 8EP 16MP				
13	1295mm	4,5EP	9MP						

PROFI Energy Board and Module Board for Corners 422. **G** **KL** .51 **A**

G Type		KL Corner Element		A Version			
5	Energy Board	00	1213 x 1213mm 5EP 10MP	18	935 x 935mm 3EP 6MP	0	Standard
6	Module Board	10	835 x 835mm 2EP 4MP	20	1200 x 1000mm 4EP 8MP	5	ESD
		12	1035 x 1035mm 3,5EP 7MP	22	1000 x 1200mm 4EP 8MP		



EASY ENERGY BOARD (EP) AND MODULE BOARD (MP), WOOD

- Light grey body, made of 19mm melamine resin covered chipboard.
- Sides with cutout for the PROFI extensions.
- Detachable powder coated rear panel with two cable glands.
- Front side prepared for the acceptance of modules in EP or MP raster.
- Terminal clamp for the connection of the power cable and an optional inhouse emergency off cable.
- Energy Board, height: 170mm.
- Module Board, height: 260mm.



EASY ENERGY Board and Module Board, Wood

31 G BBB 5 T A

G Type	BBB Width & Equipment	T Depth	A Version
3 Energy Board	030 302mm 1EP 2MP 129 4,5EP 9MP	2 150mm	0 Standard
4 Module Board	060 567mm 2EP 4MP 139 4,5EP 10MP	3 300mm	5 ESD ⚠
	069 696mm 2EP 4MP 142 5EP 10MP	6 300mm (both sided)	
	072 720mm 2EP 4MP 148 5EP 10MP		
	079 796mm 2,5EP 5MP 150 5EP 10MP		
	080 800mm 2,5EP 5MP 152 5EP 10MP		
	082 820mm 2,5EP 5MP 159 5,5EP 11MP		
	090 900mm 3EP 6MP 160 6EP 12MP		
	092 920mm 3EP 6MP 172 6EP 12MP		
	100 1000mm 3,5EP 7MP 179 6,5EP 13MP		
	105 1056mm 3,5EP 7MP 180 6,5EP 13MP		
	109 1091mm 3,5EP 7MP 192 7EP 14MP		
	112 1120mm 3,5EP 7MP 200 7EP 14MP		
	118 1180mm 4EP 8MP 209 7,5EP 15MP		
	120 1200mm 4EP 8MP 223 8EP 16MP		
121 1215mm 4EP 8MP 230 8EP 16MP			
126 1260mm 4,5EP 9MP			



PROFI MODULE RACK FOR MP

- Light grey body made of melamine resin covered chip-board with tilted front for ergonomically viewing the displays in sitting position.
- Sides with cutout for PROFI extensions.
- Prepared for the acceptance of modules in MP raster.
- Sheet steel ventilation panel (durable powder coated according to RAL-Code) at the front.
- Terminal clamp for the connection of the power cable and an optional inhouse emergency off cable.
- Depth: 380 / 325mm.
- Height: 335 / 280mm.



PROFI Module Rack		422.BB F .00 A					
BB Width & Equipment		F Extensions		A Version			
08	800mm 5MP	15	1500mm 10MP	1	SINGLE / MULTI	0	Standard
09	900mm 6MP	16	1600mm 11MP	3	ENERGY	5	ESD
10	1000mm 7MP	18	1800mm 13MP				
12	1200mm 8MP	20	2000mm 14MP				
13	1295mm 9MP	23	2303mm 16MP				

EASY MEP RACK FOR EP AND MP

- Body made of 19mm melamine resin covered chipboard with tilted front.
- Prepared for the parallax-free acceptance of modules in MP raster.
- Lower side prepared for the acceptance of modules in EP raster.
- Detachable, powder coated rear panel made of perforated sheet steel, with two cable glands.
- Depth: 350 / 300mm.
- Height: 420mm.



EASY MEP Rack		311.BB5.50 A			
BB Width & Equipment		A Version			
06	567mm 4MP + 2EP	15	1485mm 10MP + 5EP	0	Standard
09	900mm 6MP + 3EP	16	1600mm 11MP + 5,5EP	5	ESD
10	1000mm 7MP + 3,5EP	18	1800mm 13MP + 6,5EP		
13	1260mm 9MP + 4,5EP	20	2000mm 14MP + 7EP		

RETRACTABLE BENCH RACKS FOR A MAXIMUM OF PRECAUTION

Bench racks for EP and MP are available with hideaway - or foldaway mechanism. The electric devices are in safely retracted position if not required. The movement of the bench racks can either be controlled centrally or directly at each workstation.

That way you have the full bench top when the instrument panel is closed and full instrumentation whenever required.



SWIVEL MECHANICS FOR ENERGY BOARD AND MODULE BOARD

- Energy Board or Module Board flush integrated in the bench top with electric lift for up / down movement.
- With double rubber lip for mechanical bruise protection.
- Silent moving lifts with switch-off automatic for electrical bruise protection.
- In retracted position the instruments are safely stored in a powder coated sheet steel hood. The hood is equipped with service flaps.
- Central control from instructor bench or decentral with up/ down button at each bench.
- Depth: 400 - 440mm (depending on type).
- Instrument rack = bench width - 200mm.

System requirements:

- PROFI Workbench
- EASY Energy - or Module Board
- Option Swivel Mechanics



Option Swivel Mechanics 425.900.010



Application with Module Board and MP Modules



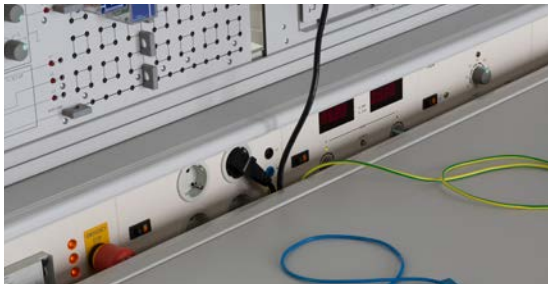
Application with Energy Board and EP Modules

HIDEAWAY MECHANISM FOR ENERGY BOARD AND MODULE BOARD

- Chest made of light grey, 19mm thick melamine resin covered chipboard and leveling feet for uneven grounds. Front side with detachable service flap.
- The instrument side of the chest holds a double rubber lip for mechanical bruise protection.
- Lifting mechanism with 2 lifts, electrical bruise protection (switch off automatics with reverse movement) and programmable lifting speed.
- Central control from instructor bench or decentral with up/ down button at each bench.

Note:

Suitable for each EASY Energy - or Module Board. Modular equipment.



Double Bruise Protection

- mechanically due to double rubber lip
- electrically due to lifts with switch off automatic

Option Hideaway Mechanism

425.900.100



EASY Bench Combination with Hideaway Module Board

HEXAGONAL TEAM RACK FOR EP AND MP

- Completely assembled light grey body, lower side with levelling feet.
- Solid construction with top and bottom made of 30mm melamine resin covered chipboard, which allows to use the surface as shelf.
- Each side prepared for the acceptance of modules in EP or MP raster.
- Rack height for EP version: 190mm (1 level), 360mm (2 levels)
- Rack height for MP version: 280mm (1 level), 530mm (2 levels).



Hexagonal Team Rack 31 **G** .55 **D** .5 **H** **A**

G Type

- 3 Energy Board
- 4 Module Board

D Diameter & Equipment

- 0 1800mm 6x 3EP / 6x 6MP
- 1 1100mm 6x 2EP / 6x 4MP
- 2 550mm 6x 1EP / 6x 2MP

H Levels

- 0 1 Level
- 1 2 Levels

A Version

- 0 Standard
- 5 ESD



HIDEAWAY MECHANISM FOR HEXAGONAL TEAM RACK (EP/MP)

- Lifting mechanism for hexagonal team racks. The team racks are equipped with detachable service flap.
- Instrument side with double rubber lip for mechanical bruise protection.
- Four silent running lifts with switch-off automatic and reverse movement for electrical bruise protection, programmable lifting speed.
- Side with double rubber lip for mechanical bruise protection.
- Central control from instructor bench or decentral with up/ down button at the workstation.



Hideaway Mechanism for Hexagonal Team Rack 425.900.150



TOWER BOARD, ALUMINIUM FOR EP AND MP

- The Tower Board is made of aluminium profile, both sides equipable.
- Bottom made with N-profile.
- F-profile for cover and intermediate profiles.
- Front and rear side are prepared for the acceptance of modules in EP or MP raster.
- Durable powder coated according to RAL-Code.
- Depth: 300mm; width: 275mm.

Tower Board, Aluminium		314.7 BB .000	
BB Equipment & Height			
11	2x: 1EP + 2MP (394mm)	03	2x: 3x 2MP (711mm)
02	2x: 2x 2MP (483mm)	22	2x: 2x 1EP + 2x 2MP (762mm)
12	2x: 1EP + 2x 2MP (622mm)	60	2x: 6x 1EP (862mm)



Tower Board, Aluminium
1EP+2MP+2MP

EASY TOWER BOARD FOR EP AND MP, WOOD

- Body made of 19mm melamine resin covered chipboard.
- Detachable, powder coated rear panel made of perforated sheet steel, with 2 cable glands.
- Front prepared for the acceptance of modules in EP or MP raster.
- Terminal clamp for the connection of the power cable and an optional inhouse emergency stop cable.
- Width: 302mm.

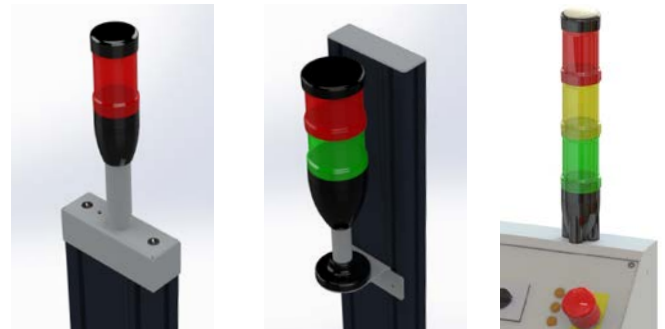


EASY Tower Board 314.7 BB . 5 T A					
BB Equipment & Height		T Depth		A Version	
11	1EP + 2MP (395mm)	03	3x 2MP (710mm)	2	150mm
02	2x 2MP (485mm)	22	2x 1EP + 2x 2MP (748mm)	3	300mm
12	1EP + 2x 2MP (620mm)	60	6x 1EP (832mm)	6	300mm both sided
				0	Standard
				5	ESD

SIGNAL LAMP

The signal lamps are installed on the rack or extensions, so the status of the workstation is visible from all sides (off, low voltage, mains voltage etc.).

- Signal lamp with foot, diameter: 70 / 40mm.
- Red, green and /or yellow signal element 230V.
- For the assembly to the rack or extension and connected to the mains module.
- Incl. wiring.



Signal Lamp 331.03 A . L B D			
A Lamp Elements	L Version	B Fixation	D Diameter
1	1x LE (red)	0	for Rack or ENERGY Extension
2	2x LE (red / green)	1	for SINGLE/ MULTI Extension
3	3x LE (red / green / yellow)	2	side of Extension
	1		5W Lamp
	3		LED
		0	70mm Standard
		1	40mm Slim



PROFI STATUS-LIGHT RGB

The PROFI Status-Light is an innovative safety feature for electrical lab benches with vertical extensions. It indicates one or more switching modes.

The Status-Light is located at the highest point of a workstation and it clearly visible from all sides. Besides the attractive design it fulfills all requirements for electric accident prevention in educational - and industrial laboratories.

Status-Lights are stackable or alternatively the different operating modes can be indicated by oscillating color changes.

The intelligent multicolor-signalling allows the signalling of different algorithms and flashing lights.

LED Unit consisting of:

- Satined transparent perspex 10mm layer.
- Powder coated aluminium lamp housing (H: 10mm).
- Integrated RGB-LED module for mixed colors.

Control Element consisting of:

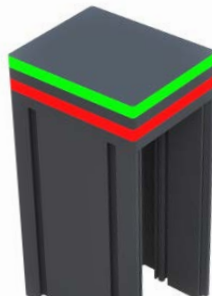
- Galvanically isolated power supply.
- Optional 3-channel control element for multicolor signalling, power outputs and 3x potential-free universal inputs (AC/DC 90- 270V).
- Completely installed and wired.

PROFI Status-Lights are available for:

- SINGLE/MULTI Extensions
- ENERGY Extension
- ENERGY Extension 45°



e.g.: 331.041.100 + 331.040.100
Single Color Signalling SINGLE/MULTI Extension



e.g.: 331.042.100 + 331.042.200 + 331.040.500
Two Color Signalling ENERGY Extension



e.g.: 331.044.100 + 2x 331.044.200 + 331.040.500
Three Color Signalling ENERGY Extension 45°, right

PROFI Status-Light		331.04 P A 00 (Note: Control Element required)	
P PROFI Extension		A Type	
1 SINGLE/MULTI	3 ENERGY 45° left	1 First LED Level	
2 ENERGY	4 ENERGY 45° right	2 Extra LED Level	
Required Control:			
331.040.100	Power Supply for Control (only single color signalling)		
331.040.500	3-Channel Control incl. Power Supply for Color Changing		



CABLE GLAND IN ALUMINIUM CHANNEL

- Slotted hole in aluminium profile with plastic slot cover to maintain height adjustability for shelves with lamps or bench racks.
- Cable gland in aluminium channel.



Cable Gland in Aluminium Channel 458.000.100

INTEGRATED SOCKETS

- Flush in bench top, shelf or bench rack integrated sockets iwth flap. The sockets are integrated into the main supply of the workstation.
- Available in international standards.



Integrated Sockets	
291.006.201	2x Socket
291.006.401	4x Socket

SLEEVE FOR LAMPS WITH HINGED ARMS

- Plastic sleeve integrated into bench top, shelf or bench rack.
- Diameter: 13mm.



Sleeve for Lamps with Hinged Arms 291.003.100

INTEGRATED SOCKETS FOR METAL RACK AND ALUBOARD 350MM

- PE sockets type F with flap, integrated in aluboard compact 350mm or other metal racks (other types on demand!).
- Completely wired and connected to the central supply.



Integrated Sockets for Metal Rack and Aluboard 350mm	
291.006.201	2x Type F with Flap
291.006.401	4x Type F with Flap

EP/MP SHELF UNIT

- Shelf unit for the integration into EP or MP racks with suitable depth.
- Made of 3mm aluminium sheet, light grey powder coated.
- Both sides with cable access.
- Depth: 250mm.
- Usable height: 100mm (EP) / 190mm (MP).



EP Shelf Unit 1,5EP



MP Shelf Unit 4MP (optional with integrated socket strip)

EP/MP Shelf Unit	
333.080.502	0,5EP (W: 132mm)
333.081.002	1EP (W: 264mm)
333.081.502	1,5EP (W: 396mm)
333.082.002	2EP (W: 528mm)
336.082.002	2MP (W: 264mm)
336.083.002	3MP (W: 396mm)
336.084.002	4MP (W: 528mm)

CARRYING CASE FOR EP AND MP

- Sheet steel housing, durable light grey powder coated, with handle and rubber feet.
- Perforated rear and bottom for air ventilation.
- Depth: 300mm.
- Incl. power cable

Carrying Case		394.BB 0. G 01
BB Equipment	G Type	
10 1EP / 2MP	3	EP, height: 190mm
15 1,5EP / 3MP	4	MP height: 280mm
20 2EP / 4MP		



CARRYING CASE, ALU FOR EP AND MP

- Aluminium housing with grip handles and foldable feet.
- Slotted rear panel, prepared for PC interface, incl. Power Cable.
- Empty (no instrument included).
- Depth: 195mm.

Carrying Case, Alu		394.BB 5. G 01
BB Equipment	G Type	
10 1EP / 2MP	3	EP, height: 150mm
15 1,5EP / 3MP	4	MP height: 250mm
20 2EP / 4MP		



CABLES AND PLUGS

Flexible cables, completely wired and ready for connection. Plugs for self connections are recommended, if the bench is not fully assembled and plug does not fit through profile openings.



Cables and Plugs			
291.001.030	3m (3x 1,5mm ²) with open end	291.001.256	5m (3x 1,5mm ²) with G-type plug (British)
291.001.100	5m (3x 1,5mm ²) with open end	291.001.258	4m (3x 1,5mm ²) with NEMA5-15 plug
291.001.140	F-type plug (Schuko), detachable	291.001.300	5m (5x 2,5mm ²) with CEE plug 16A red
291.001.144	T12-type plug (Swiss), detachable	291.001.350	5m (5x 6mm ²) with CEE plug 32A red
291.001.147	G-type plug (British), detachable	291.001.400	5m (3x 1,5mm ²) with CEE plug, 3poles blue
291.001.257	5m (3x 1,5mm ²) 10A, J-type plug (Swiss)	291.001.500	5m Emergency off cable (2x 1,5mm ²), open end
291.001.200	3m (3x 1,5mm ²) with F-type plug (Schuko)	291.001.550	3m Emergency off cable (2x 1,5mm ²), open end
291.001.250	5m (3x 1,5mm ²) with F-type plug (Schuko)	291.001.603	3m Patch cable, grey, 2x RJ45 jacks CAT6
291.001.130	3m (5x 2,5mm ²) with open end	291.001.605	5m Patch cable, grey, 2x RJ45 jacks CAT6
291.001.150	5m (5x 2,5mm ²) with open end	291.001.610	10m Patch cable, grey, 2x RJ45 jacks CAT6

