

Standard enclosures

Series CP (Polyester)

The CP series group of plastic enclosures consists of unsaturated polyester resins with glass fibre reinforcement. These are processed by pressing. Unsaturated polyester resins with glass fibre reinforcement have a mechanical strength in the range of unalloyed steels. In addition, the typical shrinkage and creep tendency of plastics is reduced by the glass fibres. Polyester resins have good electrical properties and good dielectric behaviour.

Polyester enclosures are therefore particularly suitable for accommodating and encapsulating electrical and electronic components and control components in harsh environmental conditions or hazardous areas.

As standard, the CP enclosures are supplied with a PUR seal fitted in the cover. For applications in technically demanding areas with temperature changes and chemical contact, BERNSTEIN also offers CP enclosures with alternative sealing materials.

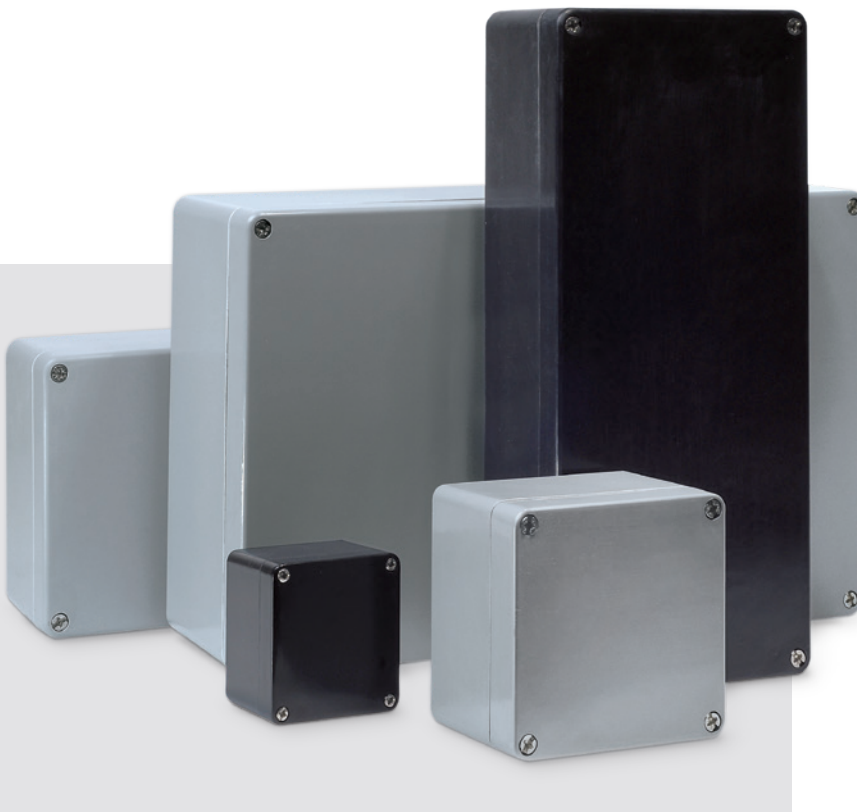
The inserted cover screws are made of stainless steel and can not be lost thanks to a self-locking mechanism integrated in the cover.

Depending on their size, BERNSTEIN polyester enclosures have mounting options in M4 or M6 in the lower part. The mounting sockets are pressed into a web on the narrow sides inside the base and are used to accommodate mounting plates, mounting rails, printed circuit boards, etc.

The polyester enclosures are available in grey (RAL 7001, silver grey) or black (RAL 9005, deep black) as standard. For larger quantities, it is possible to colour or coat the plastic enclosures according to the customer's requirements.

The enclosures of the CP series are also available as cULus and EX-U versions.



Exe- and Exi enclosures with ATEX/IECEx approval are also possible according to customer specifications.



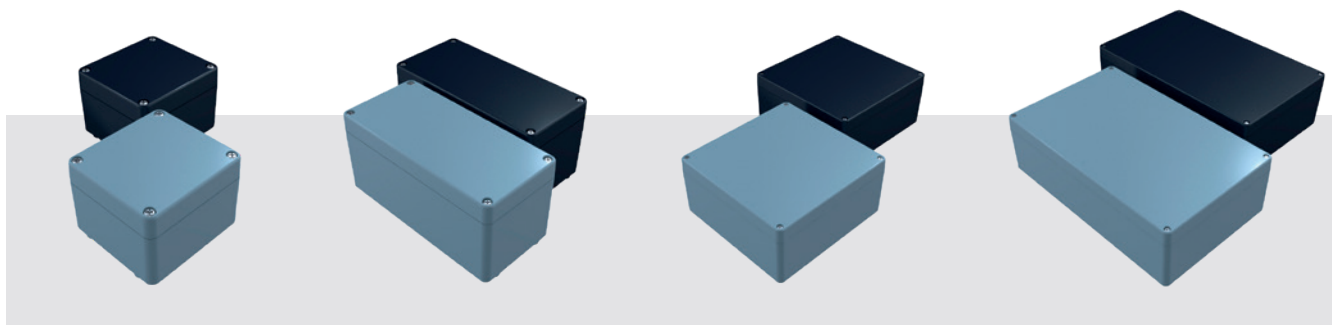
Series CP

Technical data

Standard delivery for the following applications


Specification	Value CPG (grey)	Value CPS (black)	according to standard	Note
Materials				
Enclosure	Polyester (SMC 0190)	Polyester (SMC 2600)		
Screw	A2	A2		
Seal	PUR (Polyurethane)	PUR (Polyurethane)	DIN EN ISO 3506-1	2K polyurethane foam seal
Protection classes				
IP-Code	IP66/67	IP66/67	DIN EN 60529	
IK-Code	IK08	IK08	IEC 62262	
Electrical properties				
Protection class	II	–	EN 61140 / VDE 0140-1	 Protection by double or reinforced insulation
Rated voltage	max. 750 V	max. 500 V		maximum layout
Surface resistance	10 ¹² Ohm	<10 ⁹ Ohm	IEC 60093	
Dielectric strength	18 kV/mm	>2 kV/cm	IEC 60243-1	
Chemical properties				
Toxic behaviour	Halogen free	Halogen free		
Thermal properties				
Flammability	V-0	V-0	UL 94	Similar in content to EC60695-11-10 and IEC60695-11-20
Glow wire test	960°C	960°C; 3.2 mm	IEC 60707-3	
Further information				
Product standard	yes	yes	DIN EN 62208	Empty enclosure for low-voltage switchgear combinations
Conformities				
RoHs	conformal	conformal	Directive 2011/65/EU	
CE-Label	conformal	conformal	EG-No. 765/2008	
Low Voltage Directive No.:	2014/35/EU	2014/35/EU		
Further versions (the following information is not standard)				
Approvals				
	see table	see table	UL508A / C22.2	Typ 1, 4, 4x
Enclosure incl. seals				
PUR-seal (Standard)	-40°C to +100°C	-40°C to +100°C		Enclosure material -40°C to +165°C
CR-seal	-30°C to +80°C	-30°C to +80°C		
Silicone foam seal	-40°C to +130°C	-40°C to +130°C		
Silicone full seal	-40°C to +165°C	-40°C to +165°C		
EPDM-seal	-35°C to +100°C	-35°C to +100°C		
HF/EMC-seal	-40°C to +125°C	-40°C to +125°C		


Detailed information on the respective data sheet



Series CP (Polyester)

Technical dimensions

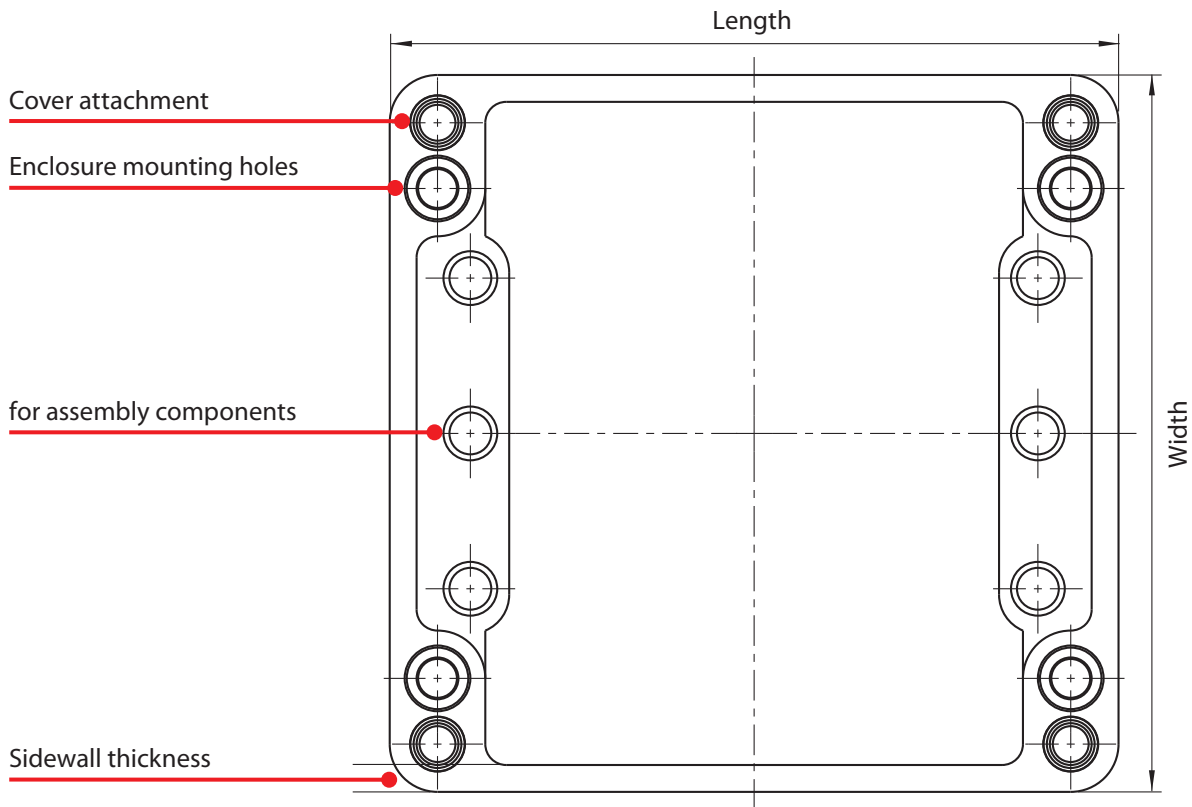
CPG (grey)	Enclosure category / Article number		External dimensions [mm]			approx. wall thicknesses [mm]			Number of cover screws
Standard version			Length	Width	Height incl. cover	Side walls min. dimension	Bottom wall	Cover wall	
CPG-140	4140000000	4140004000	80	75	55	4.25	3.5	4	4
CPG-145	4140000050	4140004050	80	75	75	4.25	3.5	4	4
CPG-150	4150000000	4150004000	110	75	55	4.25	3.5	4	4
CPG-155	4150000050	4150004050	110	75	75	4.25	3.5	4	4
CPG-170	4170000000	4170004000	160	75	55	4.25	3.5	4	4
CPG-175	4170000050	4170004050	160	75	75	4.25	3.5	4	4
CPG-190	4190000000	4190004000	190	75	55	4.25	3.5	4	4
CPG-195	4190000050	4190004050	190	75	75	4.25	3.5	4	4
CPG-220	4220000000	4220004000	122	120	90.5	4.5	4.5	5	4
CPG-240	4240000000	4240004000	220	120	90.5	4.5	4.5	4	4
CPG-280	4280000000	4280004000	160	160	91	6	6	5	4
CPG-300	4300000000	4300004000	260	160	91	6	6	5	4
CPG-320	4320000000	4320004000	360	160	91	6	6	5	4
CPG-330	4330000000	4330004000	560	160	91	6	6	5	6
CPG-370	4370000000	4370004000	255	250	120	5.75	6	5	4
CPG-400	4400000000	4400004000	400	250	120	5.75	6	5	4
CPG-450	4450000000	4450004000	400	405	120	5.75	6	5	4
CPG-460	4460000000	4460004000	400	405	165	5.75	6	5	4

CPS (black)	Enclosure category / Article number		External dimensions [mm]			approx. wall thicknesses [mm]			Number of cover screws
			Length	Width	Height incl. cover	Side walls min. dimension	Bottom wall	Cover wall	
CPS-140	5140000000	5140004000	80	75	55	4.25	3.5	4	4
CPS-145	5140000050	5140004050	80	75	75	4.25	3.5	4	4
CPS-150	5150000000	5150004000	110	75	55	4.25	3.5	4	4
CPS-155	5150000050	5150004050	110	75	75	4.25	3.5	4	4
CPS-170	5170000000	5170004000	160	75	55	4.25	3.5	4	4
CPS-175	5170000050	5170004050	160	75	75	4.25	3.5	4	4
CPS-190	5190000000	5190004000	190	75	55	4.25	3.5	4	4
CPS-195	5190000050	5190004050	190	75	75	4.25	3.5	4	4
CPS-220	5220000000	5220004000	122	120	90.5	4.5	4.5	5	4
CPS-240	5240000000	5240004000	220	120	90.5	4.5	4.5	4	4
CPS-280	5280000000	5280004000	160	160	91	6	6	5	4
CPS-300	5300000000	5300004000	260	160	91	6	6	5	4
CPS-320	5320000000	5320004000	360	160	91	6	6	5	4
CPS-330	5330000000	5330004000	560	160	91	6	6	5	6
CPS-370	5370000000	5370004000	255	250	120	5.75	6	5	4
CPS-400	5400000000	5400004000	400	250	120	5.75	6	5	4
CPS-450	5450000000	5450004000	400	405	120	5.75	6	5	4
CPS-460	5460000000	5460004000	400	405	165	5.75	6	5	4

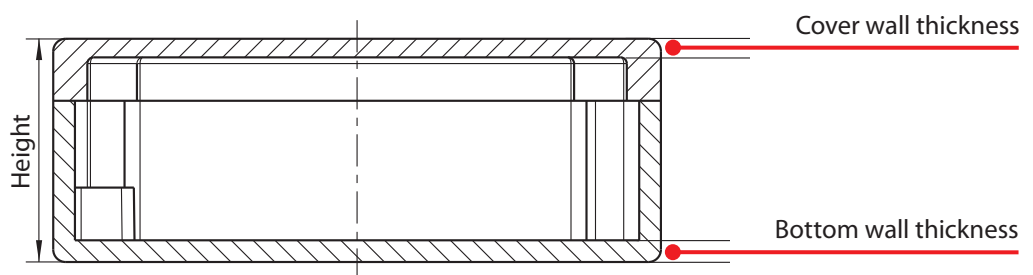
Series CP

Technical drawings

Top view



Side view



Detailed drawings of the individual enclosures can be found
at www.bernstein.eu/produkte/gehaeuseteknik