

## Tough as old boots . . .

The range of applications for standard enclosures made from cast aluminium knows no bounds. Electrical, electronic or pneumatic components are securely housed by this exceptionally resilient material. Whether used in industry, environmental technology, traffic systems, vehicle manufacturing or leisure facilities, Rittal cast aluminium enclosures set new standards in secure packaging.



### Cutouts

The requirements for cutouts or holes in cast aluminium enclosures are just as diverse as the range of possible sizes. Just send us your drawing, and we will customise an enclosure series for you.



### Special colours

The same applies to the paint finish, which we will match to your corporate colours or the finish of the system. You could also simply add a touch of colour to your product – just tell us which RAL colour shade you prefer.

Cast aluminium enclosures GA				
Width mm	Height mm	Depth mm	Model No. GA	Page
50	45	30	<b>9100.210</b>	42/43
58	64	36	<b>9101.210</b>	
98	64	36	<b>9102.210</b>	
150	64	36	<b>9103.210</b>	
75	80	57	<b>9104.210</b>	
125	80	57	<b>9105.210</b>	
175	80	57	<b>9106.210</b>	
250	80	57	<b>9107.210</b>	
122	120	80	<b>9108.210</b>	
220	120	90	<b>9110.210</b>	
360	122	80	<b>9111.210</b>	
160	160	90	<b>9112.210</b>	
260	160	90	<b>9113.210</b>	
360	160	90	<b>9114.210</b>	
200	230	110	<b>9116.210</b>	
280	230	110	<b>9117.210</b>	
330	230	110	<b>9118.210</b>	
330	230	180	<b>9119.210</b>	



### Printing

To round off our service package, as well as individual machining and paint finishes, we will also custom-inscribe your enclosures for you.

## ■ Cast aluminium completes the range of materials

### Polycarbonate enclosures



#### Durable plastic

Lid optionally transparent or grey, available in various different heights. 25 sizes, ranging from 65 x 65 x 57 mm to 360 x 254 x 165 mm.

### Sheet steel enclosures



#### The versatile specialists

With or without gland plate, lid hinged or screw-fastened, for support rail or mounting plate. 24 sizes ranging from 150 x 150 x 80 mm to 800 x 400 x 120 mm.

### Stainless steel enclosures



#### Brushed for hygiene and a high level of corrosion resistance

With the full benefit of an extensive range of accessories. 6 standard sizes or other sizes as for sheet steel.

### Sheet steel enclosures, with an aluminium zinc surface finish



#### The "shielded" versions for EMC

Standard sizes, can also be fitted to order with special threaded inserts.

# CAST ALUMINIUM ENCLOSURES GA



**1** Facilities for connecting PE conductors in the lid and enclosure.

**4** Lid secured with 4 captive, rust-proof screws. May be exchanged for screws prepared for a lead seal.

**2** Prepared for additional equipment with drilled and tapped holes.

**5** Robust surface finish, with powder coating in RAL 7001.

**7** Oil and petrol-resistant neoprene cord seal.

**9** Wall thickness adequate for screw-fastening without lock nuts.

**3** Tapped holes for securing support rails or mounting plates.

**6** Universal fastening opportunities for die-cast aluminium hinges on the outside.

**8** Variable wall-mounting opportunities, either with a wall mounting bracket or directly through the screw aperture outside of the seal.

**10** Rear panel marked on the outside with dimensions for wall mounting holes.

## Cast aluminium enclosures – the range at a glance

Dimensions in mm			Enclosure Model No. GA	Packs of	Mounting plate Model No. GA	Packs of	Support rails		Wall mounting brackets Packs of 2 Model No. GA	Sealable screws Packs of 6 Model No. GA	Exterior hinge Packs of 2 Model No. GA
							TS 15 Packs of 10 Model No. GA	TS 35 Packs of 5 Model No. GA			
W	H	D									
50	45	30	9100.210	6	–	–	–	–	–	–	–
58	64	36	9101.210	5	–	–	–	–	–	–	–
98	64	36	9102.210	3	–	–	–	–	–	–	–
150	64	36	9103.210	2	–	–	–	–	–	–	–
75	80	57	9104.210	1	–	–	–	–	–	9122.424	–
125	80	57	9105.210	1	9105.700	10	9105.150	–	–	9122.424	9123.100
175	80	57	9106.210	1	9106.700	10	9106.150	–	–	9122.424	9123.100
250	80	57	9107.210	1	9107.700	5	9107.150	–	–	9122.424	9123.100
122	120	80	9108.210	1	9108.700	2	–	9108.350	9121.122	9122.630	9123.000
220	120	90	9110.210	1	9110.700	2	–	9110.350	9121.122	9122.645	9123.000
360	122	80	9111.210	1	9111.700	2	–	9111.350	9121.122	9122.630	9123.000
160	160	90	9112.210	1	9112.700	2	–	9112.350	9121.160	9122.630	9123.000
260	160	90	9113.210	1	9113.700	2	–	9113.350	9121.160	9122.630	9123.000
360	160	90	9114.210	1	9114.700	1	–	9111.350	9121.160	9122.630	9123.000
200	230	110	9116.210	1	9116.700	1	–	9116.350	9121.230	9122.630	9123.000
280	230	110	9117.210	1	9117.700	1	–	9117.350	9121.230	9122.630	9123.000
330	230	110	9118.210	1	9118.700	1	–	9118.350	9121.230	9122.630	9123.000
330	230	180	9119.210	1	9118.700	1	–	9118.350	9121.230	9122.630	9123.000

Drawings can be found on page 44/45, accessories on page 46/47.

## Material properties

### Temperature resistance

Short-term (hours)	– 50 to + 140°C
Long-term (months)	– 40 to + 120°C

### Chemical resistance

Alcohol	good
Petrol	good
Diesel	good
Mineral oils	good
Weak alkaline solutions and acids	good

### Weather resistance

Good

### Impact strength

Excellent

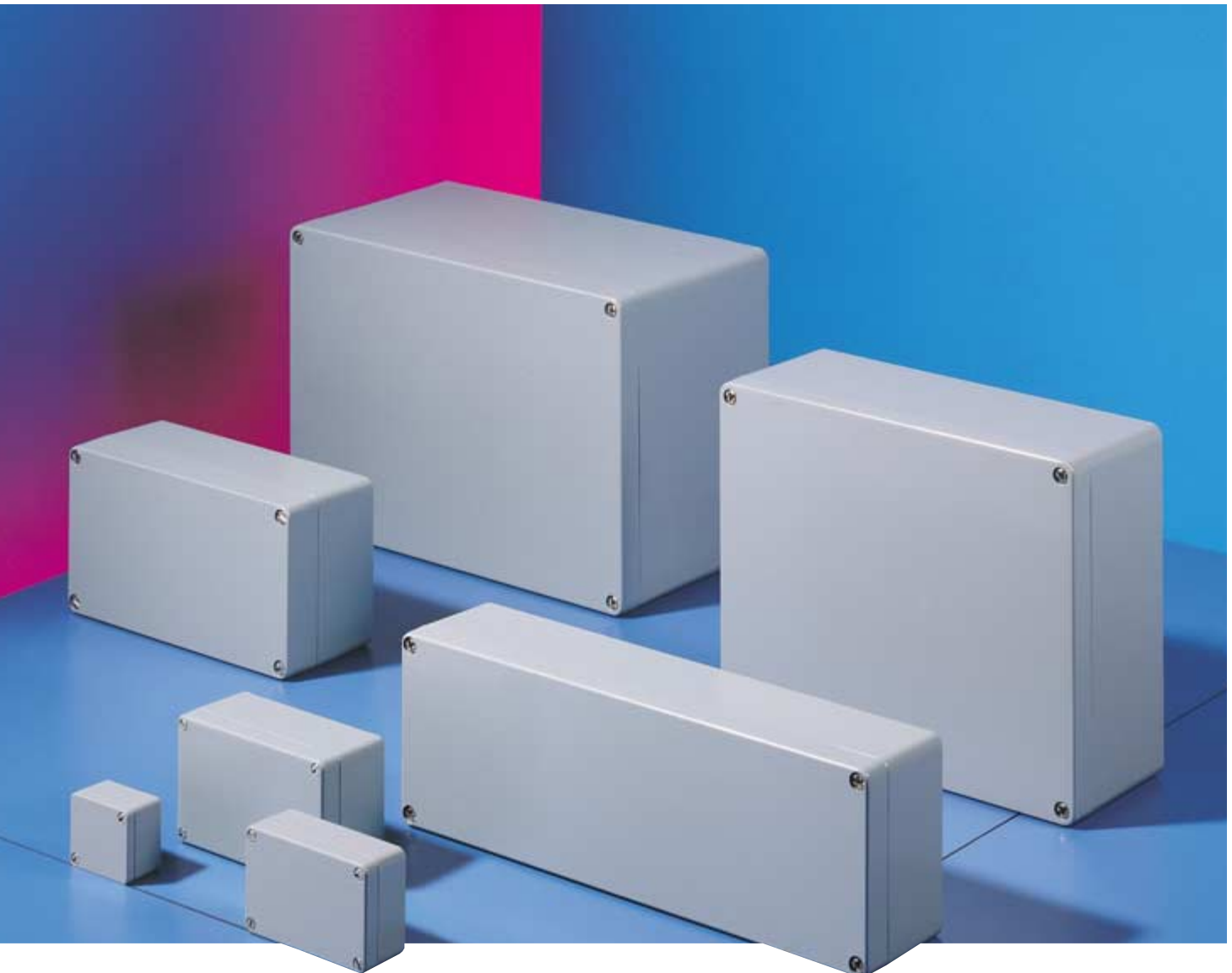
Sea water-resistant versions available on request.



### Individual standard solutions for enclosures and lids

- Drilled holes
- Tapped holes
- Milling
- Screen printing
- Engraving
- Choice of colours to RAL and other finishes available on request.

# CAST ALUMINIUM ENCLOSURES GA



**+** Other accessories:

See page 46/47.

**Material:**

Enclosure and lid cast aluminium, lid with neoprene cord seal.

**Surface finish:**

Powder coated in RAL 7001.

**Protection category:**

IP 66 to EN 60529/10.91  
Complies with NEMA 4

**Supply includes:**

2 or 4 lid screws, captive mounted  
2 or 4 screws for fastening support rails, mounting plates etc.  
1 screw for PE conductor connection.



**Support rails**

For terminal blocks.

Model No. see page 46.

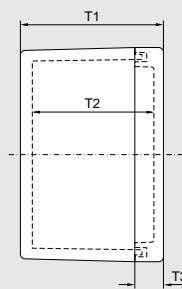
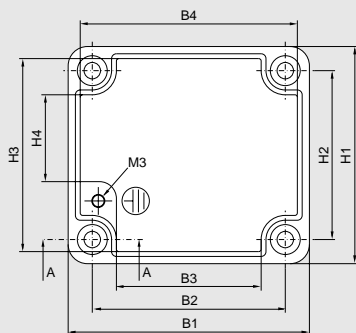


**Lid screws prepared for a lead seal,**

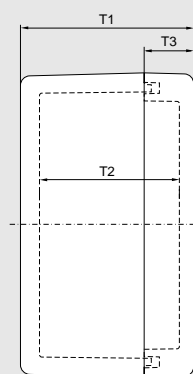
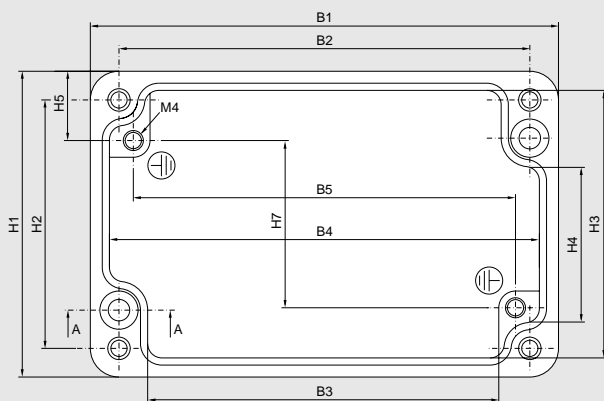
to protect against unauthorised access.

Model No. see page 47.

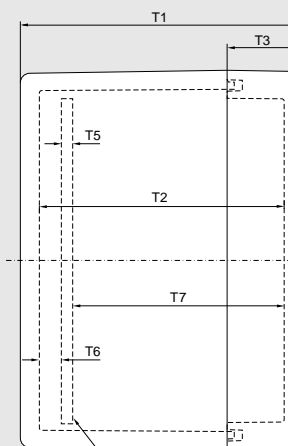
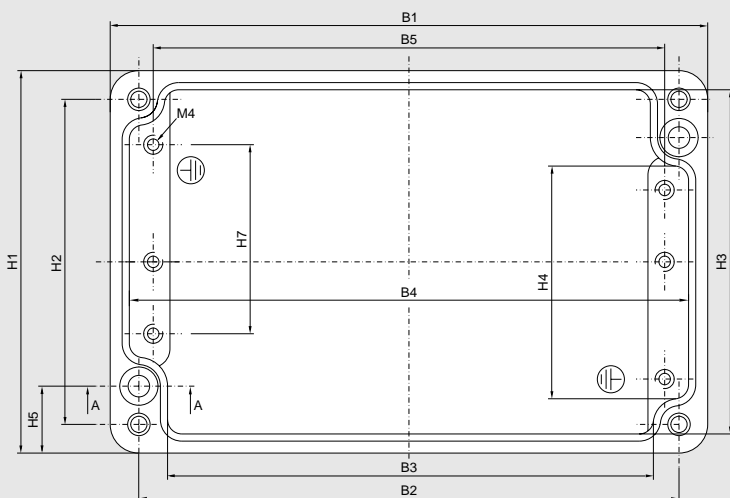
**Version A**



**Version B**

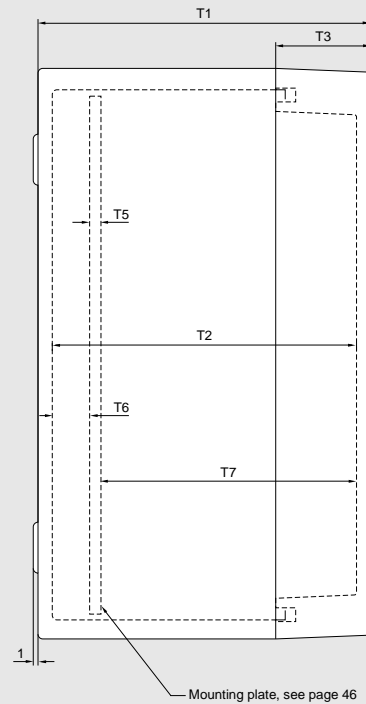
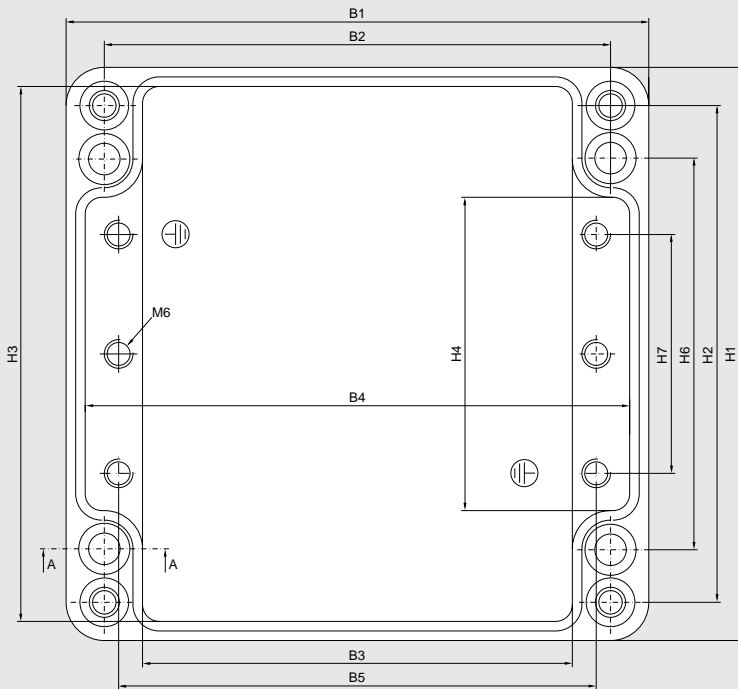


**Version C**

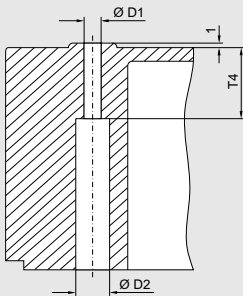


Mounting plate, see page 46  
(does not apply to GA 9104.210)

Version D

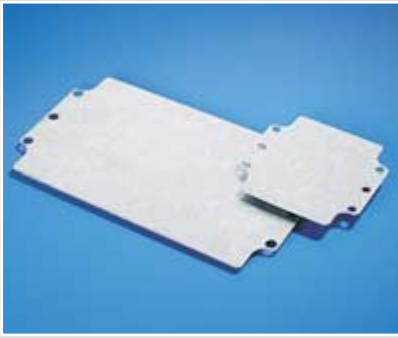


Section A – A



B = Width  
T = Depth

Model No. GA	Version	B1	B2	B3	B4	B5	H1	H2	H3	H4	H5	H6	H7	T1	T2	T3	T4	T5	T6	T7	D1	D2
9100.210	A	50	40	30	45	-	45	35	40	18	-	-	-	30	25	6	5.5	-	-	-	4.2	7.5
9101.210	B	58	46	34	50	40	64	52	56	32	14	-	35	36	29	10	9	-	-	-	4.5	8
9102.210	B	98	86	75	90	80	64	52	56	32	14	-	35	36	29	10	8	-	-	-	4.5	8
9103.210	B	150	138	126	142	132	64	52	56	32	14	-	35	36	29	10	9	-	-	-	4.5	8
9104.210	C	75	63	52	67	57	80	68	70	48	14	-	40	57	50	15	11.5	-	-	-	4.5	9
9105.210	C	125	113	99	117	107	80	68	72	48	14	-	40	57	50	15	10	1.5	7	41.5	4.5	8.5
9106.210	C	175	163	152	167	157	80	68	72	48	14	-	40	57	50	15	10.5	1.5	6	42.5	4.5	9
9107.210	C	250	238	226	242	231	80	68	72	48	14	-	40	57	50	15	10	1.5	6	42.5	4.5	8
9108.210	D	122	106	90	113	95	120	104	111	66	-	82	52	80	72	30	14.5	1.5	9	61.5	6.5	10.8
9110.210	D	220	204	183	211	193	120	104	111	66	-	82	52	90	80	30	15	1.5	9	69.5	6.8	11
9111.210	D	360	344	326	349	333	122	106	111	64	-	82	52	80	72	20	19.5	2	9	61	7	10.8
9112.210	D	160	140	120	151	130	160	140	151	90	-	110	76	90	82	20	20.5	2	9	71	6.2	12.5
9113.210	D	260	240	220	251	230	160	140	151	90	-	110	76	90	82	20	18	2	9	71	6.3	14
9114.210	D	360	340	316	346	330	160	140	151	84	-	110	74	90	82	20	19	2	9	71	7.1	14
9116.210	D	200	180	160	194	170	230	210	221	160	-	180	144	110	102	20	19	2	9	91	7.3	14
9117.210	D	280	260	240	271	250	230	210	221	160	-	180	144	110	102	20	24	2	9	91	6.2	14.2
9118.210	D	330	310	290	321	300	230	210	221	160	-	180	144	110	102	20	24.5	2	9	91	6.2	14.2
9119.210	D	330	310	290	321	300	230	210	221	160	-	180	144	180	172	20	14	2	10	160	7.5	12.5



## Mounting plate

For maximum, individual interior installation.

### Material:

Sheet steel, zinc-plated, passivated, with mounting holes.

External dimensions in mm		For enclosure	Packs of	Model No. GA
Width	Height			
112	69	GA 9105.210	10	<b>9105.700</b>
164	69	GA 9106.210	10	<b>9106.700</b>
239	69	GA 9107.210	5	<b>9107.700</b>
109	107	GA 9108.210	2	<b>9108.700</b>
207	107	GA 9110.210	2	<b>9110.700</b>
347	107	GA 9111.210	2	<b>9111.700</b>
144	142	GA 9112.210	2	<b>9112.700</b>
244	142	GA 9113.210	2	<b>9113.700</b>
345	142	GA 9114.210	1	<b>9114.700</b>
183	214	GA 9116.210	1	<b>9116.700</b>
264	214	GA 9117.210	1	<b>9117.700</b>
314	214	GA 9118.210, GA 9119.210	1	<b>9118.700</b>



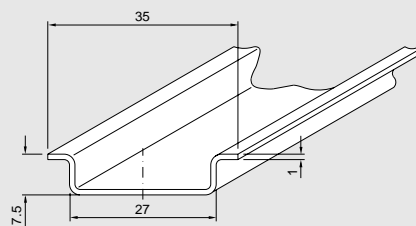
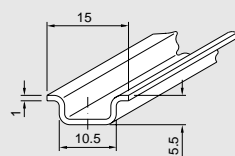
## Support rail

To accommodate terminal blocks or other installed equipment.

### Material:

Sheet steel, zinc-plated, passivated, with mounting holes.

Rail	Maximum number of terminals with the following terminal sizes			Rail length available for population mm	For enclosure width mm	Packs of	Model No. GA
	2.5 mm <sup>2</sup>	4 mm <sup>2</sup>	10 mm <sup>2</sup>				
TS 15 to EN 50 045	15	15	12	95	125	10	<b>9105.150</b>
	27	22	19	145	175	10	<b>9106.150</b>
	42	35	29	220	250	10	<b>9107.150</b>
TS 35/7.5 to EN 50 022	12	12	9	80	122	5	<b>9108.350</b>
	18	18	14	115	160	5	<b>9112.350</b>
	25	25	18	155	200	5	<b>9116.350</b>
	29	29	21	180	220	5	<b>9110.350</b>
	34	34	26	215	260	5	<b>9113.350</b>
	37	37	28	230	280	5	<b>9117.350</b>
	46	46	35	290	330	5	<b>9118.350</b>
51	51	39	320	360	5	<b>9111.350</b>	





### Wall mounting bracket

For external mounting to surfaces – no need to remove the lid if pre-assembled.

**Material:**  
Sheet steel, zinc-plated, passivated.

For enclosure	Packs of	Model No. GA
GA 9108.210, GA 9110.210, GA 9111.210	2	<b>9121.122</b>
GA 9112.210, GA 9113.210, GA 9114.210	2	<b>9121.160</b>
GA 9116.210, GA 9117.210, GA 9118.210, GA 9119.210	2	<b>9121.230</b>



### Exterior hinge

For fastening the lid to the enclosure body, complete with drilling template.

**Material:**  
Die-cast aluminium

**Colour:**  
RAL 7001

For enclosure	Packs of	Model No. GA
GA 9105.210, GA 9106.210, GA 9107.210	2 + 8 screws	<b>9123.100</b>
GA 9108.210, GA 9110.210, GA 9111.210, GA 9112.210, GA 9113.210, GA 9114.210, GA 9116.210, GA 9117.210, GA 9118.210, GA 9119.210	2 + 8 screws	<b>9123.000</b>



### Lid screws, prepared for a lead seal

To prevent unauthorised opening, from an enclosure size of 75 x 80 x 57 mm. Two per lid are required.

**Material:**  
Stainless steel

For enclosure	Packs of	Model No. GA
GA 9104.210, GA 9105.210, GA 9106.210, GA 9107.210	6	<b>9122.424</b>
GA 9108.210, GA 9111.210, GA 9112.210, GA 9113.210, GA 9114.210, GA 9116.210, GA 9117.210, GA 9118.210, GA 9119.210	6	<b>9122.630</b>
GA 9110.210	6	<b>9122.645</b>

