



THE PRODUCT

The comprehensive SHELL-TYPE CASE range is available in different sizes, heights and types.

Simply choose the case that meets your special requirements best.

YOUR ADVANTAGE

A high degree of rigidity and tight fitting as a result of the tongue- and groove joint.

Flat design for small-volume components.
Higher versions for larger components.

Guide ridges for vertical mounting of partitions and PCBs. Fastening pillars in top and base part.

3 different case types:
V: open front, closed rear.
O: open front, open rear.
G: closed front, closed rear.

Front and rear panels in aluminium or PMMA red (plexiglass®) available as accessories.

Without/with battery compartment.

Closed versions with flat top parts (type G), also with recessed area to protect the membrane keyboard.

APPLICATIONS

Measuring and control technology.

Medical field and laboratory technology.

Peripheral devices and interfaces, switchboxes, modems.

PROTECTION CLASS UP TO IP 65

For closed versions (G) without battery compartment when using the sealing kit (accessory).

3 HEIGHTS

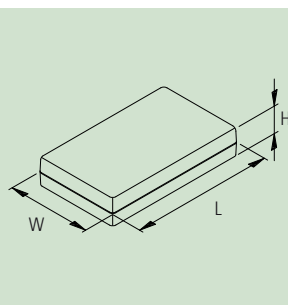
Flat top part.
Flat base part.



High top part.
Flat base part.



High top part.
High base part.



Off-white, RAL 9002



TYPES

SHELL-TYPE CASES V 85, 110, 155, 190

Open front,
closed rear.



SHELL-TYPE CASES O 155, 190

Open front,
open rear.



SHELL-TYPE CASES G 85, 110, 155, 190

Closed front,
closed rear.



SHELL-TYPE CASES

BATTERY COMPARTMENTS

Case version II

1 x 9 V (SHELL-TYPE CASE V/G 110)

Case version III

4 x AA / 2 x 9 V (SHELL-TYPE CASE V/G 155, 190)

Case version IV

2 x AA / 1 x 9 V (SHELL-TYPE CASE V/G 155)



ENCLOSURES

Part-No.	SHELL-TYPE-CASES	Outside dim. in mm			Version / Equipment (dim. in mm)			Material
		L	W	H	battery comp.	max. dim. keypad	max. size of PCB*1	
A 94 04 333	V 85	85	45	22	I	—	71 x 38 / 71 x 38	ABS (UL 94 HB)
A 94 06 333	V 110	114	72	33	I	—	99 x 54 / 99 x 54	ABS (UL 94 HB)
A 94 06 343		114	72	45	I	—	99 x 54 / 98 x 54	ABS (UL 94 HB)
A 94 06 443		114	72	57	I	—	69 x 54 / 99 x 54	ABS (UL 94 HB)
A 94 06 334		114	72	33	II*2	1 x 9 V	69 x 54 / 98 x 54	ABS (UL 94 HB)
A 94 06 344		114	72	45	II*2	1 x 9 V	69 x 54 / 98 x 54	ABS (UL 94 HB)
A 94 08 333	V 155	158	95	33	I	—	143 x 77 / 143 x 77	ABS (UL 94 HB)
A 94 08 343		158	95	45	I	—	143 x 77 / 142 x 77	ABS (UL 94 HB)
A 94 08 443		158	95	57	I	—	142 x 77 / 142 x 77	ABS (UL 94 HB)
A 94 08 338		158	95	33	III*3	4 x AA / 2 x 9 V	83 x 77 / 143 x 77	ABS (UL 94 HB)
A 94 08 348		158	95	45	III*3	4 x AA / 2 x 9 V	83 x 77 / 142 x 77	ABS (UL 94 HB)
A 94 08 336		158	95	33	IV*4	2 x AA / 1 x 9 V	113 x 77 / 143 x 77	ABS (UL 94 HB)
A 94 08 346		158	95	45	IV*4	2 x AA / 1 x 9 V	113 x 77 / 142 x 77	ABS (UL 94 HB)
A 94 13 333	V 190	190	138	45	I	—	174 x 118 / 174 x 118	ABS (UL 94 HB)
A 94 13 343		190	138	68	I	—	174 x 118 / 173 x 118	ABS (UL 94 HB)
A 94 13 443		190	138	91	I	—	174 x 118 / 173 x 118	ABS (UL 94 HB)
A 94 13 338		190	138	45	III*3	4 x AA / 2 x 9 V	114 x 118 / 174 x 118	ABS (UL 94 HB)
A 94 13 348		190	138	68	III*3	4 x AA / 2 x 9 V	114 x 118 / 173 x 118	ABS (UL 94 HB)
A 94 08 330	O 155	158	95	33	I	—	142 x 77 / 142 x 77	ABS (UL 94 HB)
A 94 08 340		158	95	45	I	—	142 x 77 / 142 x 77	ABS (UL 94 HB)
A 94 08 440		158	95	57	I	—	142 x 77 / 142 x 77	ABS (UL 94 HB)
A 94 13 330	O 190	190	138	45	I	—	173 x 118 / 173 x 118	ABS (UL 94 HB)
A 94 13 340		190	138	68	I	—	173 x 118 / 173 x 118	ABS (UL 94 HB)
A 94 13 440		190	138	91	I	—	173 x 118 / 173 x 118	ABS (UL 94 HB)
A 94 04 331	G 85	85	45	22	I	—	76 x 38 / 75 x 38	ABS (UL 94 HB)
A 94 04 341		85	45	33	I	—	76 x 38 / 75 x 37	ABS (UL 94 HB)
A 94 04 441		85	45	45	I	—	75 x 37 / 75 x 37	ABS (UL 94 HB)
A 94 06 331	G 110	114	72	33	I	—	104 x 54 / 104 x 54	ABS (UL 94 HB)
A 94 06 351		114	72	33.5	I	—	101.90 x 59.90	ABS (UL 94 HB)
A 94 06 341		114	72	45	I	—	104 x 54 / 103 x 54	ABS (UL 94 HB)
A 94 06 441		114	72	57	I	—	103 x 54 / 103 x 54	ABS (UL 94 HB)
A 94 06 332		114	72	33	II*2	1 x 9 V	75 x 54 / 104 x 54	ABS (UL 94 HB)
A 94 06 352		114	72	33.5	II*2	1 x 9 V	101.90 x 59.90	ABS (UL 94 HB)
A 94 06 342		114	72	45	II*2	1 x 9 V	75 x 54 / 103 x 54	ABS (UL 94 HB)
A 94 08 331	G 155	158	95	33	I	—	149 x 77 / 149 x 77	ABS (UL 94 HB)
A 94 08 351		158	95	33.5	I	—	144.40 x 81.40	ABS (UL 94 HB)
A 94 08 341		158	95	45	I	—	149 x 77 / 147 x 77	ABS (UL 94 HB)
A 94 08 441		158	95	57	I	—	148 x 77 / 147 x 77	ABS (UL 94 HB)
A 94 08 337		158	95	33	III*3	4 x AA / 2 x 9 V	88 x 77 / 149 x 77	ABS (UL 94 HB)
A 94 08 357		158	95	33.5	III*3	4 x AA / 2 x 9 V	144.40 x 81.40	ABS (UL 94 HB)
A 94 08 347		158	95	45	III*3	4 x AA / 2 x 9 V	88 x 77 / 147 x 77	ABS (UL 94 HB)
A 94 08 335		158	95	33	IV*4	2 x AA / 1 x 9 V	119 x 77 / 149 x 77	ABS (UL 94 HB)
A 94 08 355		158	95	33.5	IV*4	2 x AA / 1 x 9 V	144.40 x 81.40	ABS (UL 94 HB)
A 94 08 345		158	95	45	IV*4	2 x AA / 1 x 9 V	119 x 77 / 148 x 77	ABS (UL 94 HB)
A 94 13 331	G 190	190	138	45	I	—	180 x 118 / 180 x 118	ABS (UL 94 HB)
A 94 13 351		190	138	45.5	I	—	172.00 x 120.00	ABS (UL 94 HB)
A 94 13 341		190	138	68	I	—	180 x 118 / 179 x 118	ABS (UL 94 HB)
A 94 13 441		190	138	91	I	—	180 x 118 / 179 x 118	ABS (UL 94 HB)
A 94 13 337		190	138	45	III*3	4 x AA / 2 x 9 V	120 x 118 / 180 x 118	ABS (UL 94 HB)
A 94 13 357		190	138	45.5	III*3	4 x AA / 2 x 9 V	172.00 x 120.00	ABS (UL 94 HB)
A 94 13 347		190	138	68	III*3	4 x AA / 2 x 9 V	120 x 118 / 179 x 118	ABS (UL 94 HB)

V = Open front, closed rear.

O = Open front, open rear.

G = Closed front, closed rear.

*1 cutouts for pillars not taken into consideration; PCB mounting in base / top

*2 plug-in contact for 1 x 9 V flat battery see accessories page 100

*3 set of battery clips for 4 x AA are already supplied with the case; plug-in contact for 1 x 9 V flat battery see accessories page 100

*4 battery clips (2 single contacts and 1 double contact are necessary) and plug-in contact for 1 x 9 V flat battery must be ordered separately, see accessories page 100

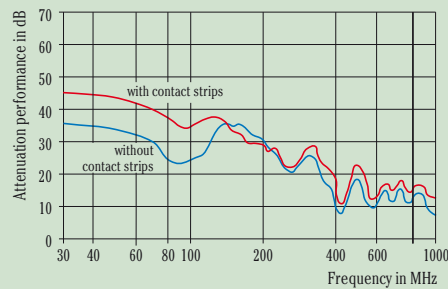
INFO-BOX

EMC

On request the shell-type cases are also available with aluminium metallization.

Bonding can be achieved by the available contact strips (accessory).

SHELL-TYPE CASE A 94 13 441 with al-metallization
(al-metallization on request)



ACCESSORIES

Article	Version / Application	For enclosure SHELL-TYPE CASE	Part-No.
① Sealing kit	protection class up to IP 65 for cases type G (closed front and rear and without battery compartment), 1 O-ring for the case, 4 rubber disks for sealing between the assembly pillars	G 85 G 110 G 155 G 190	A 91 04 250 A 91 06 352 A 91 08 486 A 91 13 630
② Contact strips	aluminium strips which provide additional electrical continuity between the top and base shells of shielded cases (order two pieces, one for each side), cases with al-metallization on request	V, G 85 V, G 110 V, O, G 155 V, O, G 190	A 91 04 073 A 91 06 095 A 91 08 120 A 91 13 150

Article	Dim. in mm	For enclosure SHELL-TYPE CASE	Part-No. matt anodised Al PMMA (plexiglass®)
③ Front / rear panel for SHELL-TYPE CASE V and O (1 piece)	36.0 x 14.6 x 1	A 94 04 33.	A 91 04 111
	59.3 x 25.0 x 1	A 94 06 33.	A 91 07 111
	59.3 x 37.0 x 1	A 94 06 34.	A 91 07 121
	59.3 x 49.0 x 1	A 94 06 44.	A 91 07 221
	81.9 x 23.6 x 1	A 94 08 33.	A 91 09 111
	81.9 x 35.6 x 1	A 94 08 34.	A 91 09 121
	81.9 x 47.6 x 1	A 94 08 44.	A 91 09 221
	124.2 x 33.6 x 1.5	A 94 13 33.	A 91 14 111
	124.2 x 56.6 x 1.5	A 94 13 34.	A 91 14 121
	124.2 x 79.6 x 1.5	A 94 13 44.	A 91 14 221
			A 91 04 113
			A 91 06 113
			A 91 06 123
			A 91 06 223
			A 91 08 113
			A 91 08 123
			A 91 08 223
			A 91 13 113
			A 91 13 123
			A 91 13 223

