BOPLA

A Phoenix Mecano Company

NGS Panel Meter Housings

Panel Mount Enclosure System

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Last Update January 2012

The 36 different designs for this DIN IEC 61554 control panel mounting enclosure mean that the user always has the right size for his electronic components.
Spring or screw clamps permit fitting in the control panel or switch cabinet to meet your exact requirements.

The clear PVC front covers (available as accessories) protect the front elements up to ingress protection category IP 65.

Enclosure material: Flame resistant noryle SE 1 GFN1. For technical data see pages 646-651.

Colour: Black, similar to RAL 9005.

Scope of delivery: **For NGS ....:** enclosure, standard front frame, rear lid, screws.
For NGS 9806-GR: enclosure, standard front frame, 2 clamping elements.

Accessories (additional charge):

NGS...NF: Spring clamp
NGS...NK: Screw clamp
NGS...ZE: Connecting piece for insertion of NGS-NH
NGS...NH: Standard retaining clasp acc. to DIN 43835 form B
NGS...FKT: Plastic front panel, red translucent, 3 mm thick
NGS...FAE: Aluminium front panel, anodized, 1.5 mm thick
NGS...F: Membrane front, firmly latching
NGS...TK: NGS front door lockable by means of knob for models 74.., 96.. and 98..
SHLO-302: Cylinder lock catch for NGS front door

NGS...SA: Open front frame with screw covers, firmly latching
NGS...AH: Clear hood cover, snap-on for NGS...F/SA
NGS...DA: Seal enclosure collar – mounting space
NGS...DI: Seal enclosure – front panel
NGS...GHN: Flexible transparent PVC hoods for IP 65 front seal
NGS...RKS: Standard NGS rear wall, separate (included in scope of delivery)

Enclosures		Size in mm		
Model	Order no.	W	H	D
NGS 4806	17480601	48.0	48	63.0
NGS 4808	17480801	48.0	48	85.0
NGS 4810	17481001	48.0	48	109.5
NGS 4811	17481101	48.0	48	119.0
NGS 4813	17481301	48.0	48	141.0
NGS 7406	17740601	144.0	72	64.0
NGS 7408	17740801	144.0	72	86.0
NGS 7410	17741001	144.0	72	110.5
NGS 7411	17741101	144.0	72	120.0
NGS 7413	17741301	144.0	72	142.0
NGS 7416	17741601	144.0	72	166.5
NGS 7706	17770601	72.0	72	63.0
NGS 7708	17770801	72.0	72	85.0
NGS 7710	17771001	72.0	72	109.5
NGS 7711	17771101	72.0	72	119.0
NGS 7713	17771301	72.0	72	141.0
NGS 7716	17771601	72.0	72	165.5
NGS 9406	17940601	96.0	48	63.0
NGS 9408	17940801	96.0	48	85.0
NGS 9410	17941001	96.0	48	109.5
NGS 9411	17941101	96.0	48	119.0
NGS 9413	17941301	96.0	48	141.0
NGS 9416	17941601	96.0	48	165.5
NGS 9606	17960601	96.0	96	63.0
NGS 9608	17960801	96.0	96	85.0
NGS 9610	17961001	96.0	96	109.5
NGS 9611	17961101	96.0	96	119.0
NGS 9613	17961301	96.0	96	141.0
NGS 9616	17961601	96.0	96	165.5
NGS 9806	17980601	144.0	144	64.0
NGS 9808	17980801	144.0	144	86.0
NGS 9810	17981001	144.0	144	110.5
NGS 9811	17981101	144.0	144	120.0
NGS 9813	17981301	144.0	144	142.0
NGS 9816	17981601	144.0	144	166.5
NGS 9806-GR	17980605	144.0	144	68.0

NGS Panel Meter Housings

NGS 48
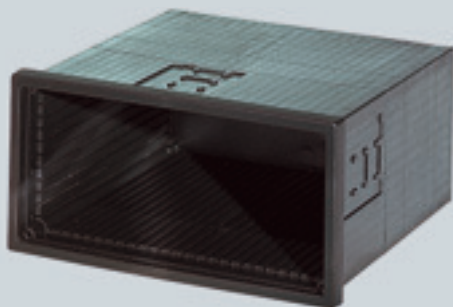
NGS 48

NGS 48

Order designation		External dimensions in mm			
Model	Order no.	W	H	D	E
NGS 4806	17480601	48	48	63.0	56.5
NGS 4808	17480801	48	48	85.0	78.5
NGS 4810	17481001	48	48	109.5	103.0
NGS 4811	17481101	48	48	119.0	112.5
NGS 4813	17481301	48	48	141.0	134.5

Accessories (additional charge)

Model		Order no.
NGS 48 FAE	= Front panel, anod. aluminium, 1.5 mm thick	37000050
NGS 48 FKT	= Front panel, plastic, red translucent, 3 mm thick	37000610
NGS 48 RKS	= Rear wall, separate (included in scope of delivery)	37040100
NGS-NK	= Screw clamp (PU = 2 pcs)	37003000
NGS-NF	= Spring clamp (PU = 2 pcs)	37005000
NGS-ZE	= Connecting piece for DIN retaining clasp (PU = 2 pcs)	37004000
NGS-NH	= DIN retaining clasp (PU = 2 pcs)	37001000
NGS 48 DA	= Seal, enclosure/control panel (PU = 5 pcs)	37048000
NGS 48 DI	= Seal, front panel/enclosure (PU = 5 pcs)	37048010
NGS 48 F	= Firmly latching membrane front	37948500
NGS 48 SA	= Front frame, firmly latching	37948600
NGS 48 AH*	= Clear hood cover	37948700
NGS 48 GHN	= Flexible transparent PVC hood	37004800

For descriptions and illustrations of accessories, see pages 362-365.
* available on request

NGS 74

Order designation		External dimensions in mm			
Model	Order no.	W	H	D	E
NGS 7406	17740601	72	144	64.0	56.0
NGS 7408	17740801	72	144	86.0	78.5
NGS 7410	17741001	72	144	110.5	103.0
NGS 7411	17741101	72	144	120.0	112.5
NGS 7413	17741301	72	144	142.0	134.5
NGS 7416	17741601	72	144	166.5	159.0

Accessories (additional charge)

Model		Order no.
NGS 74 FAE	= Front panel, anod. aluminium, 1.5 mm thick	37000200
NGS 74 FKT	= Front panel, plastic, red translucent, 3 mm thick	37000700
NGS 74 RKS	= Rear wall, separate (included in scope of delivery)	37001620
NGS-NK	= Screw clamp (PU = 2 pcs)	37003000
NGS-NF	= Spring clamp (PU = 2 pcs)	37005000
NGS-ZE	= Connecting piece for DIN retaining clasp (PU = 2 pcs)	37004000
NGS-NH	= DIN retaining clasp (PU = 2 pcs)	37001000
NGS 74 DA	= Seal, enclosure/control panel (PU = 5 pcs)	37074000
NGS 74 DI	= Seal, front panel/enclosure (PU = 5 pcs)	37074010
NGS 74 F	= Firmly latching membrane front	37974500
NGS 74 SA	= Front frame, firmly latching	37974600
NGS 74 AH*	= Clear hood cover	37974700
NGS 74 GHN	= Flexible transparent PVC hood	37007400
NGS 74 TK	= Front door lockable by means of knob	17740000
SHLO-302	= Cylinder catch for front door	21008310

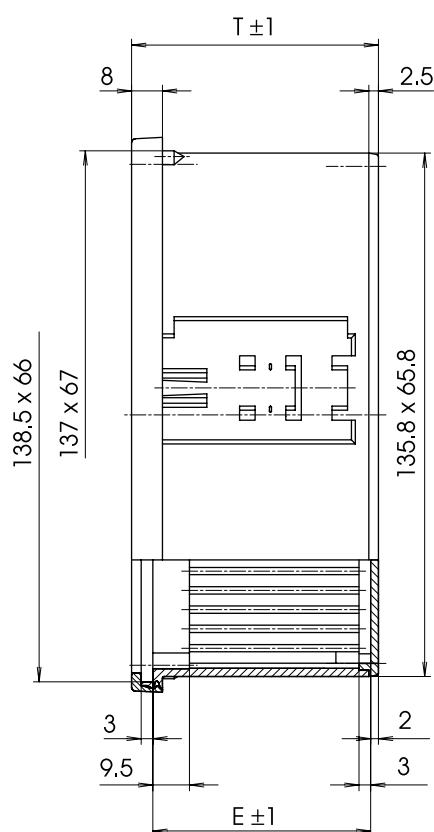For descriptions and illustrations of accessories, see pages 362-365.
* available on request

NGS 74

Cut-out to DIN IEC 61554
45+0,6 x 45+0,6

T ±1

7

2,5

44,6

42,8

42,8

3

2

9,5

3

E ±1

48

4,5

48

4,5

1,9

10

18,4

28,4

38,8

1,3

38,8
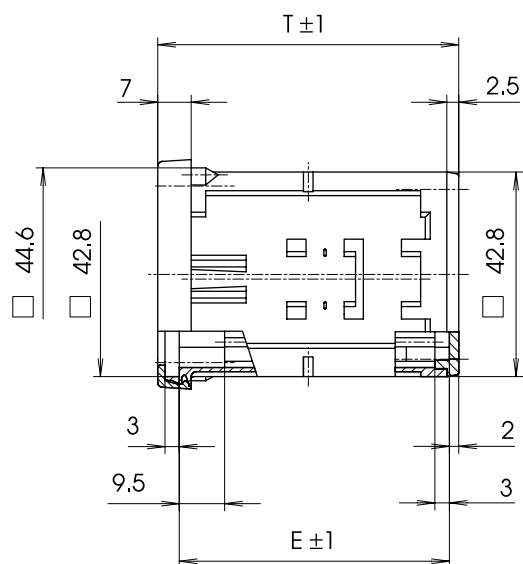
front panel
fixing points
37 mm x 37 mm

Z-2600825

T ±1

8

2,5

138,5 x 66

137 x 67

135,8 x 65,8

3

2

9,5

3

E ±1

Cut-out to DIN IEC 61554
68+0,7 x 138+1,0

72

5

10,6

5

5

5

20

20

144

11,1

11 x 5 = 55

131,5

1,9

11 x 5 = 55

11 x 5 = 55

1,3

61,5

front panel
fixing points
59.5 mm x 130 mm

Z-2600827

NGS Panel Meter Housings

NGS 77
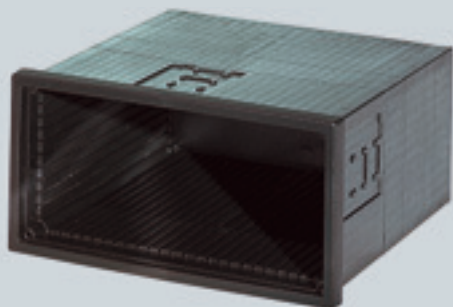
NGS 94

NGS 77

Order designation		External dimensions in mm			
Model	**Order no.**	**W**	**H**	**D**	**E**
NGS 7706	17770601	72	72	63.0	56.5
NGS 7708	17770801	72	72	85.0	78.5
NGS 7710	17771001	72	72	109.5	103.0
NGS 7711	17771101	72	72	119.0	112.5
NGS 7713	17771301	72	72	141.0	134.5
NGS 7716	17771601	72	72	165.5	159.0

Accessories (additional charge)

Model		Order no.
NGS 77 FAE	= Front panel, anod. aluminium, 1.5 mm thick	37000100
NGS 77 FKT	= Front panel, plastic, red translucent, 3 mm thick	37000600
NGS 77 RKS	= Rear wall, separate (included in scope of delivery)	37001610
NGS-NK	= Screw clamp (PU = 2 pcs)	37003000
NGS-NF	= Spring clamp (PU = 2 pcs)	37005000
NGS-ZE	= Connecting piece for DIN retaining clasp (PU = 2 pcs)	37004000
NGS-NH	= DIN retaining clasp (PU = 2 pcs)	37001000
NGS 77 DA	= Seal, enclosure/control panel (PU = 5 pcs)	37077000
NGS 77 DI	= Seal, front panel/enclosure (PU = 5 pcs)	37077010
NGS 77 F	= Firmly latching membrane front	37977500
NGS 77 SA	= Front frame, firmly latching	37977600
NGS 77 AH*	= Clear hood cover	37977700
NGS 77 GHN	= Flexible transparent PVC hood	37007700

For descriptions and illustrations of accessories, see pages 362-365.
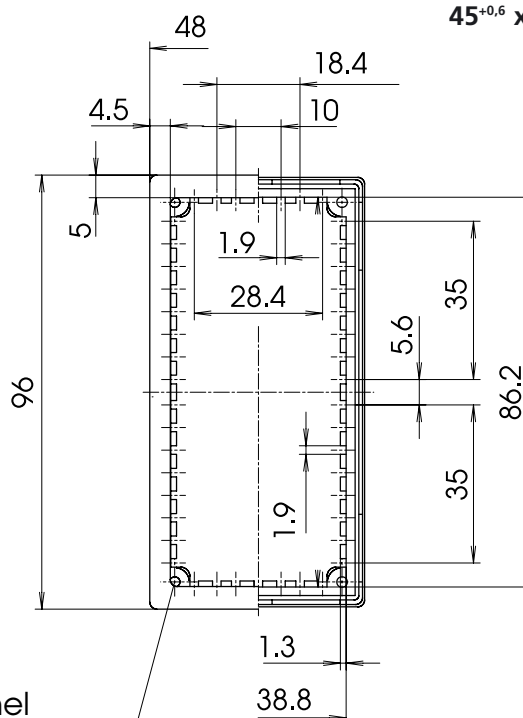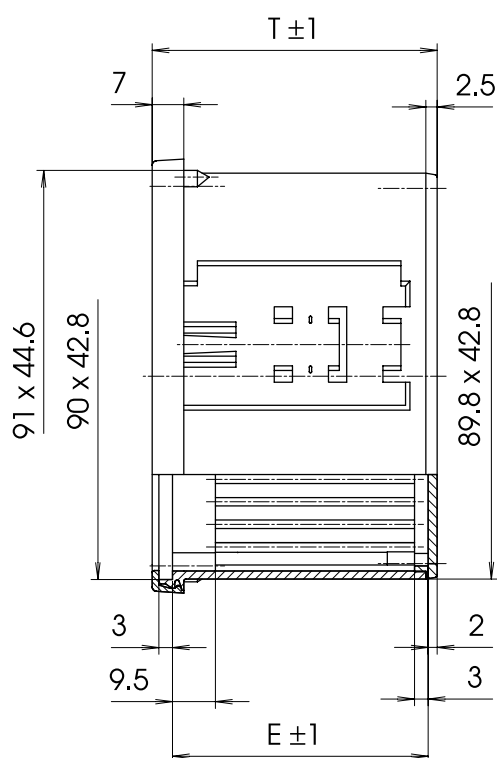
* available on request

NGS 94

Order designation		External dimensions in mm			
Model	**Order no.**	**W**	**H**	**D**	**E**
NGS 9406	17940601	48	96	63.0	56.5
NGS 9408	17940801	48	96	85.0	78.5
NGS 9410	17941001	48	96	109.5	103.0
NGS 9411	17941101	48	96	119.0	112.5
NGS 9413	17941301	48	96	141.0	134.5
NGS 9416	17941601	48	96	165.5	159.0

Accessories (additional charge)

Model		Order no.
NGS 94 FAE	= Front panel, anod. aluminium, 1.5 mm thick	37000300
NGS 94 FKT	= Front panel, plastic, red translucent, 3 mm thick	37000800
NGS 94 RKS	= Rear wall, separate (included in scope of delivery)	37001600
NGS-NK	= Screw clamp (PU = 2 pcs)	37003000
NGS-NF	= Spring clamp (PU = 2 pcs)	37005000
NGS-ZE	= Connecting piece for DIN retaining clasp (PU = 2 pcs)	37004000
NGS-NH	= DIN retaining clasp (PU = 2 pcs)	37001000
NGS 94 DA	= Seal, enclosure/control panel (PU = 5 pcs)	37094000
NGS 94 DI	= Seal, front panel/enclosure (PU = 5 pcs)	37094010
NGS 94 F	= Firmly latching membrane front	37994500
NGS 94 SA	= Front frame, firmly latching	37994600
NGS 94 AH*	= Clear hood cover	37994700
NGS 94 GHN	= Flexible transparent PVC hood	37009400

For descriptions and illustrations of accessories, see pages 362-365.

* available on request

Cut-out to DIN IEC 61554
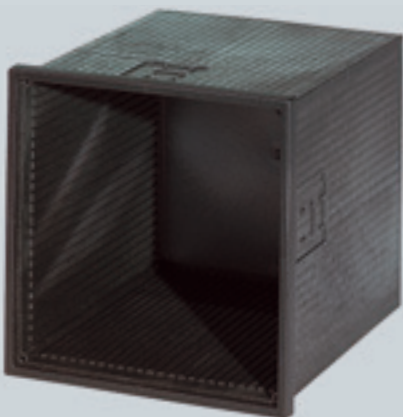**68+0,7 x 68+0,7**

T ±1

7   2.5

□67 □66 □65.8

3   2

9.5   3

E ±1

72

5

5

72

1.9

10.6 20

61.5

20

5

1.3

61.5
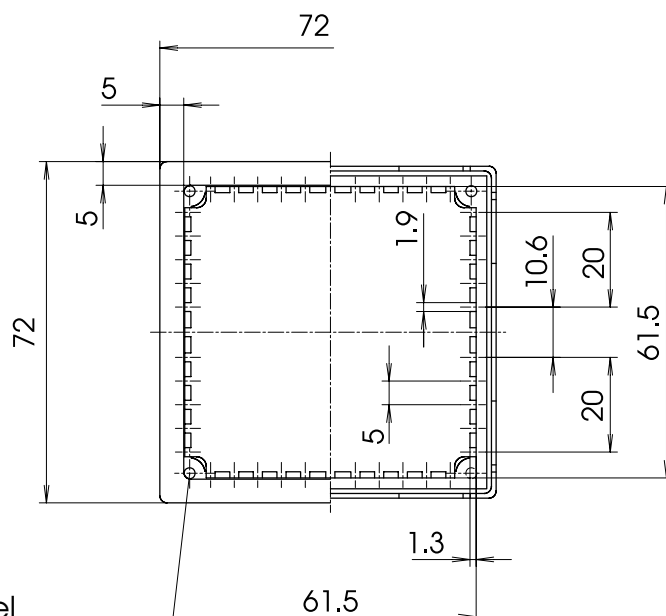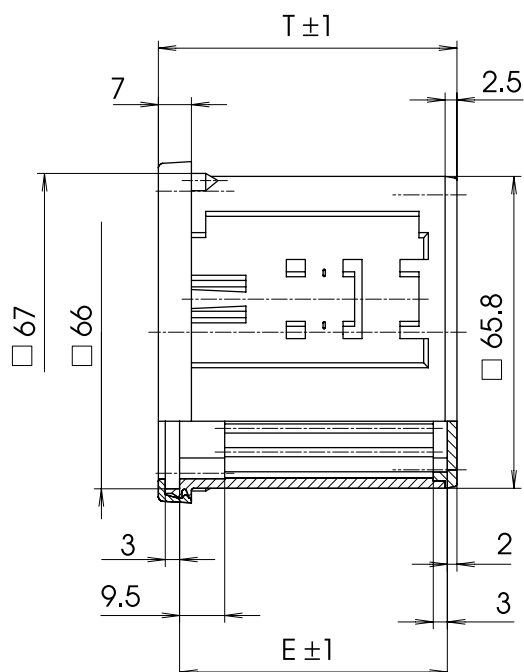
front panel
fixing points
59.5 mm x 59.5 mm

Z-2600826

Cut-out to DIN IEC 61554
45+0,6 x 92+0,8

T ±1

7   2.5

91 x 44.6 90 x 42.8 89.8 x 42.8

3   2

9.5   3

E ±1

48

18.4

4.5   10

5

1.9

28.4

96

5.6   35

86.2

35

1.9

1.3

38.8

front panel
fixing points
37 mm x 84 mm

Z-2600828

All dimensions in mm. Please refer also to technical data.   357

NGS Panel Meter Housings
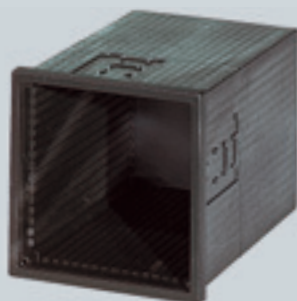
NGS 96

Order designation		External dimensions in mm			
Model	**Order no.**	**W**	**H**	**D**	**E**
NGS 9606	**17960601**	96	96	63.0	56.5
NGS 9608	**17960801**	96	96	85.0	78.5
NGS 9610	**17961001**	96	96	109.5	103.0
NGS 9611	**17961101**	96	96	119.0	112.5
NGS 9613	**17961301**	96	96	141.0	134.5
NGS 9616	**17961601**	96	96	165.5	159.0

Accessories (additional charge)

Model		Order no.
NGS 96 FAE	= Front panel, anod. aluminium, 1.5 mm thick	**37000400**
NGS 96 FKT	= Front panel, plastic, red translucent, 3 mm thick	**37000900**
NGS 96 RKS	= Rear wall, separate (included in scope of delivery)	**37001630**
NGS-NK	= Screw clamp (PU = 2 pcs)	**37003000**
NGS-NF	= Spring clamp (PU = 2 pcs)	**37005000**
NGS-ZE	= Connecting piece for DIN retaining clasp (PU = 2 pcs)	**37004000**
NGS-NH	= DIN retaining clasp (PU = 2 pcs)	**37001000**
NGS 96 DA	= Seal, enclosure/control panel (PU = 5 pcs)	**37096000**
NGS 96 DI	= Seal, front panel/enclosure (PU = 5 pcs)	**37096010**
NGS 96 F	= Firmly latching membrane front	**37996500**
NGS 96 SA	= Front frame, firmly latching	**37996600**
NGS 96 AH*	= Clear hood cover	**37996700**
NGS 96 GHN	= Flexible transparent PVC hood	**37009600**
NGS 96 TK	= Front door lockable by means of knob	**17960000**
SHLO-302	= Cylinder catch for front door	**21008310**

For descriptions and illustrations of accessories, see pages 362-365.
* available on request

NGS 98

Order designation		External dimensions in mm			
Model	**Order no.**	**W**	**H**	**D**	**E**
NGS 9806	**17980601**	144	144	64.0	56.5
NGS 9808	**17980801**	144	144	85.0	78.5
NGS 9810	**17981001**	144	144	110.5	103.0
NGS 9811	**17981101**	144	144	120.0	112.5
NGS 9813	**17981301**	144	144	142.0	134.5
NGS 9816	**17981601**	144	144	166.5	159.0

Accessories (additional charge)

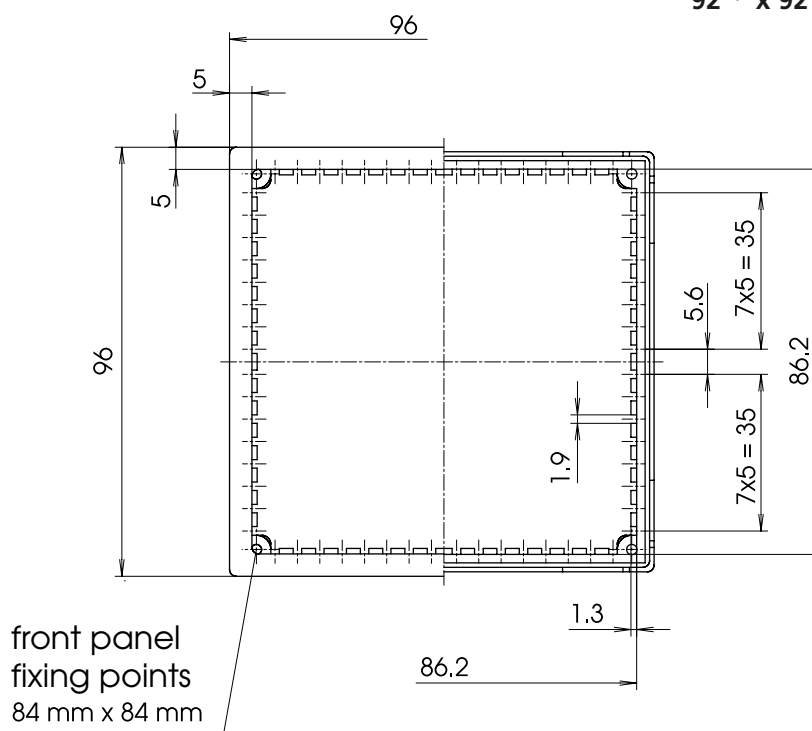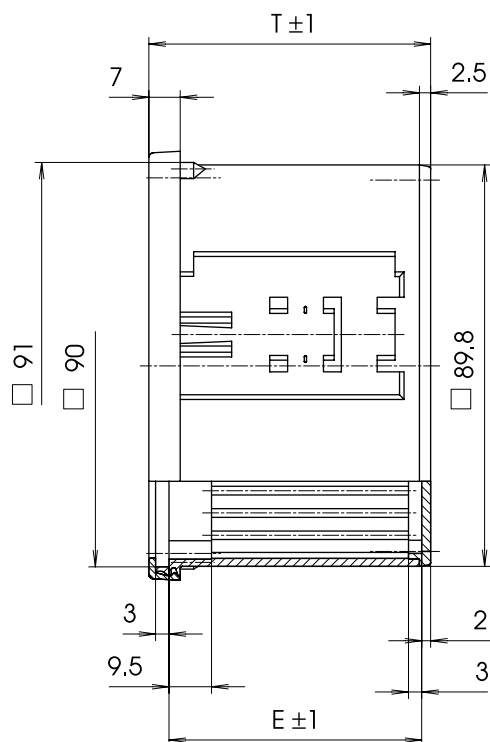| Model		Order no.
NGS 98 FAE	= Front panel, anod. aluminium, 1.5 mm thick	**37000500**
NGS 98 FKT	= Front panel, plastic, red translucent, 3 mm thick	**37000950**
NGS 98 RKS	= Rear wall, separate (included in scope of delivery)	**37001640**
NGS-NK	= Screw clamp (PU = 2 pcs)	**37003000**
NGS-NF	= Spring clamp (PU = 2 pcs)	**37005000**
NGS-ZE	= Connecting piece for DIN retaining clasp (PU = 2 pcs)	**37004000**
NGS-NH	= DIN retaining clasp (PU = 2 pcs)	**37001000**
NGS 98 DA	= Seal, enclosure/control panel (PU = 5 pcs)	**37098000**
NGS 98 DI	= Seal, front panel/enclosure (PU = 5 pcs)	**37098010**
NGS 98 F	= Firmly latching membrane front	**37998500**
NGS 98 SA	= Front frame, firmly latching	**37998600**
NGS 98 AH*	= Clear hood cover	**37998700**
NGS 98 GHN	= Flexible transparent PVC hood	**37009800**
NGS 98 TK	= Front door lockable by means of knob	**17980000**
SHLO-302	= Cylinder catch for front door	**21008310**

For descriptions and illustrations of accessories, see pages 362-365.
* available on request
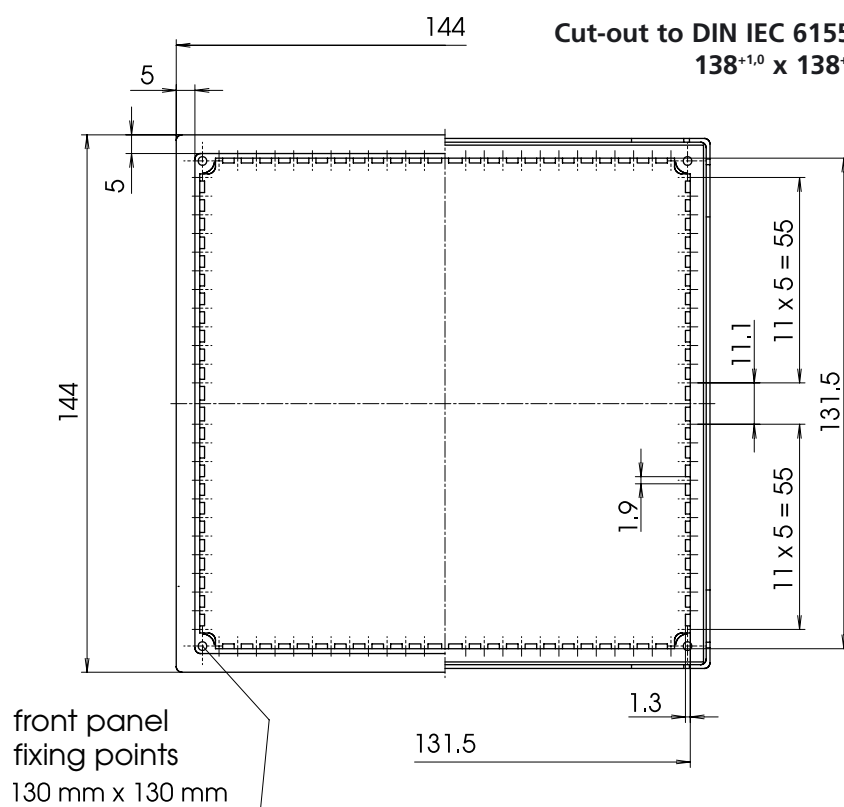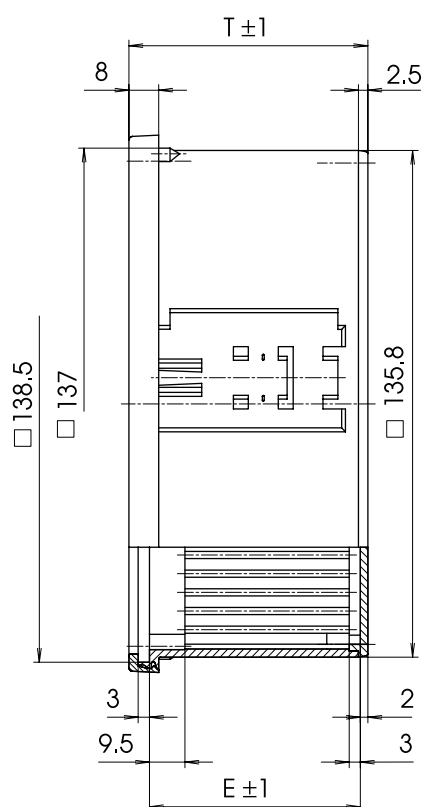
NGS 96

NGS 98

Cut-out to DIN IEC 61554
92$^{+0,8}$ x 92$^{+0,8}$

T ±1
7
2.5
□ 91
□ 90
□ 89,8
89,8
3
2
9,5
3
E ±1

96
5
5
96
7x5 = 35
5.6
86,2
1.9
7x5 = 35
1.3
86,2

front panel
fixing points
84 mm x 84 mm

Z-2600829

Cut-out to DIN IEC 61554
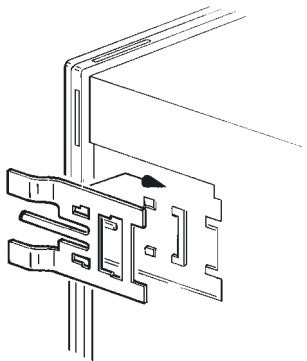**138$^{+1,0}$ x 138$^{+1,0}$**

T ±1
8
2.5
□ 138.5
□ 137
□ 135,8
135,8
3
2
9,5
3
E ±1

144
5
5
144
11 x 5 = 55
11.1
131,5
1.9
11 x 5 = 55
1.3
131,5

front panel
fixing points
130 mm x 130 mm

Z-2600830
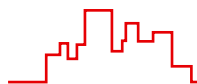
NGS Panel Meter Housings

NGS 9806-GR
(with stepped rear panel)

NGS 9806-GR

Order designation   **External dimensions in mm**

Model	Order-no.	L	W	H
NGS 9806-GR	**17980605**	144	144	68

Accessories (additional charge)

Model	Order no.
NGS 98 FAE = Front panel alu-anodized, 3 mm thick	**37000510**
NGS 98 FKT = Front plate, plastic, red translucent, 3 mm thick	**37000950**
NGS 98 DI = Seal, front panel/enclosure (PU: 5 pieces)	**37098010**
NGS 98 F = Firmly-latching membrane front	**37998500**
NGS 98 SA = Firmly-latching front frame	**37998600**
NGS 98 AH = Clear hood cover	**37998700**
NGS 98 GHN = Flexible transparent PVC hood	**37009800**
NGS 98 TK = Front door, lockable with knob	**17980000**
SHLO-302 = Cylinder catch for front door	**21008310**

For discriptions and illustrations of accessories, see pages 362-365.

Cut-out to DIN IEC 61554
138$^{+1,0}$ x 138$^{+1,0}$

front panel
min.

front panel
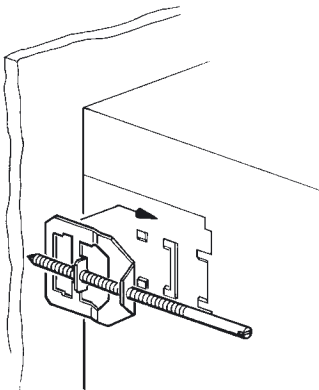max.

front panel

fixing element

Z-2602053

All dimensions in mm. Please refer to technical data.　　　　361
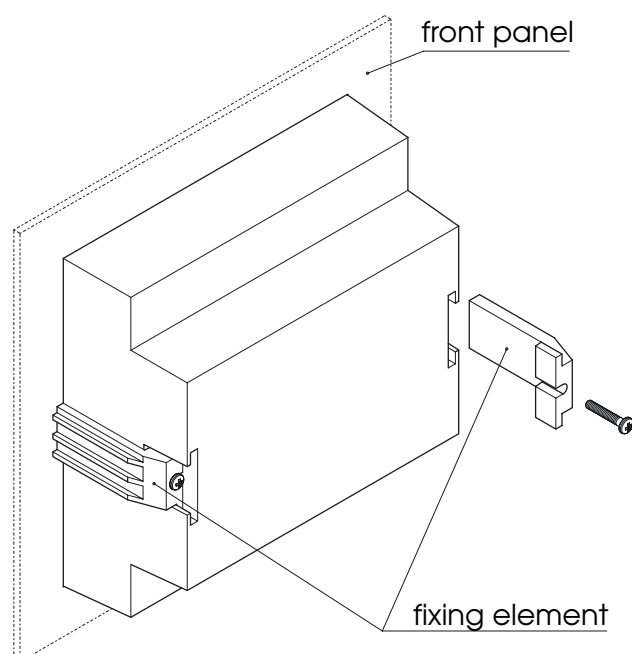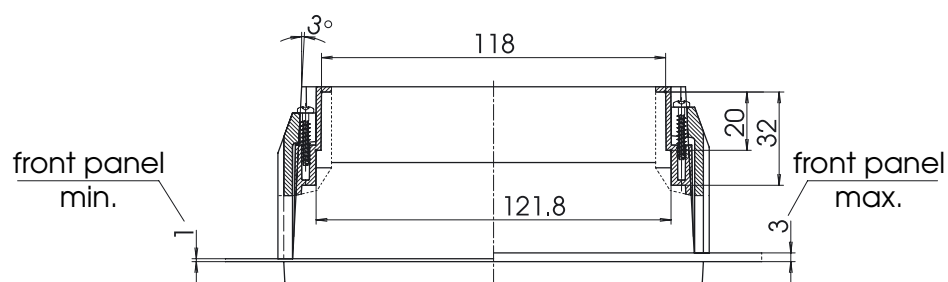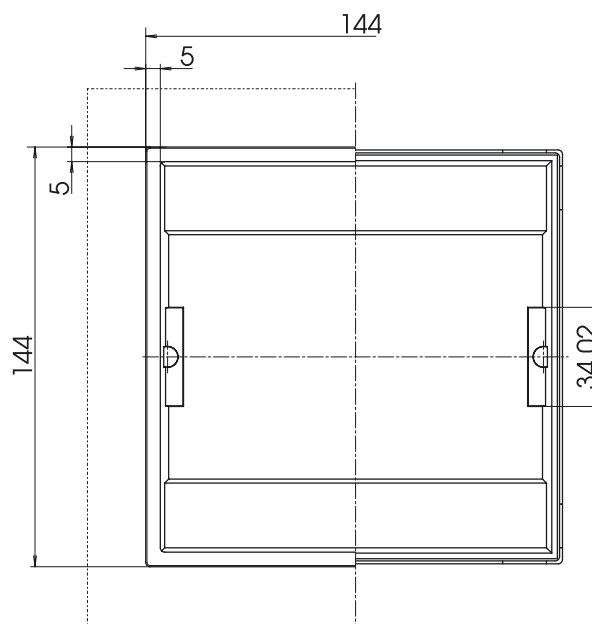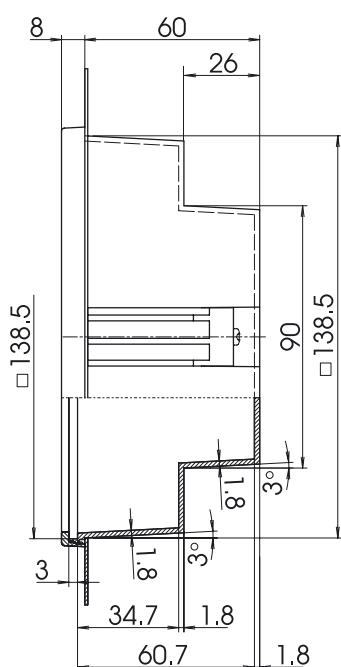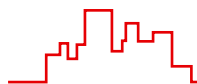
NGS Panel Meter Housing Accessories

NGS spring clamp

Order designation

Model	Order no.	PU
NGS-NF	37005000	2

The NF spring clamp is snapped onto the external wall of the enclosure and then, with the enclosure, snapped into the control panel cut-out.

NGS screw clamp

Order designation

Model	Order no.	PU
NGS-NK	37003000	2

The screw clamp is placed on the enclosure from the rear of the control panel.
After this, the enclosure is pressed firmly onto the rear wall of the control panel through the integrated screw.

NGS connecting piece
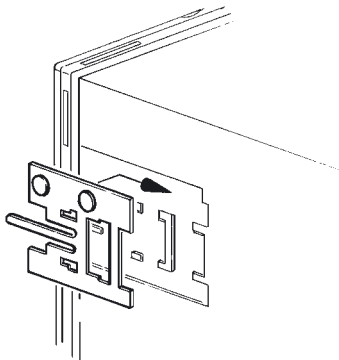
Order designation

Model	Order no.	PU
NGS-ZE	37004000	2

The ZE connecting piece is suitable for use with standard retaining clasps in accordance with DIN 43835.

NGS retaining clasp
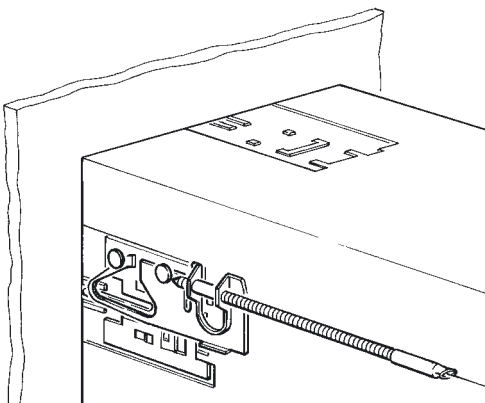
Order designation

Model	Order no.	PU
NGS-NH	37001000	2

Standard retaining clasp in accordance with DIN 43835 form B.
Can only be used together with connecting piece NGS-ZE.

This 1.5 mm thick anodized alu-
minium front panel can be sealed
towards the enclosure by means of
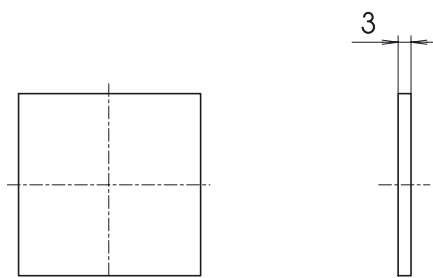NGS...DI seals. Take the different
panel shapes into account.

NGS front panel, anodized aluminium

1.5

countersink DIN74-Af2
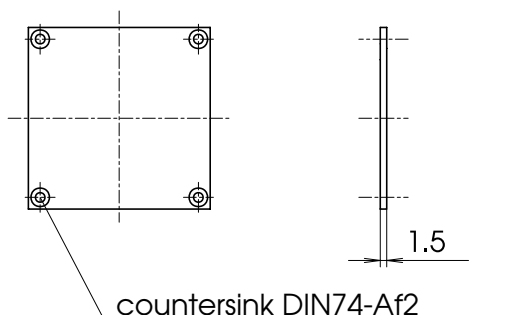
Z-2600851

This 3 mm translucent red plexiglass
pane is especially suitable for use
with LEDs. Additional sealing is not
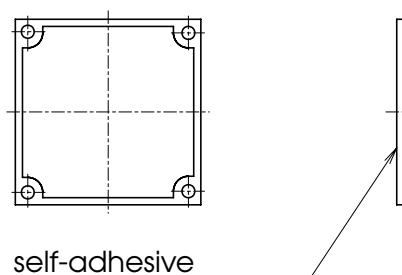possible in the case of NGS...DI.

NGS front panel, plastic, red translucent

3

Z-2600851

The NGS..DI (neoprene foam rub-
ber, 1.5 mm thick) can be used to
seal the NGS...FAE front panels
towards the interior of the enclo-
sure. Take the different panel
shapes into account.

NGS seal DI (non-definable protection category)

self-adhesive

Z-2600851

These seals (neoprene foam rubber,
1.5 mm thick) can be used to seal
the enclosure in respect of the
control panel wall. Here too, take
any different panel shapes into
account. If necessary, 4 fixing
elements can be used to achieve
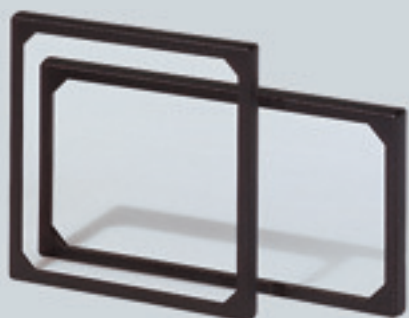optimal fitting.

NGS seal DA (non-definable protection category)
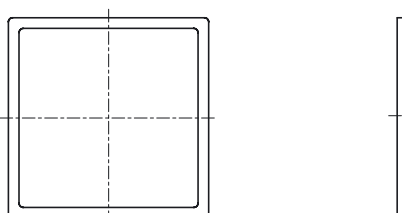
Z-2600851

Firmly latching membrane front to accept membrane keypads, etc.

Firmly latching front frame with corner trim to conceal screws.

Clear hood cover for placing on the firmly latching front frame NGS-F/SA.
Provides simple, effective protection for operating and display elements.

NGS membrane fronts NGS...F

Order designation

Model	Order no.	B	H	T1	S	B1	H1
NGS 48 F	37948500	48.4	48.4	8	1.5	$45.1^{+0.2}_{-0.1}$	$45.1^{+0.2}_{-0.1}$
NGS 74 F	37974500	72.4	144.4	9	2.5	$68.1^{+0.3}_{-0.2}$	$140.1^{+0.5}_{-0.3}$
NGS 77 F	37977500	72.4	72.4	8	1.5	$68.1^{+0.3}_{-0.2}$	$68.1^{+0.3}_{-0.2}$
NGS 94 F	37994500	48.4	96.4	8	1.5	$45.1^{+0.2}_{-0.1}$	$92.1^{+0.4}_{-0.2}$
NGS 96 F	37996500	96.4	96.4	8	1.5	$92.1^{+0.4}_{-0.2}$	$92.1^{+0.4}_{-0.2}$
NGS 98 F	37998500	144.4	144.4	9	2.5	$140.1^{+0.5}_{-0.3}$	$140.1^{+0.5}_{-0.3}$
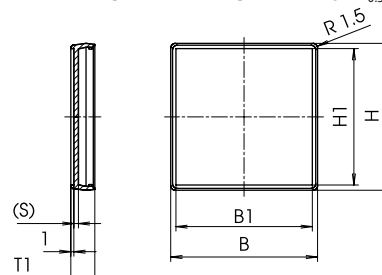
Z-2601268

NGS front frames NGS...SA

Order designation

Model	Order no.	B	H	T1	S	B1	H1	F
NGS 48 SA	37948600	48.4	48.4	7	1.5	39	39	5.40
NGS 74 SA	37974600	72.4	144.4	8	2.5	62	134	6.65
NGS 77 SA	37977600	72.4	72.4	7	1.5	62	62	5.40
NGS 94 SA	37994600	48.4	96.4	7	1.5	38	86	5.40
NGS 96 SA	37996600	96.4	96.4	7	1.5	86	86	5.40
NGS 98 SA	37998600	144.4	144.4	8	2.5	34	134	7.40
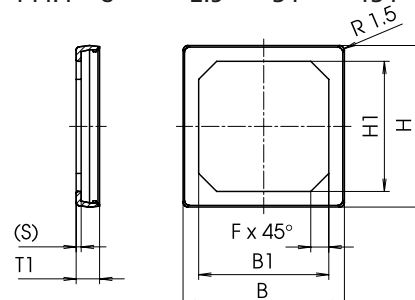
Z-2601268

NGS hood covers

Order designation

Model	Order no.	B	H
NGS 48 AH*	37948700	52.7	52.7
NGS 74 AH*	37974700	76.7	148.7
NGS 77 AH*	37977700	76.7	76.7
NGS 94 AH*	37994700	52.7	100.7
NGS 96 AH*	37996700	100.7	100.7
NGS 98 AH*	37998700	148.7	148.7

* available on request
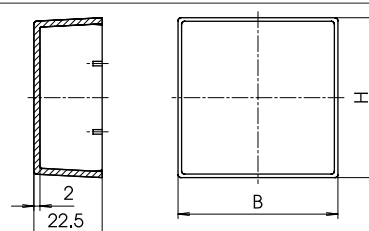
Z-2601268

NGS flexible transparent PVC hoods NGS...GHN

Order designation

| Model	Order no.	B	H	T1	B1	H1
NGS 48 GHN	**37004800**	54	54	8	48.4	48.4
NGS 74 GHN	**37007400**	78	150	9	72.4	144.4
NGS 77 GHN	**37007700**	78	78	8	72.4	72.4
NGS 94 GHN	**37009400**	54	102	8	48.8	96.4
NGS 96 GHN	**37009600**	102	102	8	96.4	96.4
NGS 98 GHN	**37009800**	150	150	9	144.4	144.4

Z-2600512
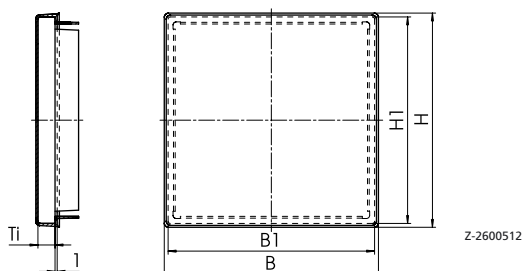
Flexible transparent PVC hoods for DIN IEC 61554 insertion enclosures. Buttons or rocker switches can be operated through the hood. Protection category up to IP 65, depending on assembly.

NGS front doors NGS...TK

Order designation

Model	Order no.
NGS 74 TK	**17740000**
NGS 96 TK	**17960000**
NGS 98 TK	**17980000**

32

26,8

E *

aluminium front panel, 1.5 mm thick

Z-2600855
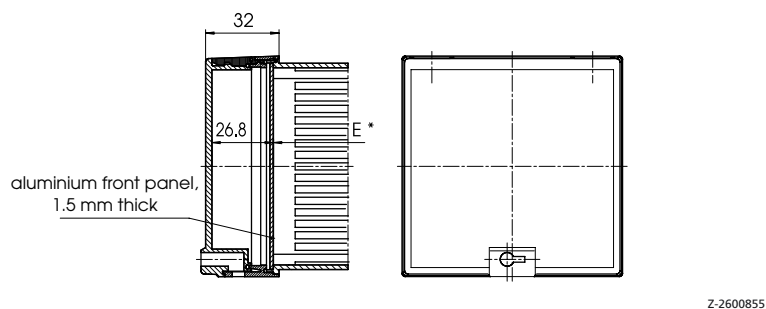
Front door lockable by means of knob

NGS cylinder catch for front door

Order designation

Model	Order no.
SHLO-302	21008310

Cylinder catch for front door