

## The ES 5000 exclusive enclosure – the compact enclosure system with multiple benefits

Compact for electronics, ideal for machine control, generously proportioned for climate control, flexible and cost-effective – the ES 5000 is a specialist for many tasks. Also available in stainless steel, for applications where hygiene and corrosion resistance are particularly important.

## The range is fully compatible with the PS system accessories.

Special machines give the self-supporting body of the ES 5000 a 10-fold profile. As a result of this folded profile, the body, which is manufactured from a single piece, boasts exceptional rigidity, load-bearing capacity and tensile force distribution during crane-lifting. 2 rows of system punchings are integrated into all 12 edges of the ES interior. This means that any part of the extensive Rittal range of Rittal components and accessories can be installed without marking out, drilling or thread tapping.

German patent no. P 3731 547  
 US patent no. 4,899,900  
 South African patent no. P 88/6904  
 Australian patent no. 604155  
 European patent no. 0 308 7115 with validity for AT, BE, CH, DE, ES, FR, GB, IT, NL, SE  
 Canadian patent no. 1315 380  
 Brazilian patent no. PI 8804798

## ES 5000 exclusive enclosures have the following approvals:

- UL
- CSA
- TÜV
- Germanischer Lloyd
- Norske Veritas
- Russian Maritime Register of Shipping
- Lloyds Register of Shipping
- Bureau Veritas
- VDE

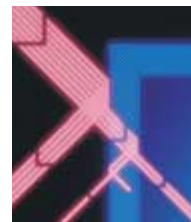


Free-standing enclosures ES 5000				
Width mm	Height mm	Depth mm	Model No. ES	Page
600	1600	500	<b>5665.600</b>	94/95
600	1800	400	<b>5684.600</b>	94/95
600	2000	500	<b>5605.600</b>	94/95
800	1600	500	<b>5865.600</b>	94/95
800	1800	400	<b>5884.600</b>	94/95
800	2000	500	<b>5805.600</b>	94/95
1000	1800	400	<b>5084.600</b>	94/95
1000	1800	400	<b>5080.600</b>	94/95
1200	1600	500	<b>5265.600</b>	96/97
1200	1800	400	<b>5284.600</b>	96/97
1200	2000	500	<b>5205.600</b>	96/97
1600	1800	400	<b>5784.600</b>	96/97
1800	2000	500	<b>5905.600</b>	96/97

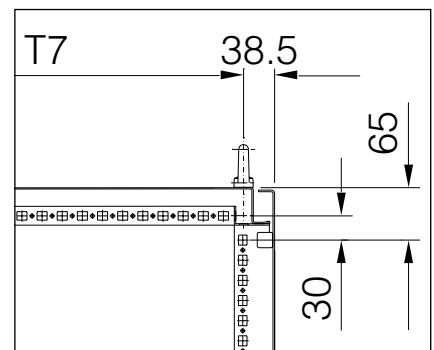


Free-standing enclosures ES 5000 stainless steel, see page 292/293.

Free-standing enclosures ES 5000, stainless steel				
Width mm	Height mm	Depth mm	Model No. ES	Page
600	1600	400	<b>5450.600</b>	292/293
600	1800	500	<b>5451.600</b>	292/293
800	1800	500	<b>5452.600</b>	292/293
800	2000	600	<b>5453.600</b>	292/293
1000	1800	400	<b>5454.600</b>	292/293
1200	2000	500	<b>5455.600</b>	292/293

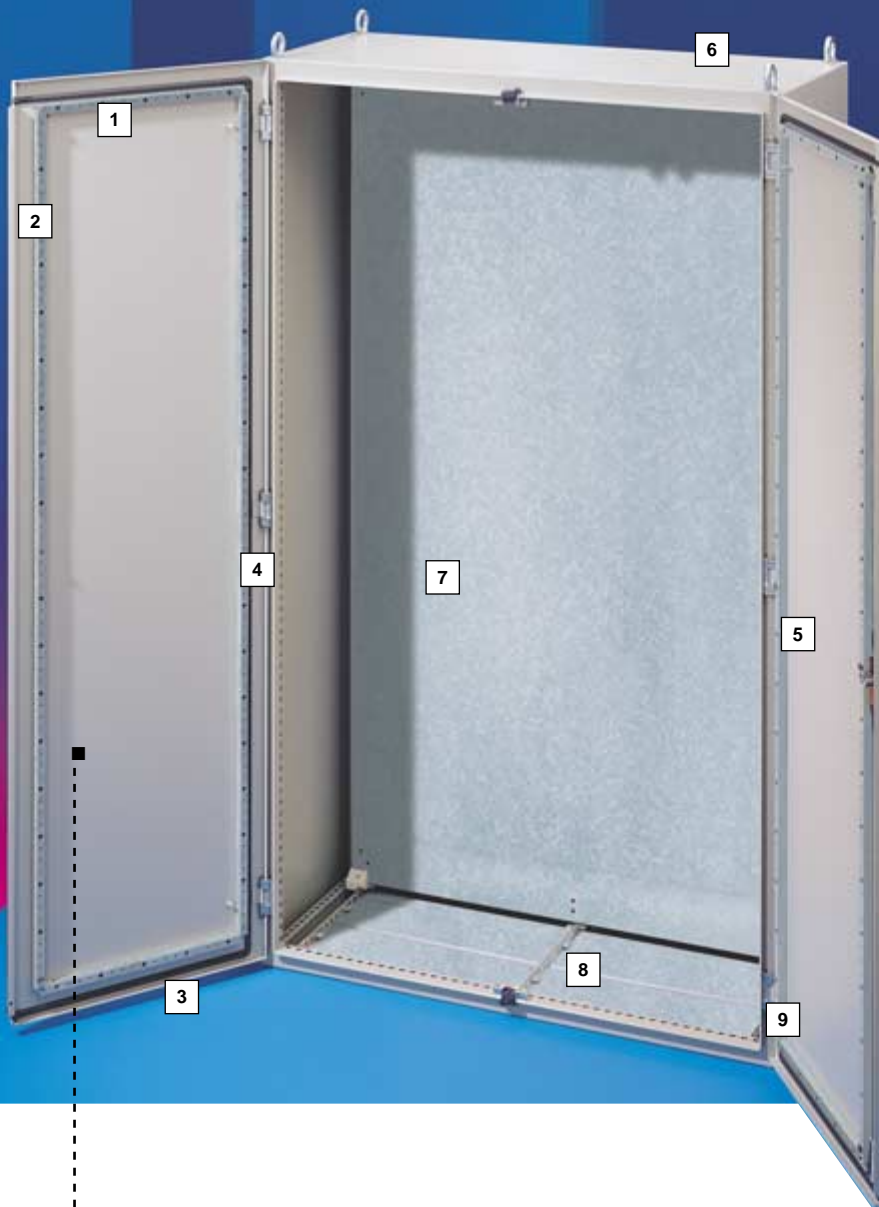


Free-standing enclosures ES 5000 with EMC shielding, see page 304/305.



Technical details, see page 98 – 101.

# FREE-STANDING ENCLOSURES ES 5000



**1** Foamed-in PU seal, may be overpainted and stove-enamelled up to 180°.

**3** Doors have a floor clearance of approximately 25 mm.

**5** Lockable door with r/h hinge. Door hinge may be swapped to opposite side in single-door enclosures.

**7** Mounting plate, zinc-plated, with C-fold at the side, depth-variable on a 25 mm pitch pattern.

**9** PE conductor connection points on the door, enclosure and removable panels.

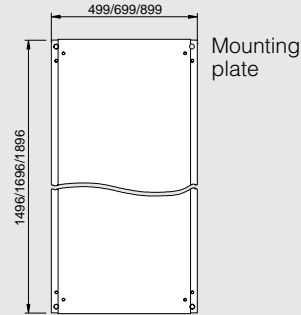
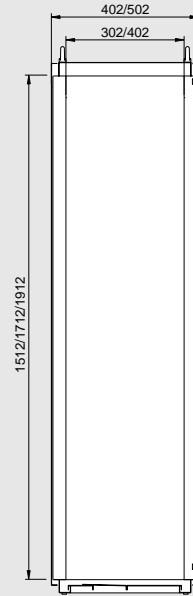
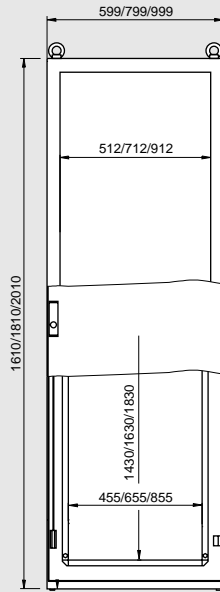
**2** Stable, screw-fastened square frame with punchings on a 25 mm pitch pattern for attaching trunking, cable harnesses, wiring plan pockets etc.

**4** Concealed 130° hinges. Easily dismantled by pulling out the two-part pins.

**6** Screw-fastened rear panel, prepared for exchange with a door, apart from ES 5784.600 and ES 5905.600.

**8** Three-part interchangeable, movable gland plates for easier cable entry and handling.

Optimum protection against corrosion with electrophoretic dipcoat-priming in RAL 7044. Unless otherwise stated, exterior surfaces are powder-coated in textured RAL 7032.



Mounting plate

Supply includes	Material Sheet steel	Surface finish
Enclosure, closed top and sides	1.8 mm	Dip-coat primed RAL 7044, powder-coated on the outside in textured RAL 7032
R/h door hinge, can be changed to opposite side (except ES 5080.600)	2.0 mm	
Removable rear panel	1.5 mm	
Mounting plate	3.0 mm	Zinc-plated
Three-part gland plates	1.5 mm	Zinc-plated
2 eyebolts, not fitted (ES 5080.600, ES 5084.600: 4 eyebolts, fitted)		
Protection category IP 56 to EN 60 529/10.91, IP 55 to EN 60 529/10.91 for ES 5080.600, complies with NEMA 12		

Detailed drawings  
Page 98 – 101

Width in mm	Packs of	600	800	600	800	1000	1000	600	800	Page
Height in mm		1600	1600	1800	1800	1800	1800	2000	2000	
Depth in mm		500	500	400	400	400	400	500	500	
<b>Model No. ES</b>	<b>1</b>	<b>5665.600</b>	<b>5865.600</b>	<b>5684.600</b>	<b>5884.600</b>	<b>5084.600</b>	<b>5080.600</b>	<b>5605.600</b>	<b>5805.600</b>	
Doors		1	1	1	1	1	2	1	1	
Weight (kg)		102.5	124.5	104.5	125.0	147.0	148.0	124.0	151.5	

**Accessories for external mounting**

Base/plinth SO Height 100 mm	1	2807.200	2829.200	2804.200	2823.200	2909.200	2909.200	2807.200	2829.200	884
Height 200 mm	1	2808.200	2830.200	2805.200	2824.200	2910.200	2910.200	2808.200	2830.200	884
Mobile base on castors SO	1	2980.200	2984.200	2979.200	2983.200	–	–	2980.200	2984.200	889
Glazed doors PS	1	4503.000	4507.000	4504.000	4508.000	–	–	4505.000	4509.000	920

**Accessories for interior installation**

Cable entry plates <sup>1)</sup>	1 set	4320.700	4321.700	4320.700	4321.700	4323.700	4323.700	4320.700	4321.700	892
System support rails	2	4361.000	4362.000	4361.000	4362.000	4347.000	4347.000	4361.000	4362.000	899
Cable clamp rails	2	4191.000	4192.000	4191.000	4192.000	4336.000	4336.000	4191.000	4192.000	898
Support strips	20	4596.000	4598.000	4596.000	4598.000	4599.000	4309.000	4596.000	4598.000	975
Wiring plan pocket, sheet steel	1	4116.000	4118.000	4116.000	4118.000	4124.000	4115.000	4116.000	4118.000	952
Utility lectern	1	4638.600	4638.800	4638.600	4638.800	–	–	4638.600	4638.800	951

<sup>1)</sup> Cable entry grommets – see accessories on page 892

**Lock systems**

Standard double-bit lock insert may be exchanged for 27 mm lock inserts, type A – see page 942 and Ergoform-S lock system – see page 939

**For primed enclosures in RAL 7044, please add extension .800 to the Model No. For textured RAL 7035, use extension .500. Delivery times available on request.**

# FREE-STANDING ENCLOSURES ES 5000

Width: 600 – 1000

Free-standing enclosures ES 5000



## Accessories:

See page 876/877 or refer to index.



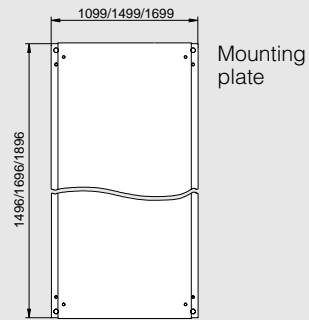
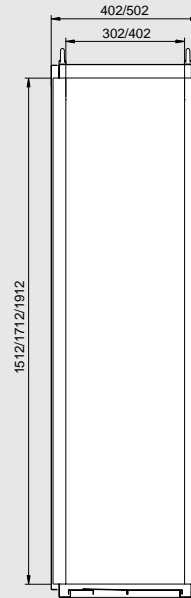
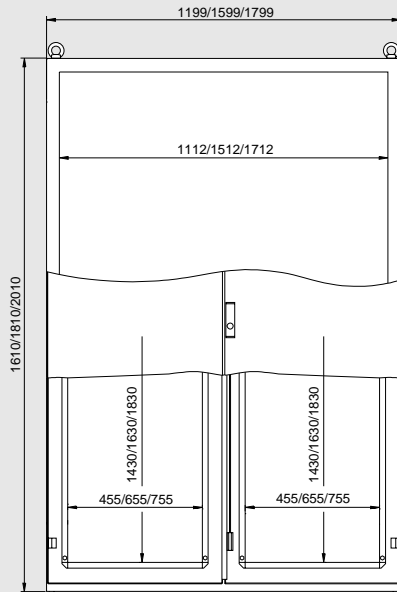
**Connector grommets**  
With cable entry plates for cables and connectors.  
Model No. see page 892.



**EMC cable entry gland**  
The inexpensive alternative to screw fastening.  
Model No. see page 894.



**System window** to protect against unauthorised access and preserve the protection category.  
Model No. see page 928.



Mounting plate

Supply includes	Material	Surface finish
Enclosure, closed top and sides	Sheet steel	
Double door, lockable on the r/h side	1.8 mm	Dip-coat primed RAL 7044, powder-coated on the outside in textured RAL 7032
Rear panel (ES 5784.600, ES 5905.600 two-part) removable	2.0 mm	
	1.5 mm	
Mounting plate	3.0 mm	Zinc-plated
Three-part gland plates	1.5 mm	Zinc-plated
4 eyebolts, fitted		
Protection category IP 55 to EN 60 529/10.91, complies with NEMA 12		

Detailed drawings  
Page 98 – 101

Width in mm	Packs of	1200	1200	1600	1200	1800	Page
Height in mm		1600	1800	1800	2000	2000	
Depth in mm		500	400	400	500	500	
<b>Model No. ES</b>	1	<b>5265.600</b>	<b>5284.600</b>	<b>5784.600</b>	<b>5205.600</b>	<b>5905.600</b>	
Doors		2	2	2	2	2	
Weight (kg)		175.0	180.0	222.0	210.0	300.0	

**Accessories for external mounting**

Base/plinth SO	Height 100 mm	1	2839.200	2836.200	2905.200	2839.200	2903.200	884
	Height 200 mm	1	2840.200	2837.200	2906.200	2840.200	2904.200	884

**Accessories for interior installation**

Cable entry plates <sup>1)</sup>	1 set	4325.700	4325.700	–	4325.700	–	892
System support rails	2	4363.000	4363.000	–	4363.000	–	899
Cable clamp rails	2	4196.000	4196.000	4338.000	4196.000	4339.000	898
Support strips	20	4596.000	4596.000	4598.000	4596.000	4579.000	975
Wiring plan pocket, sheet steel	1	4116.000	4116.000	4118.000	4116.000	4123.000	952
Utility lectern	1	4638.600	4638.600	4638.800	4638.600	–	951
Cross-brace for mounting plate	2	4333.120	4333.120	4333.160	4333.120	4333.180	966

<sup>1)</sup> Cable entry grommets – see accessories on page 892

**Lock systems**

Standard double-bit lock insert may be exchanged for 27 mm lock inserts, type A – see page 942 and Ergoform-S lock system – see page 939

**For primed enclosures in RAL 7044, please add extension .800 to the Model No. For textured RAL 7035, use extension .500. Delivery times available on request.**

# FREE-STANDING ENCLOSURES ES 5000

Width: 1200 – 1800

Free-standing enclosures ES 5000



## Accessories:

See page 876/877  
or refer to index.



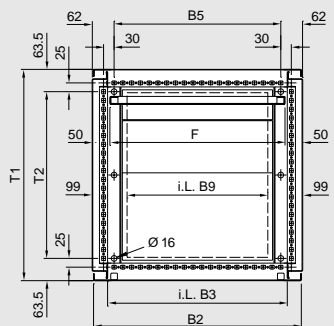
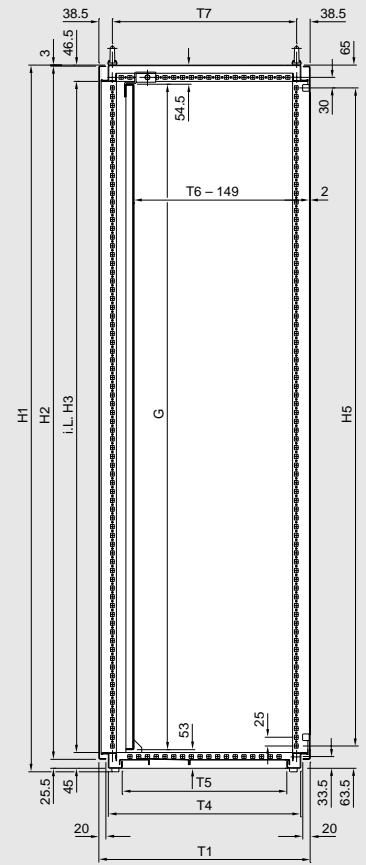
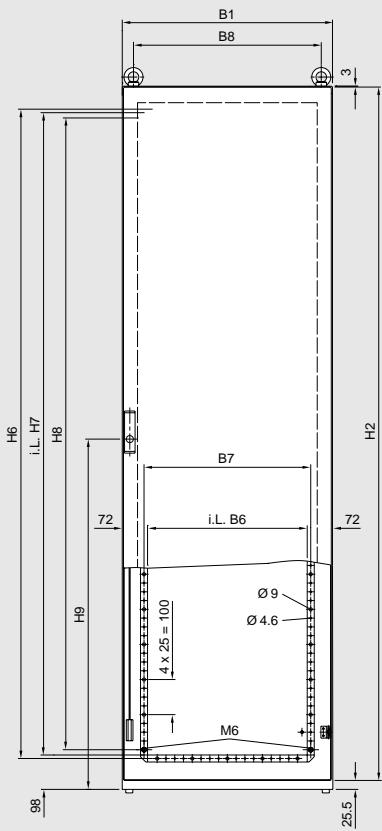
**Utility lectern**  
For programming units etc.  
Folds down quickly for  
servicing.  
Model No. see page 951.



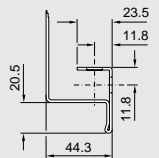
**Cable conduit/holder**  
For secure cable routing.  
Model No. see page 953.



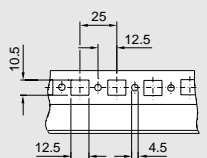
**Cross-brace for mounting plate**  
To stabilise or secure heavy  
components.  
Model No. see page 966.



Cross-section



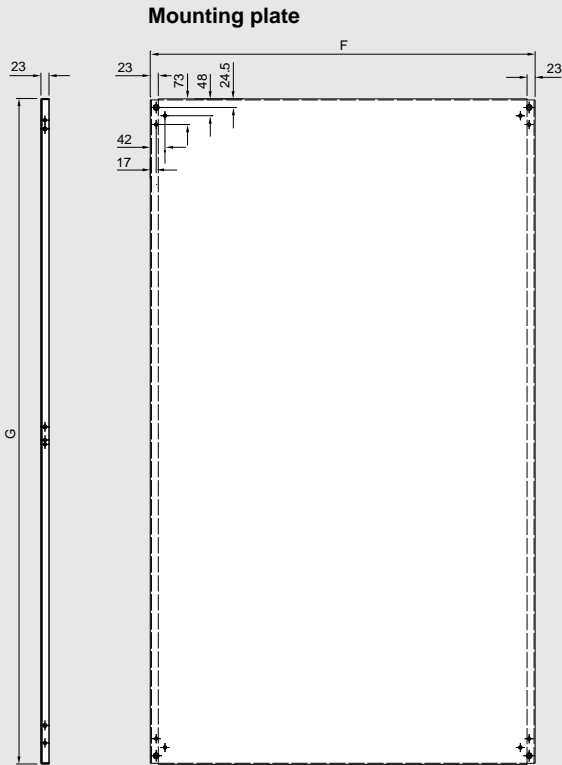
Pitch pattern of holes



i.L. = Clearance width

# FREE-STANDING ENCLOSURES ES 5000

Single-door, painted and stainless steel



### Enclosure

- B1 = overall width
- B2 = width of door
- B3 = clearance between enclosure frame sections
- B5 = section length of system punchings/hole distance of base and plinth attachment
- B6 = clearance between the tubular door frame sections
- B7 = distance between the rows of tubular door frame holes
- B8 = spacing between eyebolts
- B9 = clearance in base aperture

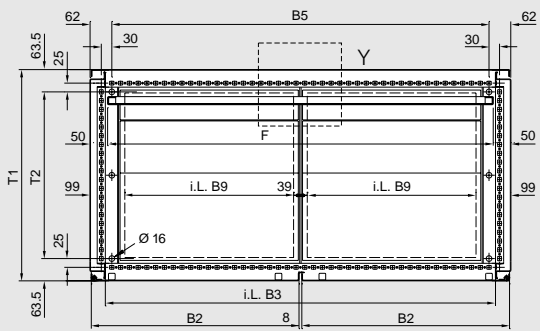
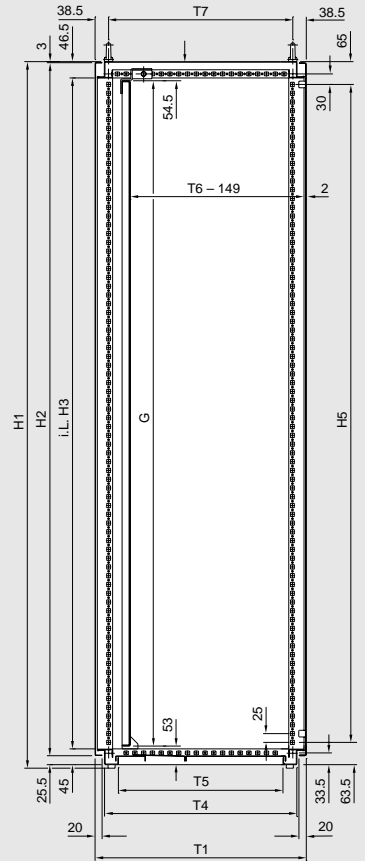
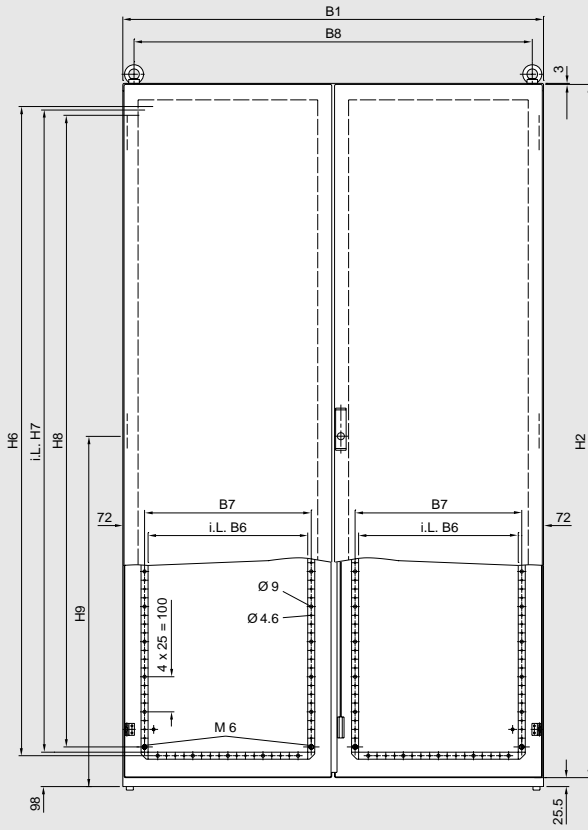
- H1 = overall height
- H2 = height of rear panel and door
- H3 = clearance between enclosure frame sections
- H5 = section length of system punchings
- H6 = distance between the rows of tubular door frame holes
- H7 = clearance between tubular door frame sections
- H8 = spacing of tubular door frame fastening bolts
- H9 = distance from base to centre of lock

- T1 = overall depth
- T2 = section length of system punchings/hole distance of base and plinth attachment
- T4 = depth of base frame
- T5 = clearance in base aperture
- T6 = possible installation depth (mounting plate assembly) up to 149 mm, depth-adjustable on a 25 mm pitch pattern
- T7 = centre-to-centre distance between eyebolts

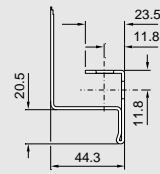
### Mounting plate

- F = overall width
- G = overall height

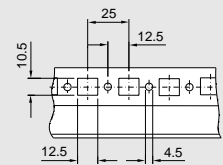
Enclosures		Widths									Heights									Depths							Mount. pl.	
Stainless steel	Painted	B1	B2	B3	B5	B6	B7	B8	B9	H1	H2	H3	H5	H6	H7	H8	H9	T1	T2	T4	T5	T6	T7	F	G			
ES 5450.600		599	592	512	475	455	475	535	401	1610	1575	1512	1475	1450	1430	1400	798	402	275	349	269	349	325	499	1496			
	ES 5665.600	599	592	512	475	455	475	535	401	1610	1575	1512	1475	1450	1430	1400	798	502	375	449	369	449	425	499	1496			
	ES 5684.600	599	592	512	475	455	475	535	401	1810	1775	1712	1675	1650	1630	1600	898	402	275	349	269	349	325	499	1696			
ES 5451.600		599	592	512	475	455	475	535	401	1810	1775	1712	1675	1650	1630	1600	898	502	375	449	369	449	425	499	1696			
	ES 5605.600	599	592	512	475	455	475	535	401	2010	1975	1912	1875	1850	1830	1800	998	502	375	449	369	449	425	499	1896			
	ES 5865.600	799	792	712	675	655	675	735	601	1610	1575	1512	1475	1450	1430	1400	798	502	375	449	369	449	425	699	1496			
	ES 5884.600	799	792	712	675	655	675	735	601	1810	1775	1712	1675	1650	1630	1600	898	402	275	349	269	349	325	699	1696			
	ES 5805.600	799	792	712	675	655	675	735	601	2010	1975	1912	1875	1850	1830	1800	998	502	375	449	369	449	425	699	1896			
ES 5454.600	ES 5084.600	999	992	912	875	855	875	935	801	1810	1775	1712	1675	1650	1630	1600	898	402	275	349	269	349	325	899	1696			
ES 5452.600		799	792	712	675	655	675	735	601	1810	1775	1712	1675	1650	1630	1600	898	502	375	449	369	449	425	699	1696			
ES 5453.600		799	792	712	675	655	675	735	601	2010	1975	1912	1875	1850	1830	1800	998	602	475	549	469	549	525	699	1896			



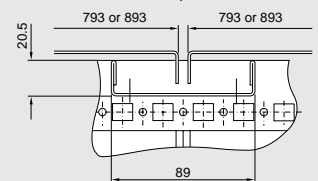
Cross-section



Pitch pattern of holes



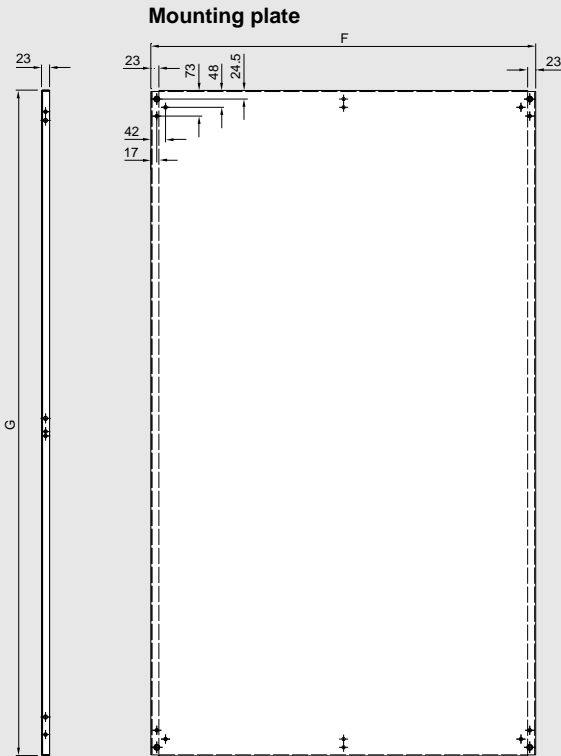
Detail Y  
(only with ES 5784.600  
and ES 5905.600)



i. L. = Clearance width

# FREE-STANDING ENCLOSURES ES 5000

Double-door, painted and stainless steel



## Enclosure

- B1 = overall width
- B2 = width of door
- B3 = clearance between enclosure frame sections
- B5 = section length of system punchings/hole distance of base and plinth attachment
- B6 = clearance between the tubular door frame sections
- B7 = distance between the rows of tubular door frame holes
- B8 = spacing between eyebolts
- B9 = clearance in base aperture

- H1 = overall height
- H2 = height of rear panel and door
- H3 = clearance between enclosure frame sections
- H5 = section length of system punchings
- H6 = distance between the rows of tubular door frame holes
- H7 = clearance between tubular door frame sections
- H8 = spacing of tubular door frame fastening bolts
- H9 = distance from base to centre of lock

- T1 = overall depth
- T2 = section length of system punchings/hole distance of base and plinth attachment
- T4 = depth of base frame
- T5 = clearance in base aperture
- T6 = possible installation depth (mounting plate assembly) up to 149 mm, depth-adjustable on a 25 mm pitch pattern
- T7 = centre-to-centre distance between eyebolts

## Mounting plate

- F = overall width
- G = overall height

Enclosures		Widths								Heights								Depths							Mount. pl.	
Stainless steel	Painted	B1	B2	B3	B5	B6	B7	B8	B9	H1	H2	H3	H5	H6	H7	H8	H9	T1	T2	T4	T5	T6	T7	F	G	
	<b>ES 5080.600</b>	999	492	912	875	355	375	935	801	1810	1775	1712	1675	1650	1630	1600	898	402	275	349	269	349	325	899	1696	
	<b>ES 5265.600</b>	1199	592	1112	1075	455	475	1135	481	1610	1575	1512	1475	1450	1430	1400	798	502	375	449	369	449	425	1099	1496	
	<b>ES 5284.600</b>	1199	592	1112	1075	455	475	1135	481	1810	1775	1712	1675	1650	1630	1600	898	402	275	349	269	349	325	1099	1696	
<b>ES 5455.600</b>	<b>ES 5205.600</b>	1199	592	1112	1075	455	475	1135	481	2010	1975	1912	1875	1850	1830	1800	998	502	375	449	369	449	425	1099	1896	
	<b>ES 5784.600</b>	1599	792	1512	1475	655	675	1535	681	1810	1775	1712	1675	1650	1630	1600	898	402	275	349	269	349	325	1499	1696	
	<b>ES 5905.600</b>	1799	892	1712	1675	755	775	1735	781	2010	1975	1912	1875	1850	1830	1800	998	502	375	449	369	449	425	1699	1896	