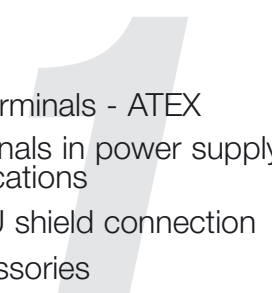


The Weidmüller Catalogue System Industry 2002

Sectional catalogue 1:

Terminals 2002

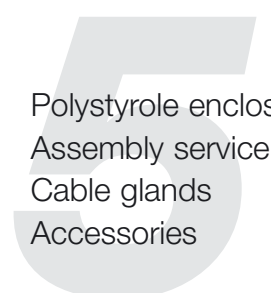
W-Series Ex Terminals - ATEX
Z-Series Terminals in power supply applications
IDC-Series KLBÜ shield connection
SAK-Series Accessories



Sectional catalogue 5:

Enclosures 2002

Mild steel enclosures Polystyrole enclosures
Die cast aluminium enclosures Assembly service
Polyester GRP enclosures Cable glands
Polycarbonate enclosures Accessories



Sectional catalogue 2:

PCB Components 2002

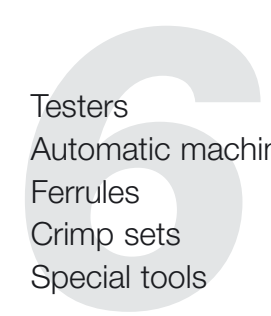
PCB Terminals
PCB Connectors



Sectional catalogue 6:

Tools 2002

Certification of tools Testers
Cutting tools Automatic machines
Stripping tools Ferrules
Crimping tools Crimp sets
Screw driving tools Special tools



Sectional catalogue 3:

Heavy Duty Connectors 2002

HA, HE, HD, HDD, HVE, HSB, DSTVK plus DSTV-HD-Series
ConCept
ModuFlex
HDC-Kits
Single contacts
Accessories
Cable glands



Sectional catalogue 7:

Installation Products 2002

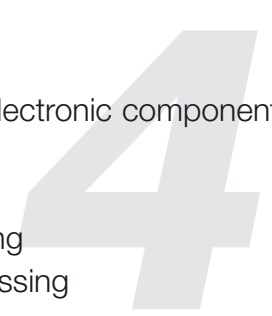
Connection markers
Conductor and cable markers
Equipment and installation markers
Labels
Marking systems
Cable ties
Installation products



Sectional catalogue 4:

Electronics 2002

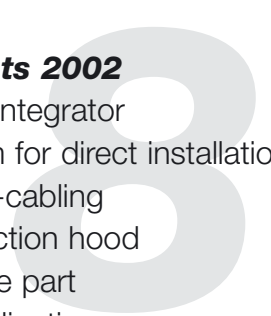
Terminal blocks with electronic components
Interface units
PLC system interface
Digital signal processing
Analogue signal processing
Power supply units
Overvoltage protection
Modules for different functions
Component holders and housings
Markers



Sectional catalogue 8:

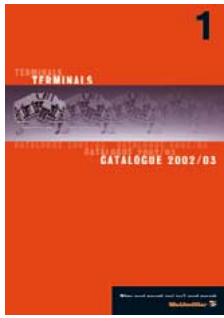
Fieldbus-Components 2002

SAI - Sensor-Actuator-Integrator
A well designed system for direct installation
SAI for passive system-cabling
SAI with plug-in connection hood
Cable available as piece part
SAI - Integrators in applications
SAI - Actuator-Integrator PASSIVE
SAI - Actuator-Integrator ACTIVE
PROFIBUS-PA T-Connector
Typical system layout
Applications



For further information on our worldwide activities please refer to the last pages of this catalogue.

The Weidmüller Catalogue System Industry 2002



Sectional catalogue 1:

Terminals 2002

Cat. No. german: 5629090000
Cat. No. english: 5628980000



Sectional catalogue 5:

Enclosures 2002

Cat. No. german: 5629130000
Cat. No. english: 5629020000



Sectional catalogue 2:

PCB Components 2002

Cat. No. german: 5629100000
Cat. No. english: 5628990000



Sectional catalogue 6:

Tools 2002

Cat. No. german: 5629140000
Cat. No. english: 5629030000



Sectional catalogue 3:

Heavy Duty Connectors 2002

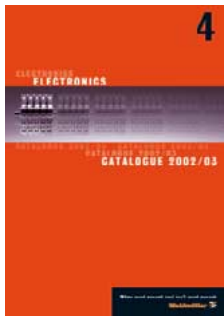
Cat. No. german: 5629110000
Cat. No. english: 5629000000



Sectional catalogue 7:

Installation Products 2002

Cat. No. german: 5629150000
Cat. No. english: 5629040000



Sectional catalogue 4:

Electronics 2002

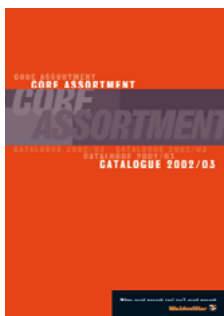
Cat. No. german: 5629120000
Cat. No. english: 5629010000



Sectional catalogue 8:

Fieldbus-Components 2002

Cat. No. german: 5629160000
Cat. No. english: 5629050000



Catalogue

Core Assortment 2002

Cat. No. german: 5629170000
Cat. No. english: 5629060000

Complete set of 8 sectional catalogues. German: Cat.No. 5629200000 / English: Cat.No. 5629190000. Additional: Catalogue slip case only: 5619250000

Ordering hint

We now only use 10-digit catalogue numbers.

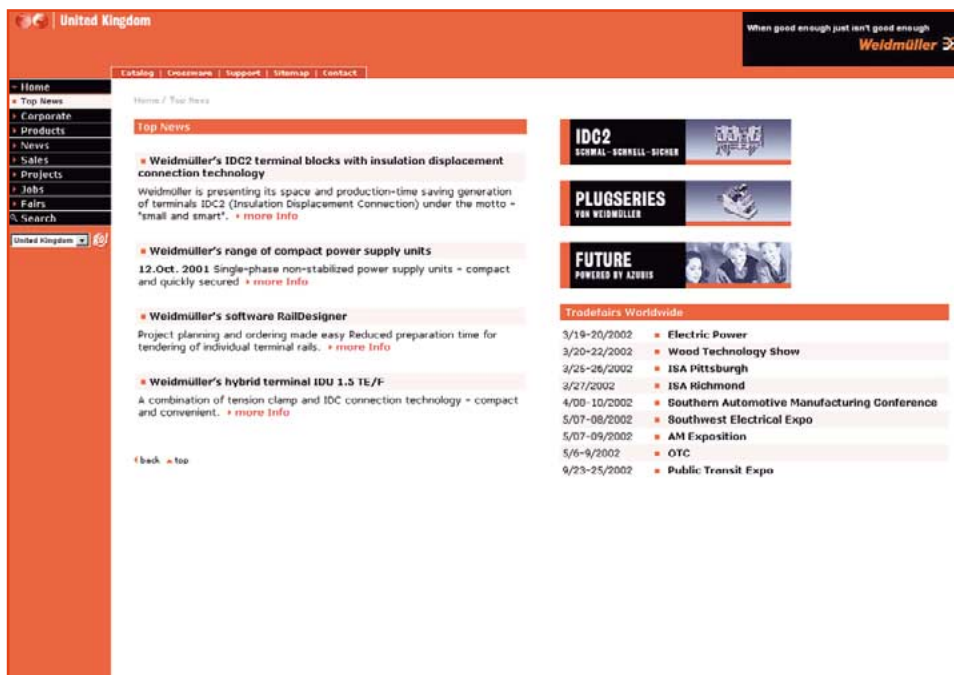
Please note: The four digits may refer to a product variation (for example: 102998 0000 = standard and 102998 1111 = associated variation).

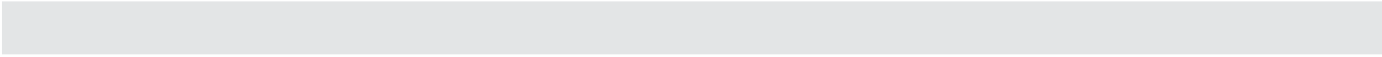
Wherever possible, please utilise 10-digit numbers only.

The official Weidmüller-Website contains information about the latest innovations, trade-show dates, press reports, certifications, software demos and much more.

www.weidmueller.com ...

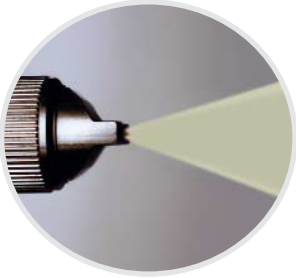
... the address for up-to-date information





Custom-Specific Production

Your Complete Service Provider



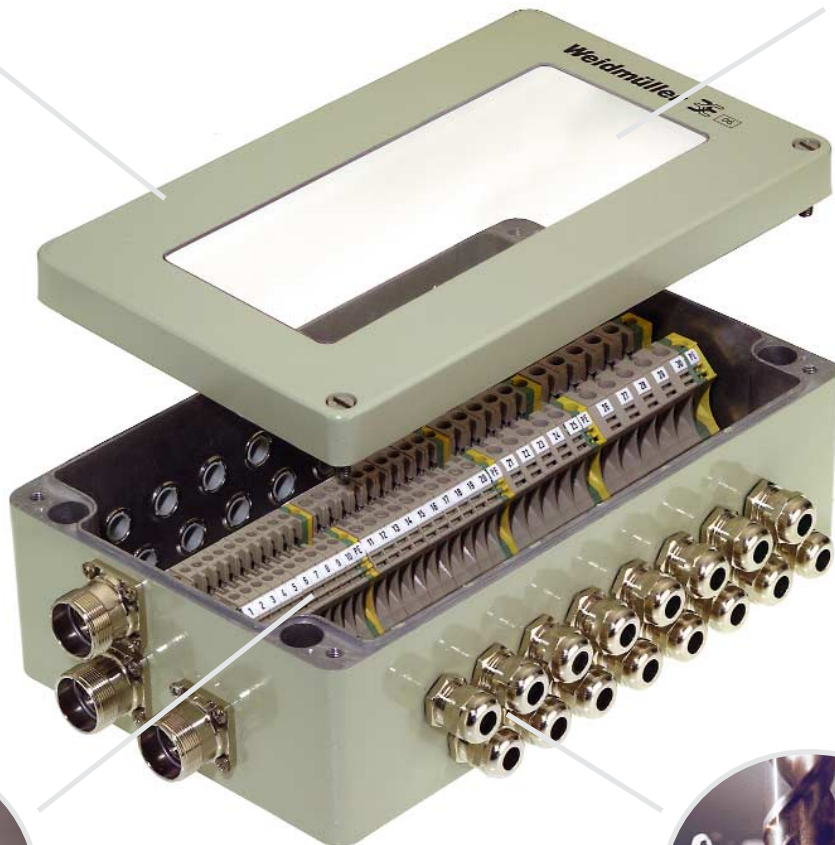
Painting

Painting: in any colour required - wet paint or powder coating.
Printing: pad or screen process.



Milling

Cost efficient and high quality milling thanks to coordinated machining technologies.



Assembling/mounting

Ready-for-use enclosures in accordance with your requirements with mounting plates, cable glands, mounting rails, terminal strips, electronics modules, markers and so forth ...



Drilling

Drilling, thread cutting

Service

Custom-Specific Production

To compete internationally, the trend towards outsourcing and relocation of activities within the net product chain has become established worldwide.

A high standard of education together with high personnel costs are not a contradiction in terms, but complement each other ideally by relocating uniform work processes in order to free-up capacity for more challenging tasks.

Take advantage of Weidmüller's know-how!

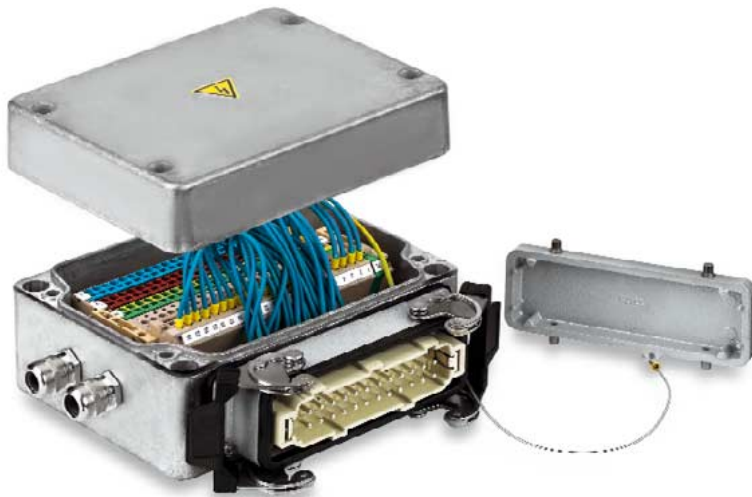
We will install the components onto the mounting rail in accordance with your specifications, assemble and customise the enclosure to suit your applications' needs.

Weidmüller is your external service partner. Your capacity increases and quality is assured by our exacting quality standards. Our production has already been certified to ATEX. That means that Weidmüller today meets the standards becoming mandatory in 2003 throughout Europe.

Cost-efficient and on-time production is our business.

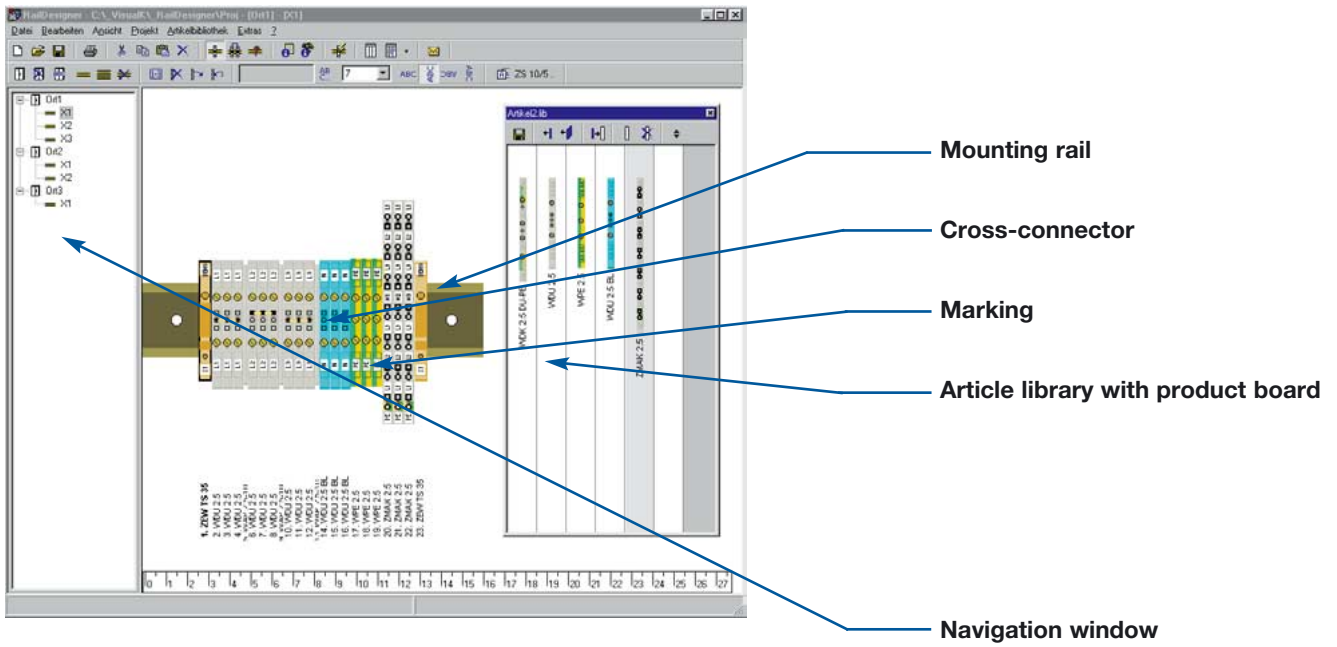
Your business profits from our expertise.

Tell us what you require and we will produce it in Weidmüller quality.



Service

Custom-Specific Production



Custom-Specific Production

We write Customer Service with a capital "C".

- Take advantage of our new ordering options
- Optimize your planning and ordering process with the software **RailDesigner**



Product description:

Software for planning and ordering individual strips of terminals.

RailDesigner distinguishes itself in particular through its graphic user interface and true-to-detail display of the products. The articles required for assembly are contained in article libraries and can be individually mounted onto the mounting rail with a mouse click or at the touch of a button. Extensive product information and search functions simplify the selection of the required article from the data base.

Cross-connections, markers, end plates, partitions, end brackets, open slots external cable bridges etc., are also displayed graphically. The prescribed marking can be quickly generated with the help of the automatic numbering function.

The detailed construction of the terminal rail can be printed in the form of mounting or ordering lists.

You will quickly notice any errors in the construction by using the "Mounting Notes" function.

An overview of all utilized terminal strips are clearly displayed in a navigation window.

Data exchange with other systems is made possible by an export/import interface.

Orders for terminal strips are made directly in RailDesigner via e-mail or disk.

The software is easy to learn with the help of the included multimedia tutorial.

Advantages:

- Graphic user guidance and true-to-detail user interface.
- Intuitive operation via standard Windows functions and via the clearly arranged menu structure.
- Quick selection of articles via intelligent database queries and article libraries.
- Clear project processing.
- Quotation and ordering of terminal strips per e-mail.
- Multimedia tutorial for self study.
- Export / import interface, direct access to CADdy++ ET.
- Updates and Service via Internet
<http://www.raildesigner.de>




How to order:

- Design terminal strips.
- Save project and send via e-mail or disk.
- Confirm contract.

We will produce your terminal strips according to your data, at no extra cost, directly, quickly, and in optimum quality.

Ordering Details

Type	Cat. No.
RD-Basic CD-Rom for Windows 9x/NT/2000	1781400000

Content Enclosures		Page
Q Range Sheet steel enclosures		4 - 7
Next Range Large sheet-steel enclosures		8 - 13
TB Range Sheet steel enclosures		14 - 17
STB Range Small sheet steel enclosures		18 - 19
K Range Aluminium enclosures		20 - 23
POK Range Polyester enclosures		24 - 27
TBF Range Polyester enclosures		28 - 31
MPC Range Small to medium sized polycarbonate enclosures		32 - 35
FPC Range Medium sized polycarbonate enclosures		36 - 39
GPS Range Polystyrene enclosures		40 - 43
Cable Glands		44 - 65
Appendix		66 - 137
Which enclosure for which application?		67
Product overview: enclosures		68 - 71
Dimensions and cable glands:		
Q Range		72 - 73
Next Range		74 - 75
TB Range		76 - 77
STB Range		78 - 81
K Range		82 - 95
POK Range		96 - 107
TBF Range		108 - 111
MPC Range		112 - 117
FPC Range		118 - 121
GPS Range		122 - 131
Terminal connection plan		132 - 133
IP protection classes		134
Protection classes in accordance with NEMA, UL, CSA		135
Hazardous areas		136
Labeling in accordance with ATEX		137
Accessories		138 - 161
Component carrier and Housings		138 - 157
Connectors		158 - 159
Other applications		160 - 161
Index		162 - 181
Worldwide activities		182 - 183



Requirements and Products

Weidmüller offers its customers a wide range of enclosures for the protection of circuitry, components and devices.

These have been developed to suit a wide range of applications and environments.

This overview is designed to help you choose the right enclosure for your particular requirements.

Even better, let us choose for you. Our technical clearing service within the custom-specific manufacturing department is pleased to accept your ideas and requests and translate them with assured Weidmüller quality.

Q Range
Sheet steel enclosures



Q Range

Sheet steel enclosures

The Q enclosure range is the result of more than 30 years of Weidmüller experience in the development of enclosures.

The merits of this range are its user friendliness, simplicity and ease of access to its interior.

Features:

- 29 sizes in two material designs
- Lid with concealed hinges
- Reversible lid (left/right)
- Lid lock incl. mounting plate
- Gland plates in the base

Our assembly service can supply these enclosures preassembled with terminals and cable glands according to customer requirements.

Technical data	
Material	Sheet steel 1.2mm (18 SWG)
	Stainless steel 1.4301 (304)
Finish	Painted Sheet steel, semi gloss textured, similar to RAL 7032
	Stainless steel, brushed
Gasket	Foam in Place polyurethane
Lid fixing	2 or 3 hinges / 1 or 2 90°-Two-way lock
Gland plates	1 or 2 gland plates in base
Earthing	M 6 studs in base and lid
Enclosure mounting	Holes through back of enclosure or using external fixing lugs
Equipment mounting	4 or 6 M 6 pillars for mounting rail or mounting plate
Protection class	IP 65
Temperature range	-20°C to +80°C

Approvals	
ATEX	on request

Q Range

Ordering information

Type	Length x Width x Depth mm	Interior height mm	RAL 7032 Cat. No.	Stainless steel Cat. No.	Weight (Stainless steel) g
Q 20/20/12	200 x 200 x 120	100	9526220000	9527170000	2,221
Q 30/20/12	300 x 200 x 120	100	9526230000	9527180000	2,940
Q 30/30/12	300 x 300 x 120	100	9526240000	9527190000	3,822
Q 30/40/12	300 x 400 x 120	100	9530240000	9530390000	4,870
Q 40/30/12	400 x 300 x 120	100	9526250000	9527200000	4,870
Q 40/40/12	400 x 400 x 120	100	9526420000	9527210000	5,600
Q 50/40/12	500 x 400 x 120	100	9526260000	9527220000	6,795
Q 60/40/12	600 x 400 x 120	100	9526270000	9527230000	8,360
Q 30/30/22	300 x 300 x 220	200	9526280000	9527240000	5,172
Q 30/40/22	300 x 400 x 220	200	9530250000	9530400000	6,253
Q 40/30/22	400 x 300 x 220	200	9526290000	9527250000	6,253
Q 40/40/22	400 x 400 x 220	200	9526430000	9527260000	7,480
Q 40/50/22	400 x 500 x 220	200	9530260000	9530410000	8,707
Q 50/30/22	500 x 300 x 220	200	9530270000	9530420000	7,334
Q 50/40/22	500 x 400 x 220	200	9526300000	9527270000	8,707
Q 50/50/22	500 x 500 x 220	200	9530280000	9530430000	10,080
Q 50/60/22	500 x 600 x 220	200	9530290000	9530440000	11,454
Q 60/30/22	600 x 300 x 220	200	9530300000	9530450000	8,415
Q 60/40/22	600 x 400 x 220	200	9526310000	9527280000	10,100
Q 60/50/22	600 x 500 x 220	200	9530310000	9530460000	11,454
Q 60/60/22	600 x 600 x 220	200	9526440000	9527290000	13,600
Q 70/30/22	700 x 300 x 220	200	9530320000	9530470000	9,496
Q 70/40/22	700 x 400 x 220	200	9530330000	9530480000	11,162
Q 70/50/22	700 x 500 x 220	200	9530340000	9530490000	12,827
Q 70/60/22	700 x 600 x 220	200	9530350000	9530500000	14,493
Q 80/30/22	800 x 300 x 220	200	9530360000	9530510000	10,577
Q 80/40/22	800 x 400 x 220	200	9530370000	9530520000	12,389
Q 80/50/22	800 x 500 x 220	200	9530380000	9530530000	14,200
Q 80/60/22	800 x 600 x 220	200	9526320000	9527300000	17,000

Accessories

Mounting plates

(Zinc coated mounting plate supplied with enclosure)

painted sheet steel 2.03 mm, similar to RAL 2000

Type	Cat. No.	Weight g
MP Q 20/20	9524400000	400
MP Q 30/20	9526340000	600
MP Q 30/30	9526350000	900
MP Q 40/30	9526360000	1,200
MP Q 40/40	9526450000	1,600
MP Q 40/50	9526370000	2,000
MP Q 50/30	9526470000	1,500
MP Q 50/50	9526480000	2,500
MP Q 50/60	9526490000	3,000
MP Q 60/30	9526500000	1,800
MP Q 60/40	9526380000	2,400
MP Q 60/60	9526460000	3,600
MP Q 70/30	9530560000	2,100
MP Q 70/40	9530570000	2,800
MP Q 70/50	9530580000	3,500
MP Q 70/60	9530590000	4,200
MP Q 80/30	9530600000	2,400
MP Q 80/40	9530610000	3,200
MP Q 80/50	9530620000	4,000
MP Q 80/60	9526390000	4,800

Stand-off pillars M6 (Set with 2 pieces)

Type	Cat. No.	Length in mm
SP 15	3896100000	15
SP 20	3896200000	20
SP 30	3896300000	30

Fixing lugs (Set with 4 pieces)

Type	Cat. No.	
MF Q mild	9526410000	Sheet steel
MF Q ss	9527310000	Stainless steel







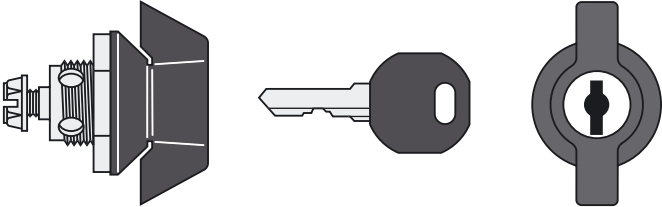
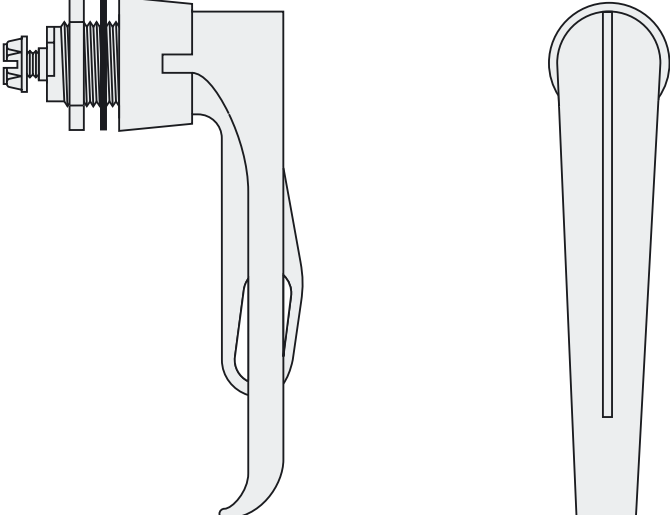
Rail mounting bracket

Type	Cat. No.	
QZB	9526400000	For all types

Lock inserts (key not included unless stated)

Type	Cat. No.	Keys
Slot shape	9533140000	N/A
Eastern European (D-Shape)	9533150000	9541760000
Double bit shape 5 mm	9533210000	9541820000
Square 8mm	9533170000	9541780000
Square 7mm	9533180000	9541790000
Triangular 8mm	9533190000	9541800000
Triangular 7mm	9533200000	9541810000
Crown shape	9533160000	9541770000
Wing knob insert c/w standard key	3091430000	9533230000
L padlockable handle	9533220000	N/A

Q Range

Type	Cat.-No.
Slot shape	9533140000
	Spare key N/A
Eastern European (D-Shape)	9533150000
	Spare key 9541760000
Double Bit Shape	9533210000
	Spare key 9541780000
Square 8mm	9533170000 7mm 9533180000
	Spare key 9541800000
Triangular 8mm	
	Spare key 9541810000
Crown Shape	9533160000
	Spare key 9541770000
Wing Knob Insert c/w standard key	3091430000
Spare standard key	9533230000
	
L Padlock-Suitable Handle	9533220000
	

NexT Range
Large sheet steel enclosures



NexT Range

Large sheet steel enclosures

The NexT Range is the optimum choice for particularly harsh environments. The stainless steel design of the NexT Range can face up to the toughest of conditions.

Features:

- 20 sizes, each in 10 designs
- Completely detachable lid
- Lid opens 180°
- Concealed hinges
- Earth stud continuity
- Choice of 0 to 4 gland plates
- Fixing lugs
- Mounting plates as accessories

Our assembly service can supply these enclosures preassembled with terminals and cable glands according to customer requirements.

Technical data		
Material	NEXT 26/26...50/35	Sheet steel 16 SWG 1.50 mm or stainless steel 1.4404
	NEXT 62/45...98/74	Sheet steel 14 SWG 2.02 mm or stainless steel 1.4404
	Gland plates	Sheet steel 10 SWG 3.25 mm or stainless steel 1.4404
Finish	Painted	Light-grey coating, semi gloss textured, similar to RAL 7032
	Stainless steel	Polished chemically dipped
Gaskets		Chloroprene (lid and gland plates)
Lid fixing		Fully detachable, hinged lid
		with captive, stainless steel hexagonal M6 screws
Earthing		M 10 earth studs
Enclosure mounting		4 welded external brackets with 10-mm holes / recesses
Equipment mounting		4 Stand-off pillars 10-mm external diameter, threaded hole M 6 x 10 mm
Protection class		IP 66 and IP 67
Impact resistance		7 J
Temperature range		-40°C to +85°C, 100°C for 1 hour

Special versions	
Finish	Special colours according to customer requirements
Sizes	Sizes according to customer requirements
Equipment	We will manufacture the enclosures according to your requirements with terminals, cable glands etc.
Gland plates	According to customer requirements
Earth studs	Also in flange and lid possible
EMC	Designed for high-level shielding against EMS/HFS
Lock	Padlock hasp for padlock

Approvals	
ATEX	KEMA99ATEX7540 X

NexT Range

Ordering information

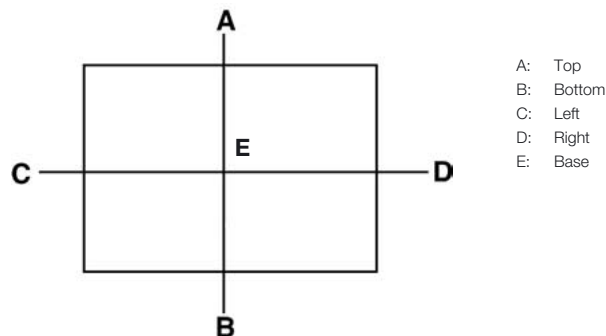
Dimensions		NexT 22/15/13	NexT 26/26/16	NexT 26/26/20	NexT 30/30/16
Length	mm	229	260	260	306
Width	mm	152	260	260	306
Depth	mm	130	160	205	150
Weight	g	3,250	5,500	6,000	7,000
Gland plate top/bottom	mm	94 x 144	120 x 254	164 x 254	116 x 298
Gland plate left/right	mm	94 x 144	120 x 154	164 x 154	116 x 254/298

Ordering information		NexT 22/15/13 Cat. No.	NexT 26/26/16 Cat. No.	NexT 26/26/20 Cat. No.	NexT 30/30/16 Cat. No.
0 Gland plate	Sheet steel, RAL 7032	9533470000	9523590000	9523660000	9533520000
	Stainless steel	9539730000	9523450000	9523520000	9539780000
1 Gland plate (side B) bottom	Sheet steel, RAL 7032	9533480000	9522890000	9522960000	9533530000
	Stainless steel	9539740000	9522610000	9522680000	9539790000
2 Gland plates (side A + B) Top and bottom	Sheet steel, RAL 7032	9533490000	9507740000	9507880000	9533540000
	Stainless steel	9539750000	9508550000	9508690000	9539800000
3 Gland plates (side B, C + D) bottom Right and left	Sheet steel, RAL 7032	9533500000	9523030000	9523100000	9533550000
	Stainless steel	9539760000	9522750000	9522820000	9539810000
4 Gland plates (all sides)	Sheet steel, RAL 7032	9533510000	9507810000	9507950000	9533560000
	Stainless steel	9539770000	9508620000	9508760000	9539820000

Dimensions		NexT 30/30/20	NexT 38/26/16	NexT 38/26/20	NexT 45/38/16
Length	mm	306	380	380	458
Width	mm	306	260	260	382
Depth	mm	205	160	205	160
Weight	g	7,500	7,000	7,500	9,750
Gland plate top/bottom	mm	164 x 298	120 x 254	164 x 254	116 x 374
Gland plate left/right	mm	164 x 254/298	120 x 254	164 x 254	116 x 374

Ordering information		NexT 30/30/20 Cat. No.	NexT 38/26/16 Cat. No.	NexT 38/26/20 Cat. No.	NexT 45/38/16 Cat. No.
0 Gland plate	Sheet steel, RAL 7032	9541000000	9523600000	9523670000	9533570000
	Stainless steel	9541500000	9523460000	9523530000	9539830000
1 Gland plate (side B) bottom	Sheet steel, RAL 7032	9541010000	9522900000	9522970000	9533580000
	Stainless steel	9541510000	9522620000	9522690000	9539840000
2 Gland plates (side A + B) Top and bottom	Sheet steel, RAL 7032	9541020000	9507750000	9507890000	9533590000
	Stainless steel	9541520000	9508560000	9508700000	9539850000
3 Gland plates (side B, C + D) bottom. Right and left	Sheet steel, RAL 7032	9541030000	9523040000	9523110000	9533600000
	Stainless steel	9541530000	9522760000	9522830000	9539860000
4 Gland plates (all sides)	Sheet steel, RAL 7032	9541040000	9507820000	9507960000	9533610000
	Stainless steel	9541540000	9508630000	9508770000	9539870000

Enclosure side identification



See appendix Page 74

NexT Range

Ordering information

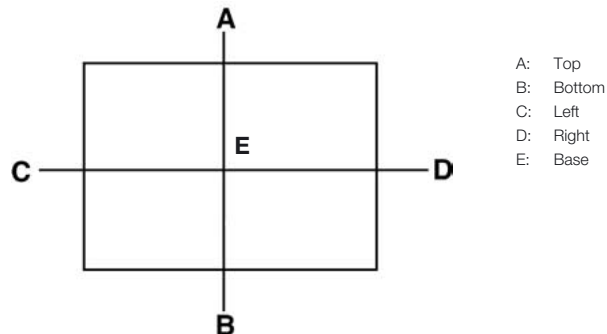
Dimensions		NexT 45/38/20	NexT 48/48/16	NexT 48/48/20	NexT 50/35/16
Length	mm	458	480	480	500
Width	mm	382	480	480	350
Depth	mm	205	160	205	160
Weight	g	10,250	10,400	10,900	10,500
Gland plate top/bottom	mm	164 x 374	120 x 444	164 x 444	120 x 344
Gland plate left/right	mm	164 x 374	116 x 374/120 x 444	164 x 374/444	120 x 344

Ordering information		NexT 45/38/20 Cat. No.	NexT 48/48/16 Cat. No.	NexT 48/48/20 Cat. No.	NexT 50/35/16 Cat. No.
0 Gland plate	Sheet steel, RAL 7032	9541050000	9533620000	9541100000	9523610000
	Stainless steel	9541550000	9539880000	9541600000	9523470000
1 Gland plate (side B) bottom	Sheet steel, RAL 7032	9541060000	9533630000	9541110000	9522910000
	Stainless steel	9541560000	9539890000	9541610000	9522630000
2 Gland plates (side A + B) Top and bottom	Sheet steel, RAL 7032	9541070000	9533640000	9541120000	9507760000
	Stainless steel	9541570000	9539900000	9541620000	9508570000
3 Gland plates (side B, C + D) bottom. Right and left	Sheet steel, RAL 7032	9541080000	9533650000	9541130000	9523050000
	Stainless steel	9541580000	9539910000	9541630000	9522770000
4 Gland plates (all sides)	Sheet steel, RAL 7032	9541090000	9533660000	9541140000	9507830000
	Stainless steel	9541590000	9539920000	9541640000	9508640000

Dimensions		NexT 50/35/20	NexT 62/45/16	NexT 62/45/20	NexT 74/55/20
Length	mm	500	620	620	740
Width	mm	350	450	450	550
Depth	mm	205	160	205	205
Weight	g	11,000	17,000	17,500	23,500
Gland plate top/bottom	mm	164 x 344	120 x 444	164 x 444	164 x 544
Gland Plate left/right	mm	164 x 344	120 x 444	164 x 444	164 x 544

Ordering information		NexT 50/35/20 Cat. No.	NexT 62/45/16 Cat. No.	NexT 62/45/20 Cat. No.	NexT 74/55/20 Cat. No.
0 Gland plate	Sheet steel, RAL 7032	9523680000	9523620000	9523690000	9523700000
	Stainless steel	9523540000	9523480000	9523550000	9523560000
1 Gland plate (side B) bottom	Sheet steel, RAL 7032	9522980000	9522920000	9522990000	9523000000
	Stainless steel	9522700000	9522640000	9522710000	9522720000
2 Gland plates (side A + B) Top and bottom	Sheet steel, RAL 7032	9507900000	9507770000	9507910000	9507920000
	Stainless steel	9508710000	9508580000	9508720000	9508730000
3 Gland plates (side B, C + D) bottom. Right and left	Sheet steel, RAL 7032	9523120000	9523060000	9523130000	9523140000
	Stainless steel	9522840000	9522780000	9522850000	9522860000
4 Gland plates (all sides)	Sheet steel, RAL 7032	9507970000	9507840000	9507980000	9507990000
	Stainless steel	9508780000	9508650000	9508790000	9508800000

Enclosure side identification



Next Range

Ordering information

Dimensions		NexT 76/50/20	NexT 86/64/20	NexT 91/61/20	NexT 98/74/20
Length	mm	762	860	914	980
Width	mm	508	640	610	740
Depth	mm	205	205	205	205
Weight	g	24,000	29,000	31,000	38,000
Gland plate top/bottom	mm	164 x 444	164 x 634	144 x 602	164 x 344 x 2
Gland plate left/right	mm	164 x 634	164 x 344 x 2	144 x 602	164 x 444 x 2

Ordering information		NexT 76/50/20	NexT 86/64/20	NexT 91/61/20	NexT 98/74/20
		Cat. No.	Cat. No.	Cat. No.	Cat. No.
W/O Gland plate	Sheet steel, RAL 7032	9541150000	9523710000	9541200000	9523720000
	Stainless steel	9541650000	9523570000	9541700000	9523580000
1 Gland plate (side B) bottom	Sheet steel, RAL 7032	9541160000	9523010000	9541210000	9523020000
	Stainless steel	9541660000	9522730000	9541710000	9522740000
2 Gland plates (side A + B)	Sheet steel, RAL 7032	9541170000	9507930000	9541220000	9507940000
	Stainless steel	9541670000	9508740000	9541720000	9508750000
Top and bottom					
3 Gland plates (side B, C + D) bottom. Right and left	Sheet steel, RAL 7032	9541180000	9523150000	9541230000	9523160000
	Stainless steel	9541680000	9522870000	9541730000	9522880000
4 Gland plates (all sides)	Sheet steel, RAL 7032	9541190000	9508000000	9541240000	9508010000
	Stainless steel	9541690000	9508810000	9541740000	9508820000

Accessories

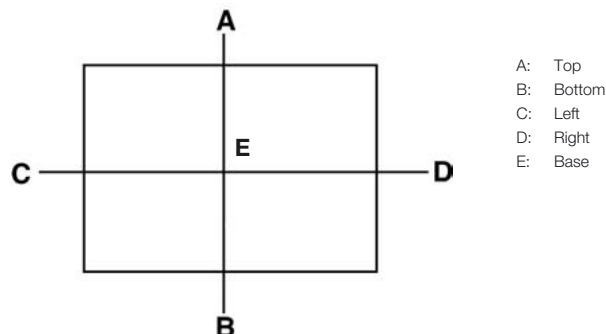
Mounting plates			
Painted sheet steel 2.03 mm, similar to RAL 2000			
Type	Painted	Stainless steel	Weight
	Cat. No.	Cat. No.	(Sheet steel) g
MP NexT 22/15	9513370000	9513320000	243
MP NexT 26/26	9515530000	9515390000	693
MP NexT 30/30	9513380000	9513330000	926
MP NexT 38/26	9515520000	9515380000	1,031
MP NexT 45/38	9513390000	9513340000	2,037
MP NexT 48/48	9518190000	9518180000	2,038
MP NexT 50/35	9515510000	9515370000	2,039
MP NexT 62/45	9515500000	9515360000	3,609
MP NexT 74/55	9515490000	9515350000	5,378
MP NexT 76/50	9513400000	9513350000	5,038
MP NexT 86/64	9515480000	9515340000	7,280
MP NexT 91/61	9513410000	9513360000	7,424
MP NexT 98/74	9515470000	9515330000	10,034

Stand-off pillars M6 (Set with 2 pieces)		
Type	Cat. No.	Length in mm
SP 15	3896100000	15
SP 20	3896200000	20
SP 30	3896300000	30

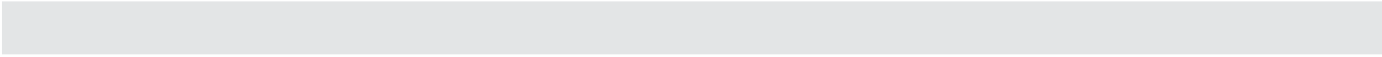
Lock		
Type	Cat. No.	
Padlock	509140000	Brass with 2 keys
Padlock hasp	9509130000	
Screwdriver		
Type	Cat. No.	
Hexagon 10mm	9008940000	SSI (VDE)
Hexagon 10mm	9009070000	SS

Mounting rail		
Type	Cat. No.	
TS35	0383400000	2m length
TAS20	0316400000	2m length

Enclosure side identification



See appendix Page 74



TB Range
Sheet steel enclosures



TB Range

Sheet steel enclosures

For years the TB range of enclosures has been the proven solution for harsh industrial environments, offering the same technical features as the NexT Range.

We recommend the stainless steel versions from this range for protection against corrosion.

Features:

- 6 sizes; 2 material designs
- With 2 or 4 flange plates
- Lid opens 180°
- Concealed hinges
- Earth studs
- Fixing lugs

Our assembly service can supply these enclosures preassembled with terminals and cable glands according to customer requirements.

Technical data		
Material	TB 10-12	Sheet steel 1.5 mm or stainless steel 316L (1.4404)
	TB 13-14	Sheet steel 14 SWG (2.03 mm) or stainless steel 316L (1.4404)
	Gland plates	Sheet steel 10 SWG (3.25 mm) or stainless steel 316L (1.4404)
Finish	Painted	RAL 7032
	Stainless steel	Polished, chemically dipped
Gasket		Chloroprene (lid and gland plates)
Lid fixing		Fully detachable lid with 4 or 6 captive, hexagonal head screws
Earthing		M 10 earth studs
Enclosure mounting		4 external brackets with holes/recesses 10-mm apart
Equipment mounting		4 Stand-off pillars, external diameter 10 mm, with threaded hole M 6 x 10 mm
Protection class		IP66 and IP67
Temperature range		-40°C to +85°C, 100°C for 1 hour
Impact resistance		7 J

Special versions	
Dimension	TB11-13 version with 200 mm depth
Gland plates	Differing flange designs, entry drilled or threaded; plate 6 mm thick
Finish	Special colours according to customer requirements
Equipment	Assembled according to customer requirements with terminals, cable glands and drainage components.
Earthing	M6 or M14 earthing rod, earthing rods TB11-14, M6 or M10 for flange and lid available for delivery.

Approvals	
ATEX	BAS 01ATEX2210

TB Range

TB Ordering information

Type	Length x Width x Depth mm	Interior height mm	Flange A + B		Flange A, B, C and D		Weight (stainless steel) g
			RAL 7032 Cat. No.	Stainless steel Cat. No.	RAL 7032 Cat. No.	Stainless steel Cat. No.	
TB 10	229 x 152 x 130	102	3802800000	3800600000	3801100000	3802100000	3,375
TB 11	306 x 306 x 150	122	3802900000	3800700000	3801200000	3802200000	6,582
TB 12	458 x 382 x 150	122	3803000000	3800800000	3801300000	3802300000	10,249
TB 12a	480 x 480 x 150	122	9504000000	9500100000	9517940000	9518020000	10,400
TB 13	762 x 508 x 150	122	3803100000	3800900000	3801400000	3802400000	22,170
TB 14	914 x 610 x 200	172	3803200000	3801000000	3801500000	3802500000	31,000

Accessories

Mounting plates

Painted sheet steel 2.03 mm, similar to RAL 2000 or stainless steel

Type	Sheet steel Cat. No.	Stainless steel Cat. No.	Weight (Sheet steel) g
MP TB 10	9513370000	9513320000	243
MP TB 11	9513380000	9513330000	926
MP TB 12	9513390000	9513340000	2,037
MP TB 12a	9518190000	9518180000	2,038
MP TB 13	9513400000	9513350000	5,038
MP TB 14	9513410000	9513360000	7,242

Stand-off pillars M6 (set with 2 pieces)

Type	Cat. No.	Length in mm
SP 15	3896100000	15
SP 20	3896200000	20
SP 30	3896300000	30

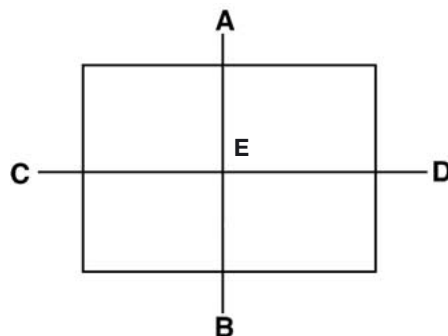
Lock

Type	Cat. No.	
Padlock	9526410000	Brass with 2 keys

Screwdriver

Type	Cat. No.	
Hexagonal head 10mm	9008940000	SSI (VDE)
Hexagonal head 10mm	9009070000	SS

Enclosure side identification



A = Top
 B = Bottom
 C = Left
 D = Right
 E = Base



STB Range
Small Sheet steel enclosures



STB Range

Small Sheet steel enclosures

Enclosures from the STB range are typically used as distribution boards and throughout building automation. We recommend the stainless steel versions from this range for the chemical and food industries, due to high demands placed in these fields.

Features:

- 8 sizes with in two material designs
- Lid with 4 hexagonal M 6 slotted-head screws
- Earth studs
- Fixing lugs

Our assembly service can supply these enclosures preassembled with terminals and cable glands according to customer requirements.

Technical data	
Material	Sheet steel 1.5 mm Stainless steel 1.4404 1.5 mm
Finish	Painted Light grey, semi gloss textured, similar to RAL7032 Stainless steel Polished, chemically dipped
Gasket	Sizes 1-4: chloroprene Sizes 5-6: silicon HT800
Lid fixing	4 captive hexagonal head, slotted M 6 screws
Earthing	M 6 earth studs made of brass
Enclosure mounting	External brackets with 8 mm drillings
Equipment mounting	TAS 20 rail welded to enclosure base
Protection class	IP 66
Impact resistance	7 J
Temperature range	-20°C to + 85°C

Special versions	
Finish	Special colours according to customer requirements
Equipment	Assembled according to customer requirements with terminals and cable glands Openings without threads according to customer requirements
Sizes	Special sizes according to customer requirements

Approvals	
ATEX	KEMA00ATEX8500 X

Ordering information

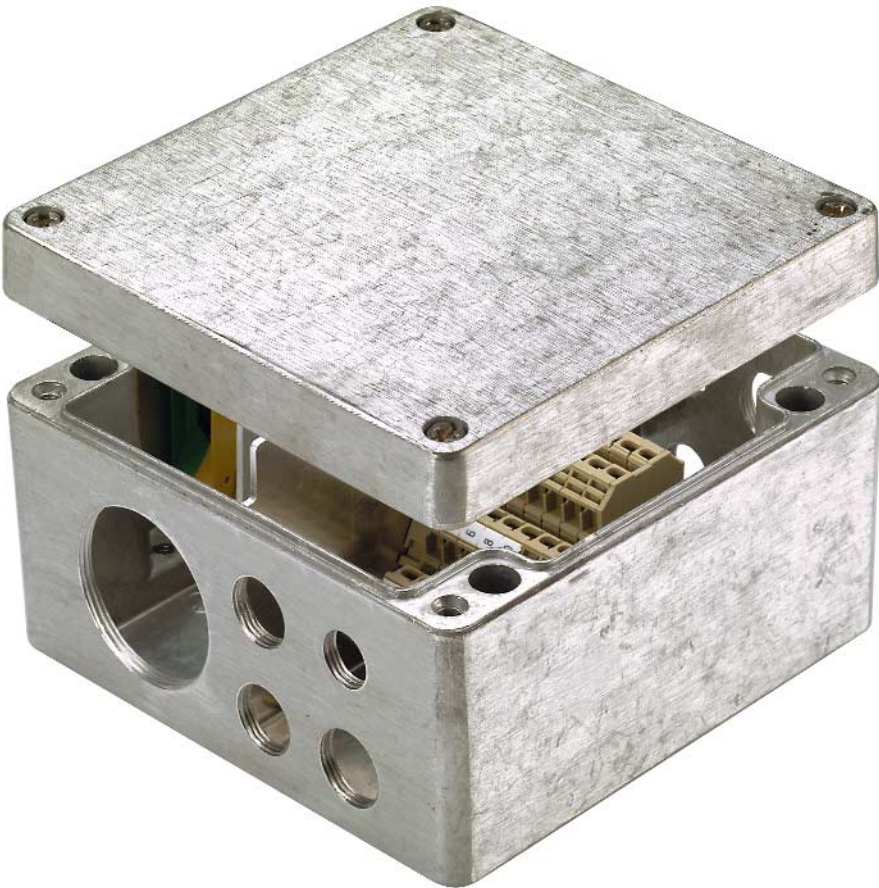
Type	Length x Width x Depth mm	Interior height mm	RAL 7032		Stainless steel		Weight (Stainl. steel) g
			Cat. No.	Cat. No.	Cat. No.	Cat. No.	
STB 1	120 x 120 x 80	76	3873100000	3873300000			1,400
STB 1.1	150 x 120 x 80	76	9524770000	9524780000			1,550
STB 2	150 x 150 x 90	86	3873500000	3873700000			1,900
STB 2.1	190 x 150 x 90	86	9524790000	9524800000			1,960
STB 3	190 x 190 x 100	96	9513870000	9513890000			3,000
STB 4	250 x 250 x 120	116	9513900000	9513920000			3,700
STB 5	160 x 380 x 120	116	9505260000	9505300000			3,700
STB 6	250 x 400 x 130	126	9505270000	9505310000			5,400

Accessories

Lock nuts		
	Type	Cat. No.
Sliding fixing nut M5 with screw for TS 32 and TS 35	SFNS 5	0433500000
Sliding fixing nut M5 with screw for for TS 15	SFNS 4	0500000000
Sliding fixing nut M3 with screw for terminal strips	SFNS 3	3875100000
M 6 earthing rod nut, brass	M6	9502700000

See appendix, page 78

K Range
Aluminium enclosures



K Range

Aluminium enclosures

K Range enclosures offer a high resistance against environmental influences in industry and transportation. They offer numerous options for applications, for example, for assembling terminals, switches, power supplies, operating and display elements and electronics.

Features:

- 22 sizes in 2 designs
- Lid with stainless steel screws
- Earthing screw inside
- Mounting holes outside of sealed area
- Mounting thread for mounting rails and mounting plates

Our assembly service can supply these enclosures preassembled with terminals and cable glands according to customer requirements.

Technical data		
Material	High quality aluminum alloy (Al-Si12)	
Finish	Smooth untreated	
	Silver grey semi gloss textured similar to RAL 7001, 40µm	
Paint thickness		
Gasket	Neoprene	
Lid fixing	K0, K01, K02, K1, K11; K2, K21, K3, K31, K32, K4	Stainless steel-(+/-)-screws M 4
Earthing (internal)	K0, K01, K02, K1, K2, K11, K21, K3, K31, K32	Earthing screw M4
	K4, K5, K6, K7, K8	Earthing screw M5
	K41, K51, K52, K61, K71, K72, K81	Earthing screw M6
Enclosure mounting	K0, K01, K02, K1, K11, K2, K21, K3, K31, K32	Holes M4
	K4	Holes M5
	K41, K5, K51, K52, K6, K61, K7, K71, K72, K8, K81	Holes M6
Equipment mounting	K0, K01, K02, K1, K2, K3	2 threaded holes M3
	K11, K21, K31, K32	2 threaded holes M4
	K4, K5, K6, K7, K8	2 threaded holes M5
	K41, K51, K52, K61, K71, K72, K81	M6 threaded holes
Protection class	IP 66 and IP 67	
Impact resistance	7 J	
Temperature range	-30°C to +80°C	

Special versions	
Finish	Special colours according to customer requirements
Equipment	Assembled according to customer requirements with terminals and cable glands
	Drillings according to customer requirements
Gaskets	EPDM, Viton

Approvals	
ATEX	KEMA00ATEX8501 X

K Range

Ordering information

Type	Width x Length x Depth mm	Interior height mm	Untreated Cat. No.	RAL 7001 Cat. No.	Weight g
K 0	45 x 50 x 30	24	0573200000	9529090000	60
K 01	64 x 58 x 34	28.5	1565240000	9529100000	160
K 02	64 x 98 x 34	28.5	1565250000	9529110000	220
K 1	70 x 70 x 40.5	25	0342000000	9529120000	200
K 11	80 x 75 x 57	51	0573300000	9529130000	300
K 2	70 x 100 x 40.5	25	0342100000	9529140000	250
K 21	80 x 125 x 57	51	0573400000	9529150000	435
K 3	70 x 165 x 40.5	23.5	0342200000	9529160000	450
K 31	80 x 175 x 57	51	0573500000	9529170000	530
K 32	80 x 250 x 55	51	1565260000	9529180000	710
K 4	82 x 130 x 72	56 / 66.5*	0342300000	9529190000	684
K 41	120 x 122 x 81	73	1565270000	9529200000	940
K 5	130 x 170 x 90	82	0342400000	9529210000	1,500
K 51	120 x 220 x 81	73	1565280000	9529220000	1,410
K 52	160 x 160 x 91	74	1565290000	9529230000	1,410
K 6	160 x 200 x 100	66 / 82*	0342500000	9529240000	2,040
K 61	160 x 260 x 91	74	0573600000	9529250000	1,960
K 7	160 x 350 x 100	76 / 94*	0342600000	9529260000	2,741
K 71	230 x 280 x 111	94 / 103*	0573700000	9529270000	2,925
K 72	230 x 400 x 111	92 / 101*	1565300000	9529280000	4,870
K 8	160 x 585 x 100	81.5 / 91.5*	0351200000	9529290000	6,030
K 81	313 x 404 x 111	92 / 101*	0573800000	9529300000	6,310

* see dimensions diagrams

Accessories



Mounting plate 2.03-mm galvanized sheet steel			
Type	Cat. No.	Type	Cat. No.
MP K1	3072990000	MP K51	3073090000
MP K11	3073000000	MP K52	3073100000
MP K2	3073010000	MP K6	3073110000
MP K21	3073020000	MP K61	3073120000
MP K3	3073030000	MP K7	3073130000
MP K31	3073040000	MP K71	3073140000
MP K32	3073050000	MP K72	3073150000
MP K4	3073060000	MP K8	3073160000
MP K41	3073070000	MP K81	3073170000
MP K5	3073080000		

Enclosure types K0, K01 and K02 are designed for use without mounting plates

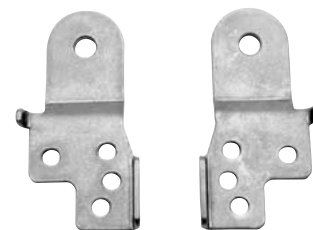
Earthing Rails				
Enclosure type	Horizontal Rails		Vertical Rails	
	Cat. No.	Pole	Cat. No.	Pole
K 41	9511200000	4	9511160000	2
K 5	9525010000	6	9525050000	2
K 51	9511210000	6	9511160000	2
K 52	9511220000	6	9511170000	4
K 6	9525020000	6	9511170000	4
K 61	9511230000	8	9511170000	4
K 7	9525030000	8	9511170000	4
K 71	9511190000	8	9525060000	6
K 72	9511270000	12	9525060000	6
K 8	9511190000	8	9511180000	6
K 81	9511270000	12	9511260000	8

Enclosures K0 to K4 are designed for use without earthing rails



Stand-off pillars M6 (Set with 2 pieces)			
Type	Cat. No.	Length in mm	
SP 15	3896100000	15	
SP 20	3896200000	20	
SP 30	3896300000	30	

See appendix Page 82



Exterior fixing lugs (stainless steel, set with 4 pieces)			
Type	Cat. No.	available for Enclosures	
MF set	9529080000	K4, K5, K6, K7, K8	
MF set	9527590000	K41, K51, K61, K71, K72, K81	

Enclosures K 01, K 02, K 1, K 11, K 2, K 21, K 3, K 31, K 32 are not intended for use with fixing lugs.

K Range

Accessories



External hinges

The hinges can be delivered separately or assembled. The protection class is retained when correctly mounted. The hinges allow the lids to be opened up to 185°. A hinge set is composed of an enclosure hinge, drillings and mounting template, O-rings and appropriate screws.

Type	Material	Cat. No.
Hinge set	Die-cast aluminium	1580360000

Enclosure type	Number of hinges	
	A + B	C + D
K 11	1	1
K 21	1	1
K 31	1	1
K 32	1	1
K 4	1	1
K 41	1	1
K 5	1	1
K 51	2	1
K 52	1	1
K 6	2	1
K 61	2	1
K 7	2	1
K 71	2	2
K 72	2	2
K 8	2	1
K 81	2	2

Enclosures K0, K01, K02, K1, K2, and K3 are not intended for use with hinges.

**POK Range
Polyester enclosures**



POK Range

Polyester enclosures

The POK Range of glass fibre reinforced polyester enclosures are a high quality, reasonably priced solution for electrical connections. The enclosures are suitable for applications where corrosion resistance and impact resistance as well as a high protection class are required.

Features:

- 17 sizes
- Lid with stainless steel screws
- Mounting holes outside of sealed areas
- Mounting thread for mounting rails and mounting plates

Our assembly service can supply these enclosures preassembled with terminals and cable glands according to customer requirements.

Technical data		
Material	Glass-fibre reinforced polyester (plastic fibres in accordance with DIN 16913)	
Finish	Natural grey, similar RAL 7001	
Gasket	Chloroprene + Polyurethane	
Lid fixing	POK 1.2.3.31.32	4 stainless steel-(+/-)- head screws M4
	POK 4-12	4 Stainless steel-(+/-)- head screws M6
Enclosure mounting	POK 1.2.3.31.32	4 holes M4
	POK 4-12	4 holes M6
Protection class	IP 66	
Impact resistance	7 J	
Temperature range	-40 °C to +90 °C	
Surface resistance	> 10 ¹² Ohm	
Flammability	UL94 V-0	
Toxicity	Halogen and cadmium free	

Special versions	
EMC	Shielded for applications that require electromagnetic compatibility
Equipment	Assembled according to customer requirements with terminals and cable glands

Approvals	
ATEX	on request

POK Range

Ordering information

Type	Length x Width x Depth mm	Interior height mm	Cat. No.	Weight g
POK 1	75 x 80 x 55	46	1277200000	230
POK 2	75 x 110 x 55	46	1277300000	295
POK 3	75 x 160 x 55	46	1277400000	405
POK 31	75 x 190 x 55	46	1565400000	450
POK 32	75 x 230 x 55	46	9510510000	575
POK 4	120 x 122 x 90	80	1277500000	750
POK 5	120 x 220 x 90	80	1277600000	1,060
POK 51	160 x 160 x 90	80	1565410000	1,290
POK 6	160 x 260 x 90	80	1277700000	1,710
POK 7	160 x 360 x 90	80	1277800000	2,150
POK 71	160 x 560 x 90	80	9510520000	3,185
POK 8	250 x 255 x 120	109	1565420000	2,650
POK 9	250 x 400 x 120	109	1565430000	3,650
POK 91	250 x 600 x 120	109	9510470000	5,235
POK 10	405 x 400 x 120	109	1565440000	5,580
POK 11	250 x 255 x 160	149	9510530000	3,275
POK 12	250 x 400 x 160	149	9510540000	4,800

Accessories



Mounting plate 2.03 mm galvanized sheet steel

Enclosure Types	Cat. No.	Enclosure Types	Cat. No.
POK 1	9510570000	POK7	9510630000
POK 2	9510580000	POK71	9510710000
POK 3	9510680000	POK8	9510640000
POK 31	9510690000	POK9	9510650000
POK 32	9510700000	POK91	9510660000
POK 4	9510590000	POK10	9510670000
POK 5	9510600000	POK11	9510640000
POK 51	9510610000	POK12	9510650000
POK 6	9510620000		

Earthing rails

Enclosure Types	Horizontal Rails		Vertical Rails	
	Cat. No.	Pole	Cat. No.	Pole
POK 4	9511200000	4	9511160000	2
POK 5	9511210000	6	9511160000	2
POK 51	9511220000	6	9511170000	4
POK 6	9511230000	8	9511170000	4
POK 7	9511240000	8	9511170000	4
POK 71	9511250000	8	9511170000	4
POK 8	9511260000	8	9511180000	6
POK 9	9511270000	12	9511180000	6
POK 91	9511280000	12	9511180000	6
POK 10	9511270000	12	9511190000	6
POK 11	9511260000	8	9511180000	6
POK 12	9511270000	12	9511180000	6

Enclosures POK1 to POK32 are not intended for use with earthing rails



Stand-off pillars M6 (set with 2 pieces)

Type	Cat. No.	Length in mm
SP 15	3896100000	15
SP 20	3896200000	20
SP 30	3896300000	30

POK Range

Accessories



External hinges

The hinges can be delivered separately or assembled. The protection class is retained when correctly mounted. The hinges allow the lids to be opened up to 185°. A hinge set is composed of an enclosure hinge, drillings and mounting template, O-rings and appropriate screws.

Type	Material	Cat. No.
Hinge set	Die-cast aluminium	1580360000

Enclosure type	Number of Hinges	
	A + B	C + D
POK 1	1	1
POK 2	1	1
POK 3	1	1
POK 31	1	1
POK 32	2	1
POK 4	2	1
POK 5	2	1
POK 51	2	2
POK 6	2	2
POK 7	2	2
POK 71	2	2
POK 8	2	2
POK 9	2	2
POK 91	2	2
POK 10	2	2
POK 11	2	2
POK 12	2	2

TBF Range
Polyester enclosures



TBF Range

Polyester enclosures

The enclosure range, with the TBFP variant, are manufactured from extremely robust glass-fibre reinforced polyester. They are ideal enclosures for applications where both low weight and at the same time high impact resistance are required.

The weather-resistant enclosures TBF/TBFP are suitable for a wide spectrum of applications. Together with the extensive range of accessories, they provide a universal solution for accommodating built-in components such as controlling devices, measuring instruments, valves and other such devices.

Features:

- 9 sizes in 2 designs
- Lid with nylon screws
- Mounting holes outside of sealed areas
- Mounting thread for mounting rails and mounting plates
- Extensive range of accessories

Our assembly service can supply these enclosures preassembled with terminals and cable glands according to customer requirements.

Technical data	
Material	TBF 1-7 Enclosures and lids made from glass-fibre reinforced polyester (GRP)
	TBFP 1-7 base made from glass-fibre reinforced polyester (GRP), lid from polycarbonate (PC)
Finish	Grey, similar to RAL 7036
Gasket	Polyurethane
Lid fixing	4 or 6 captive slotted/recessed head nylon screws
Equipment mounting	4 or 6 clamping screw M4
Protection class	TBF 1-7 IP 67
	TBFP 1-7 IP 66
Impact resistance	TBF 2-7 4 J
	TBFP 2-7 7 J
Temperature range	TBF -50 °C to + 150 °C
	TBFP -50 °C to +130 °C
Flammability	GRP UL 94 HB
	PC V2
Toxicity	Halogen free

Additional features	
Hinges	Reduction of protection class possible!
Extension frames	Reduction of protection class possible!
External brackets	

Special versions	
Equipment	Available assembled according to customer requirements with terminals, cable glands, earthing plates, earthing rods, display windows, lid hinges and locks.

Approvals	
Ex	BAS Ex 92C3393X

TBF Range

Ordering information

Type	Length x Width x Depth mm	Interior height mm	Grey lid Cat. No.	Transparent lid Cat. No.	Weight g
TBF 19/15/14	186 x 151 x 139	85	0360100000		1,055
TBF 19/15/14	186 x 151 x 139	85		0500500000	810
TBF 30/19/18	302 x 186 x 175	130	0360200000		1,750
TBF 30/19/18	302 x 186 x 175	130		0500600000	1,410
TBF 30/30/18	302 x 302 x 175	130	0360300000		2,270
TBF 30/30/18	302 x 302 x 175	130		0500700000	1,970
TBF 37/30/18	372 x 302 x 175	130	0360400000		2,900
TBF 37/30/18	372 x 302 x 175	130		0500800000	2,370
TBF 49/30/18	488 x 302 x 175	130	9502800000		3,760
TBF 49/30/21	488 x 302 x 210	160		9502840000	3,260
TBF 56/30/18	558 x 302 x 175	130	9502810000		3,970
TBF 56/30/21	558 x 302 x 210	160		9502850000	3,500
TBF 60/30/18	603 x 302 x 175	130	0360500000		4,380
TBF 60/30/21	603 x 302 x 210	160		0500900000	3,900
TBF 60/37/18	603 x 372 x 175	130	9502820000		5,350
TBF 60/37/21	603 x 372 x 210	160		9502860000	4,880
TBF 60/60/18	603 x 603 x 175	130	9502830000		7,400
TBF 60/60/21	603 x 603 x 210	160		9502870000	6,900

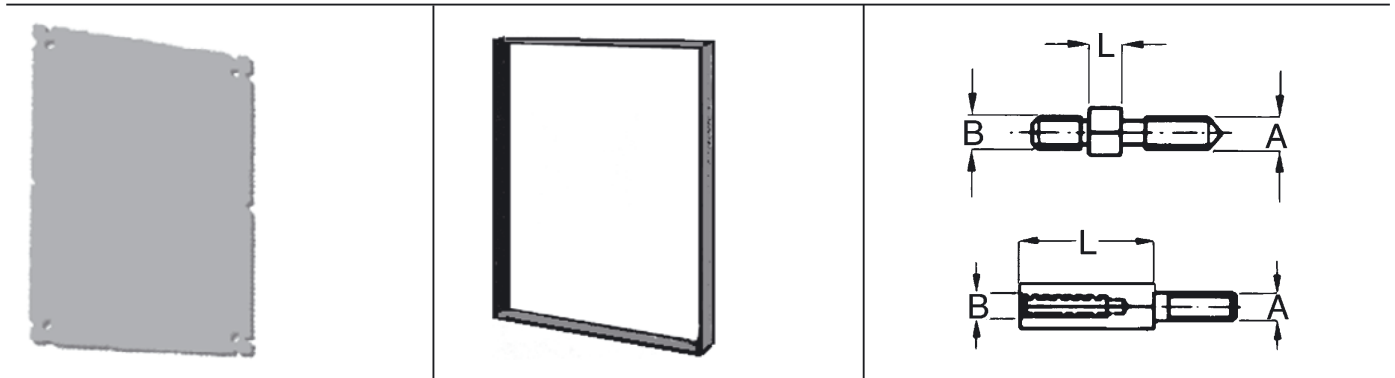
Accessories

Mounting plates

Zinc coated mild steel

Extension frames (glass-fibre reinforced polyamide PA66)

Stand-off pillars



Type	Thickness (mm)	Cat. No.	Type	Depth	Cat. No.	Length	Ø A & B	Cat. No.	VPE
MP TBF 19/15	2	9502720000	EF TBF 19/15	35	9502930000	6	M4	9503150000	100
MP TBF 30/19	2	3018950000	EF TBF 30/19	35	9502940000	10	M4	9503160000	50
MP TBF 30/30	2	9502730000	EF TBF 30/30	35	9502950000	15	M4	9503170000	50
MP TBF 37/30	2	9502740000	EF TBF 37/30	35	9502960000	20	M4	9503180000	50
MP TBF 49/30	2	9500960000	EF TBF 56/30	60	9502980000	25	M4	9503190000	50
MP TBF 56/30	2	9500950000	EF TBF 60/30	60	9502990000	30	M4	9500910000	50
MP TBF 60/30	2	9502750000	EF TBF 60/37	60	9503000000	60	M4	9500920000	50
MP TBF 60/37	2	9502910000	EF TBF 60/60	60	9503010000	97	M4	9500930000	50
MP TBF 60/60	2	9502920000				102	M4	9500940000	50

TBF Range

Accessories

Earth continuity plates, brass 3mm

Earth continuity plates must be connected to the internal earth point of the enclosure.

Type	Page	Cat. No.	Weight	Page	Cat. No.	Weight
EP TBF 19/15	C & D	3877300000	0.234	A & B	3877200000	0.181
EP TBF 30/19	C & D	3877500000	0.644	A & B	3877400000	0.335
EP TBF 30/30	C & D	3877500000	0.644	A & B	3877500000	0.644
EP TBF 37/30	C & D	3877600000	0.827	A & B	3877500000	0.644
EP TBF 49/30	C & D	9507390000	1.127	A & B	3877500000	06.44
EP TBF 56/30	C & D	(2x) 9507700000	0.619	A & B	3877500000	0.644
EP TBF 60/30	C & D	(2x) 3877500000	0.644	A & B	3877500000	0.644
EP TBF 60/37	C & D	(2x) 3877500000	0.644	A & B	3877600000	0.827
EP TBF 60/60	C & D	(2x) 3877500000	0.644	A & B	(2x) 3877500000	0.644

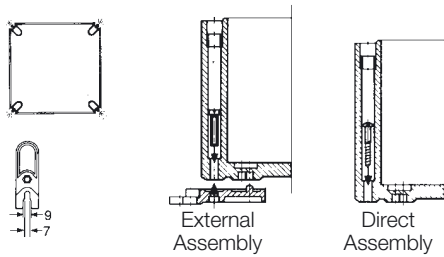
Earth studs

Type	Cat. No.	Weight (g)	Type	Cat. No.	Weight (g)
M6 Brass	9502700000	18.6	M6 Stainless steel	9505240000	19.9
M10 Brass	9502710000	87.9	M10 Stainless steel	9500870000	85.9

External brackets

Type	Cat. No.
4 pieces per set made of glass-fibre reinforced polyamide	0360800000

Direct mounting using the four corner holes of the enclosure. If a mounting frame is used, the wall brackets must be mounted before the frame.
Maximum permissible equipment weight: 150 kg



MPC Range
Small to medium sized
polycarbonate enclosures



MPC Range

Small to medium sized polycarbonate enclosures

The MPC range of polycarbonate enclosures is particularly suitable for the installation of electrical, electromechanical, and pneumatic devices as well as PCBs. The enclosures are suitable for use in mechanical and chemical applications in demanding environments.

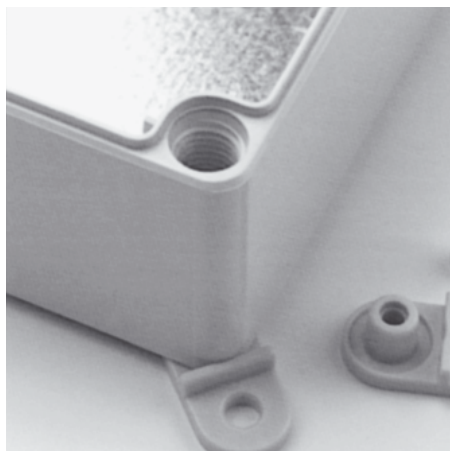
Features:

- 9 sizes in 2 designs
- Grey or transparent lid
- Lid with sealing holes
- Mounting holes outside of sealed areas
- Mounting thread for mounting rails and mounting plates
- Extensive range of accessories

Our assembly service can supply these enclosures preassembled with terminals and cable glands according to customer requirements.

Technical data	
Material	Polycarbonate
Lid	Transparent or grey
Finish	Grey, similar to RAL 7035
Gasket	Polyurethane foam
Lid fixing	4 recessed screws (polyamide)
Enclosure mounting	4 Holes Ø 4.5 or external fixing lugs (accessories)
Equipment mounting	Self tapping screws
Protection class	IP 66 and IP 67
Temperature range	-50°C to +130°C

Approvals	
ATEX	on request



MPC Range

Ordering information

Type	Length x Width x Depth mm	Interior height mm	Grey lid Cat. No.	Transparent lid Cat. No.	Weight g
MPC 07/12/07	75 x 125 x 75	60.5	9535170000	9535180000	209
MPC 07/12/12	75 x 125 x 125	110.5	9535210000	9535220000	300
MPC 12/12/07	125 x 125 x 75	60.5	9535230000	9535240000	283
MPC 12/17/07	125 x 175 x 75	60.5	9535290000	9535300000	381
MPC 12/17/10	125 x 175 x 100	85.5	9535310000	9535320000	465
MPC 12/17/12	125 x 175 x 125	110.5	9535330000	9535340000	530
MPC 17/17/07	175 x 175 x 75	60.5	9535370000	9535380000	461
MPC 17/17/15	175 x 175 x 150	135.5	9535430000	9535440000	717
MPC 17/25/10	175 x 250 x 100	85.5	9535470000	9535480000	743

Accessories

Mounting plates made of galvanized sheet steel

Type	Cat. No.
MP MPC 07/12	9533540000
MP MPC 12/12	9535550000
MP MPC 12/17	9535560000
MP MPC 17/17	9535570000
MP MPC 17/25	9535580000

Hinge set

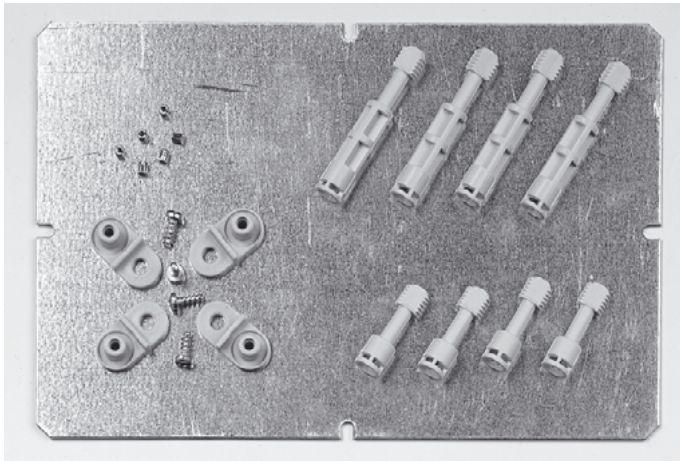
Type	Cat. No.
HG MPC	9535590000

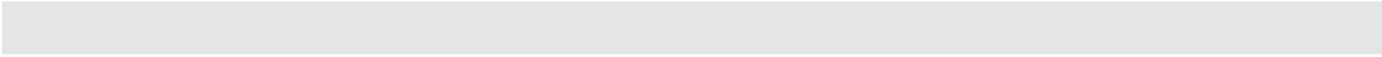
Fixing lugs (set with 4 pieces)

Type	Cat. No.
MF MPC	9535600000

Mounting screws

Type	Cat. No.
SC MPC	9535640000





FPC Range
Medium sized polycarbonate enclosures



FPC Range

Medium sized polycarbonate enclosures

The design of the FPC range of enclosures is based on the MPC range.

The FPC range of enclosures has the same material characteristics as the Mpc range plus a more extensive assortment of accessories; thus increasing the amount of applications.

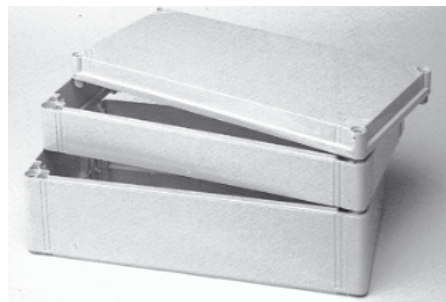
Features:

- 6 sizes in 2 designs
- Grey or transparent lid
- Lid with sealing holes
- Mounting holes outside of sealed areas
- Mounting thread for mounting rails and mounting plates
- Extensive range of accessories

Our assembly service can supply these enclosures preassembled with terminals and cable glands according to customer requirements.

Technical data	
Material	Polycarbonate
Lid	Transparent or grey
Finish	Grey, similar to RAL 7035
Gasket	Polyurethane foam
Lid fixing	4 recessed screws (polyamide)
Enclosure mounting	4 Holes Ø 7.5 or external fixing lugs (Accessories)
Equipment mounting	Self tapping screws
Protection class	IP 66 and IP 67
Temperature range	-50 °C to +130 °C

Approvals	
ATEX	on request



FPC Range

Ordering information

Type	Length x Width x Depth mm	Interior height mm	Grey lid Cat. No.	Transparent lid Cat. No.	Weight g
FPC 20/20/13	200 x 200 x 130	115	9535690000	9535680000	1,039
FPC 20/30/13	200 x 300 x 130	115	9535710000	9535700000	1,349
FPC 20/40/13	200 x 400 x 130	115	9535730000	9535720000	1,674
FPC 30/30/13	300 x 300 x 130	115	9535750000	9535740000	1,738
FPC 30/40/13	300 x 400 x 130	115	9535770000	9535760000	2,199
FPC 40/60/13	400 x 600 x 130	115	9535810000	9535820000	3,964

Accessories

Mounting plates made of galvanized sheet steel

Type	Cat. No.
MP FPC 20/20	9535920000
MP FPC 20/30	9535930000
MP FPC 20/40	9535940000
MP FPC 30/30	9535950000
MP FPC 30/40	9535960000
MP FPC 40/60	9535980000

Extension frames

Type	Cat. No.	
EF FPC 20/20	9535850000	55 mm hoch
EF FPC 20/30	9535860000	55 mm hoch
EF FPC 20/40	9535870000	55 mm hoch
EF FPC 30/30	9535880000	55 mm hoch
EF FPC 30/40	9535890000	55 mm hoch
EF FPC 40/60	9535910000	55 mm hoch

Hinge set

Type	Cat. No.
HG FPC	9535990000

Fixing lugs (set with 4 pieces)

Type	Cat. No.
MF FPC	9536040000

Display window

Type	Cat. No.	
WK FPC 2	9536080000	67 mm x 59 mm
WK FPC 4	9536090000	67 mm x 94 mm
WK FPC 6	9536100000	67 mm x 130 mm
WK FPC 8	9536110000	67 mm x 163 mm
WK FPC 10	9536120000	67 mm x 200 mm

GPS Range
Polystyrene enclosures



GPS Range Polystyrene enclosures

The GPS range of enclosures is the universal and reasonably priced solution for indoor applications.

Features:

- 9 sizes in 4 designs
- Grey or transparent lid
- Sides with or without openings
- Lid with sealing holes
- Mounting holes outside of sealed areas

Our assembly service can supply these enclosures preassembled with terminals and cable glands according to customer requirements.

Technical data	
Material	Polystyrene
Finish	Grey, similar to RAL 7035
Gasket	Polyurethane
Lid	Grey: polystyrene Transparent: polycarbonate
Lid fixing	4 recessed screws made from polyamide
Enclosure mounting	4 holes or via external lugs (accessories)
Equipment mounting	Self tapping screws (accessories)
Protection class	IP66
Max. Temperature range	-40 °C to 70 °C
Flammability	V - 2 according to UL94

Approvals	
ATEX	on request

GPS Range

Ordering information

Type	Length x Width x Depth mm	Interior height mm	With knockout		Without knockout	
			Grey Cat. No.	Transparent Cat. No.	Grey Cat. No.	Transparent Cat. No.
GPS 07/07/06	65 x 65 x 57	45	9917590000	1785410000	9917580000	1785500000
GPS 09/07/06	94 x 65 x 57	45	9917600000	1785420000	9917610000	1785510000
GPS 11/11/07	110 x 110 x 66	53	9917630000	1785430000	9917640000	1785520000
GPS 11/11/09	110 x 110 x 90	77	9917650000	1785440000	1789310000	1785530000
GPS 13/09/06	130 x 94 x 57	45	9917660000	1785450000	9917670000	1785540000
GPS 13/13/08	130 x 130 x 75	63	9917680000	1785460000	1789320000	1785550000
GPS 18/11/09	180 x 110 x 90	75	9917690000	1785470000	9917700000	1785560000
GPS 25/18/09	254 x 180 x 90	75	9917740000	1785480000	9917750000	1785570000
GPS 36/25/11	360 x 254 x 111	97	1789330000	1785490000	9917770000	1785580000

Accessories

Mounting plates

Type	Cat. No.
MP GPS 07/07	1789340000
MP GPS 09/07	1789350000
MP GPS 11/11	1789360000
MP GPS 13/09	1789370000
MP GPS 13/13	1789380000
MP GPS 18/11	1789390000
MP GPS 25/18	1789400000
MP GPS 36/25	1789410000

Mounting screws

Type	Cat. No.
SC GPS	9917800000

Spacer between enclosure base and side (set with 4 pieces)

Type	Cat. No.
SP GPS	9917810000

Fixing lugs (set with 4 pieces)

Type	Cat. No.
MF GPS	9917820000

Hinge set

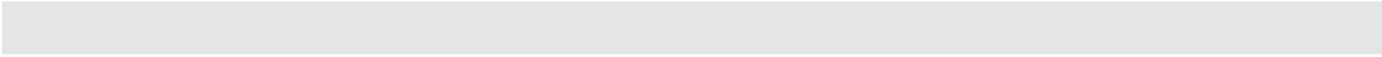
Type	Cat. No.
HG GPS small (to GPS 13/15/08)	9917830000
HG GPS large (from GPS 18/11/09)	9917840000



Hinge set



Stand-off pillars



Cable glands



Cable glands

The European Technical Standard DIN EN 50 262

Metric cable glands for electric installations - the end of the PG-Cable glands threads.

- The technical standards "Cable Glands for cables and conductors with PG standard threads" DIN 46320 (P1 - P4), DIN 46255, DIN 46259, DIN 46319 and DIN VDE 0619 became invalid on the 31 December 1999.
- Cable glands with PG threads are no longer standard.
- The design approvals granted in accordance with DIN VDE 0619: 1987 – 09 remained valid until 31.3.2001.
- The European Standard "Metric Cable Glands for Electrical Installations" EN 50 262 became valid on 1.4.1999.
- The EN Standard EN 50 262 is mandatory in all member countries of the European Union (EU) and associated countries collaborating with CENELEC (European Committee For Electrotechnical Standardization) who adopt the standard.
- That means that only metric cable glands are permitted to be used in new constructions as of 1.3.2001 in those countries described above.

We offer cable glands as a well balanced assortment for different applications.


- Cable glands made from plastic and brass
- EMC cable glands
- For hazardous areas in accordance with EN 50014, EN 50019 and ATEX
- VDE, CSA and UL approved

Cable entries, for example for enclosures or heavy duty connectors can be easily and reliably installed.

DIN 40050 protection classes:

- IP 54** Protection against dust accumulation as well as protection against water splash
- IP 65** Protection against dust inflow as well as protection against hose water
- IP 66** Protection against dust inflow as well as protection in the case of overflowing
- IP 68** Protection against dust inflow as well as protection when submerging
- IP 69** Protection against water under pressure

Labelling of explosion protected electric equipment according to 'old' Ex approvals.


Name of manufacturer or logo	Type designation from manufacturer	Examination certificate number of EU test site	Symbol for electrical equipment certified by EU test site	Conformity to european standards certified	Risk of explosion	Abbreviation of protection classes used	Group of electrical devices
	16		 ATEX	E	Ex	e i	II

Cable glands

Labeling of devices and protection systems according ATEX

The following information must be clearly and permanently readable on every device and protection system:

Example:

Name of manufacturer or logo	Type/size designation from manufacturer	Number of EU-type-examination test certificate EU test site	Symbol of protection from explosion	Symbol of device group and category	Conformity to european standards certified	Risk of explosion	Abbreviation of applied type of protection classes	Device group
				II 2 G	E	EX	e ia	II

Cable glands with metric connection thread

With the taking of effect of European standard EN 50 262 – metric cable glands for electric installation – the Europe-wide introduction of the metric ISO fine thread in cable glands took place on 01.01.2000.

The EN 60 423 standard lists the individual thread sizes. The previously-known thread sizes PG 7 to PG 48 (10 sizes) were replaced by the metric sizes M 12 to M 63 (8 sizes). This catalogue contains a large selection of metric cable glands Ex cables and cable entries for use in hazardous areas.

Cable glands

Cable glands

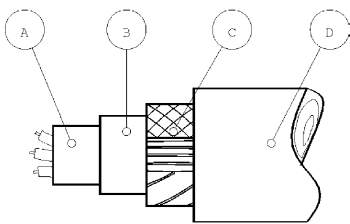
Criteria for the selection of cable glands Type ADE

- Define the installation area, in which you want to use the glands
- Define the cable types to determine the requested functions
- Check the dimensions of the outer cable sheath
- Check the size and type of reinforcement
- Check the dimensions of the inner cable sheath
- Check the dimensions of the lead sheath
- Determine the environmental condition
- Check the accessories

Installation instructions for endangered areas in accordance with the Standards CENELEC EN 50014 - 50018 - 50019

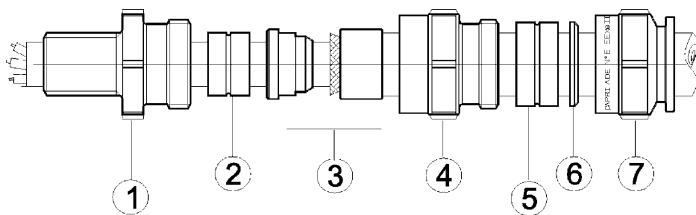
- Increased safety to Standard EN 50019; direct thread insertion into the enclosure or with a lock nut. Unused insertions have to be closed with a certified stopping plug.
- Flame protected in accordance with EN 50018; direct thread insertion into the enclosure with five full pitches (approx. 8 mm); Unused insertion have to be closed with a certified stopping plug.

Armoured cable



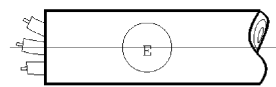
- A: Inner sheath
- B: Lead sheath
- C: Armouring (steel strip / SWA / braided)
- D: Outer sheath

Cable glands for armoured cable



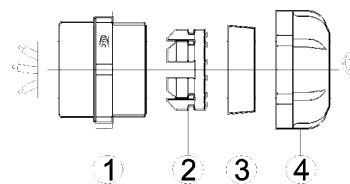
- 1: Gland
- 2: Sealing washer for inner cable sheath
- 3: Clamping module / Earthing of armouring
- 4: Base
- 5: Sealing washer for outer cable sheath
- 6: Washers
- 7: Union nut

Non-armoured cable

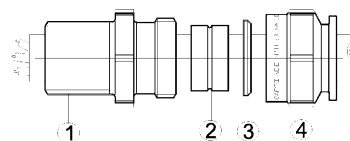


- E: Outer sheath

Cable glands for non-armoured cable



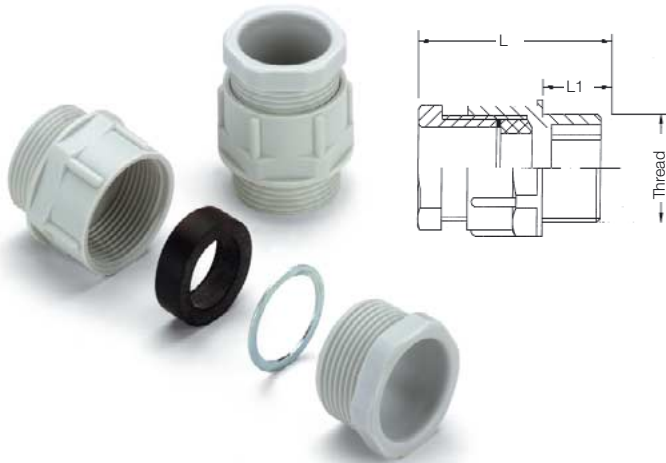
- 1: Gland
- 2: Clamping module
- 3: Sealing washer
- 4: Union nut



- 1: Gland
- 2: Sealing washer
- 3: Washer
- 4: Union nut

Cable glands

Plastic IP54



Reasonably priced cable glands IP 54

Technical data

Material:	Polyamide connection thread M Polystyrene connection thread PG
Sealing:	Soft rubber
Temperature:	-20°C ... +60°C
Protection class:	IP54 (with thread sealing ring type GWDR ...-PO = IP65)
Colour:	similar grey RAL 7035

Ordering data

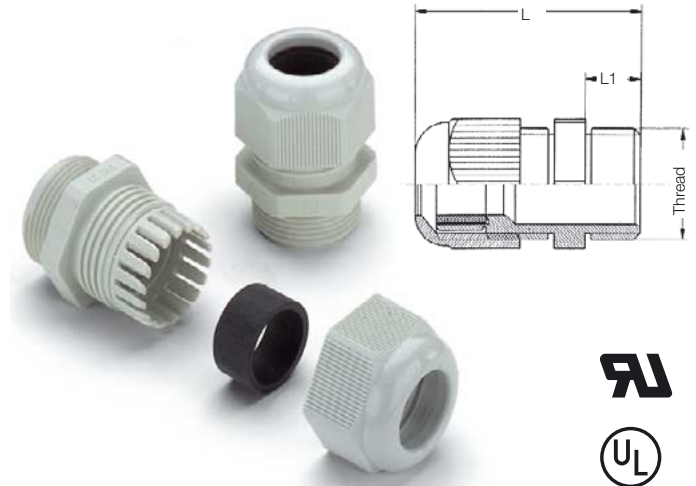
Type	Thread	Clamp range	L	L1	SW1/SW2	Qty.	Cat. No.
Metric gland plastic IP54							
VGM12-K54	M 12 x 1.5	6.0 - 8.0	32	11	19/16	50	1777080000
VGM16-K54	M 16 x 1.5	8.0 - 10.0	32	11	19/16	50	1777070000
VGM20-K54	M 20 x 1.5	8.0 - 10.0	35	11	22/19	50	1777050000
VGM25-K54	M 25 x 1.5	12.0 - 14.0	39	11	27/23	50	1777030000
VGM25-K54	M 25 x 1.5	15.0 - 17.0	39	11	27/23	50	1778830000
VGM32-K54	M 32 x 1.5	24.0 - 26.0	44.50	11	42/40	25	1777020000
VGM40-K54	M 40 x 1.5	28.0 - 30.0	44.50	11	42/40	25	1777010000
VGM50-K54	M 50 x 1.5	31.0 - 33.0	53	11	53/50	10	1776990000
VGM63-K54	M 63 x 1.5	45.0 - 47.0	58	11	65/60	10	1776980000

PG gland plastic IP54

VG 7-K54	PG 7	5.0 - 7.0	28	8	15/13	50	0521560000
VG 9-K54	PG 9	6.0 - 8.0	29	8	19/17	50	0261560000
VG 11-K54	PG 11	8.0 - 10.0	32	8	22/19	50	0260760000
VG 13.5-K54	PG 13.5	10.0 - 12.0	34	9	24/21	50	0260860000
VG 16-K54	PG 16	12.0 - 14.0	38	10	27/23	25	0261460000
VG 21-K54	PG 21	15.0 - 17.0	43.5	11	32/30	20	0260960000
VG 29-K54	PG 29	24.0 - 26.0	44.5	11	42/40	20	0261060000
VG 36-K54	PG 36	31.0 - 33.0	55	13	53/50	10	0497660000
VG 42-K54	PG 42	39.0 - 40.0	60	13	60/55	10	0497760000
VG 48-K54	PG 48	45.0 - 47.0	61	14	65/60	5	1718760000

all sizes in mm

Plastic IP68



Plastic cable glands IP68; VDE, CSA and UL tested; halogene-free.

EN 50262: metric



Technical data

Material:	Polyamide
Sealing:	Neoprene
Temperature:	-40°C ... +70°C (peak +100°C)
Protection class:	IP68 / 5 bar in the stated clamping range with GWDR
Colour:	similar grey RAL 7035

Ordering data

Type	Thread	Clamp range	L	L1	SW	Qty.	Cat. No.
Metric gland plastic Approval: VDE							
VG M 12 - K 68	M 12 x 1.5	3.0 - 6.5	31	8	15	50	1772280000
VG M 16 - K 68	M 16 x 1.5	5.0 - 10.0	35	10	22	50	1772290000
VG M 20 - K 68	M 20 x 1.5	6.0 - 12.0	43	10	24	50	1772300000
VG M 25 - K 68	M 25 x 1.5	13.0 - 18.0	48	10	33	25	1772310000
VG M 32 - K 68	M 32 x 1.5	18.0 - 25.0	61	15	42	20	1772320000
VG M 40 - K 68	M 40 x 1.5	22.0 - 32.0	72	15	53	20	1772330000
VG M 50 - K 68	M 50 x 1.5	30.0 - 38.0	74	18	60	10	1772340000
VG M 63 - K 68	M 63 x 1.5	34.0 - 44.0	75	18	65	5	1772350000

PG gland plastic

Type	Thread	Clamp range	L	L1	SW	Qty.	Cat. No.
Approval: VDE/UL							
VG 7-K68	PG 7	3.0 - 6.5	30.5	8.0	15	50	1568970000
VG 9-K68	PG 9	4.0 - 8.0	34	8.0	19	50	1568980000
VG 11-K68	PG 11	5.0 - 10.0	37	8.0	22	50	1568990000
VG 13.5-K68	PG 13.5	6.0 - 12.0	39	9.0	24	50	1569000000
VG 16-K68	PG 16	10.0 - 14.0	42.5	10.0	27	25	1569010000
VG 21-K68	PG 21	13.0 - 18.0	48	11.0	33	20	1569020000
VG 29-K68	PG 29	18.0 - 25.0	53	11.0	42	20	1569030000
VG 36-K68	PG 36	22.0 - 32.0	65	13.0	53	10	1569040000
VG 42-K68	PG 42	30.0 - 38.0	68	13.0	60	10	1569050000
VG 48-K68	PG 48	34.0 - 44.0	69	14.0	65	5	1718770000

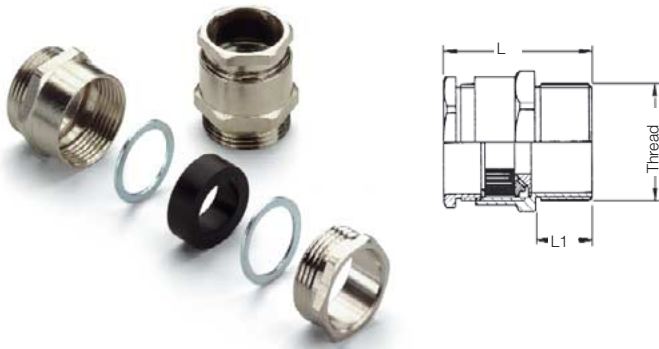
NPT gland plastic

Type	Thread	Clamp range	L	L1	SW	Qty.	Cat. No.
Approval: UL/CSA							
VG NPT 3/8" 5-10-K 68	NPT 3/8"	5.0 - 10.0	42	15	22	50	1772520000
VG NPT 1/2" 6-12-K 68	NPT 1/2"	6.0 - 12.0	42	15	24	50	1772550000
VG NPT 1/2" 10-14-K 68	NPT 1/2"	10.0 - 14.0	45	15	27	25	1772560000
VG NPT 3/4" 13-18-K 68	NPT 3/4"	13.0 - 18.0	46	15	33	20	1772590000
VG NPT 1" 18-25-K 68	NPT 1"	18.0 - 25.0	60	18	42	20	1772600000

all sizes in mm

Cable glands

Cable glands brass IP54



Brass cable gland with hexagon threaded glands

Technical data

Material:	Nickel plated brass
Sealing:	Soft rubber
Temperature:	-20°C ... +60°C
Protection class:	IP54 (with thread sealing ring Type GWDR ...-PO = IP65)

Ordering data

Type	Thread	Clamp range	L	L1	SW1/SW2	Qty.	Cat. No.
Metric gland brass IP 54, hexagonal							
VGM12-MS54	M 12 x 1.5	5.0 - 7.0	21.50	6	14/13	100	1778410000
VGM12-MS54	M 12 x 1.5	6.0 - 8.0	22	6	17/15	100	1778400000
VGM16-MS54	M 16 x 1.5	8.0 - 10.0	26	6	20/18	100	1778390000
VGM20-MS54	M 20 x 1.5	8.0 - 10.0	26.50	6.50	22/18	50	1778380000
VGM20-MS54	M 20 x 1.5	10.0 - 12.0	26.50	6.50	22/20	50	1778370000
VGM25-MS54	M 25 x 1.5	12.0 - 14.0	27.50	7	27/22	50	1778360000
VGM25-MS54	M 25 x 1.5	15.0 - 17.0	29.50	7	30/28	50	1778350000
VGM32-MS54	M 32 x 1.5	24.0 - 26.0	33	8	40/38	25	1778340000
VGM40-MS54	M 40 x 1.5	28.0 - 30.0	33	8	43/37	25	1778330000
VGM50-MS54	M 50 x 1.5	31.0 - 33.0	39	9	55/47	10	1778320000
VGM50-MS54	M 50 x 1.5	39.0 - 41.0	43	9	57/54	5	1778310000
VGM63-MS54	M 63 x 1.5	45.0 - 47.0	45	10	68/60	5	1778300000

PG gland brass IP 54, hexagonal

VG 7-MS54	PG 7	5.0 - 7.0	20.5	5	14/13	50	0521500000
VG 9-MS54	PG 9	6.0 - 8.0	22	6	17/15	50	0261500000
VG 11-MS54	PG 11	8.0 - 10.0	26	6	20/18	50	0260700000
VG 13.5-MS54	PG 13.5	10.0 - 12.0	26	6.5	22/20	50	0260800000
VG 16-MS54	PG 16	12.0 - 14.0	27	6.5	24/22	25	0261400000
VG 21-MS54	PG 21	15.0 - 17.0	29.5	7	30/28	20	0260900000
VG 29-MS54	PG 29	24.0 - 26.0	33	8	40/37	20	0261000000
VG 36-MS54	PG 36	33.0 - 35.0	39	9	50/47	10	0497600000
VG 42-MS54	PG 42	41.0 - 43.0	44	10	57/54	10	0497700000
VG 48-MS54	PG 48	45.0 - 47.0	45	10	64/60	5	1718780000

all sizes in mm

Cable glands brass IP68



Brass cable gland IP68 with strain relief.

Reduced clamping range on request.

Multiple seal insert on request.

Technical data

Material:	Nickel plated brass
Sealing:	Neoprene
Temperature:	-40°C ... +70°C (peak +100°C)
Protection class:	IP 68 / 5 bar with GWDR in the clamping area

Ordering data

Type	Thread	Clamp range	L	L1	SW	Qty.	Cat. No.
Metric gland brass							
VG M 12 - MS 68	M 12 x 1.5	3.0 - 6.5	24	5	14	50	1772200000
VG M 16 - MS 68	M 16 x 1.5	5.5 - 10.0	28	5.5	17	50	1772210000
VG M 20 - MS 68	M 20 x 1.5	8.0 - 13.0	32	6	22	50	1772220000
VG M 25 - MS 68	M 25 x 1.5	11.0 - 18.0	35	7	30	20	1772230000
VG M 32 - MS 68	M 32 x 1.5	15.0 - 21.0	39	8	34	20	1772240000
VG M 40 - MS 68	M 40 x 1.5	19.0 - 27.0	53	8	44	10	1772250000
VG M 50 - MS 68	M 50 x 1.5	26.0 - 35.0	55	9	55	10	1772260000
VG M 63 - MS 68	M 63 x 1.5	34.0 - 45.0	58	10	66	5	1772270000

PG gland brass IP 68

VG 7-MS68	PG 7	3.0 - 6.5	23	5	14	50	1569060000
VG 9-MS68	PG 9	4.0 - 10.0	27	6	17	50	1569070000
VG 11-MS68	PG 11	5.0 - 10.0	28.5	6	20	50	1569080000
VG 13.5-MS68	PG 13.5	6.0 - 12.0	29.5	6.5	22	50	1569090000
VG 16-MS68	PG 16	10.0 - 14.0	29.5	6.5	24	25	1569100000
VG 21-MS68	PG 21	13.0 - 18.0	33.5	7	30	20	1569110000
VG 29-MS68	PG 29	18.0 - 25.0	37.5	8	40	20	1569120000
VG 36-MS68	PG 36	22.0 - 32.0	45	9	50	10	1569130000
VG 42-MS68	PG 42	30.0 - 38.0	47.5	10	57	10	1569140000
VG 48-MS68	PG 48	34.0 - 44.0	50.5	10	64	5	1718790000

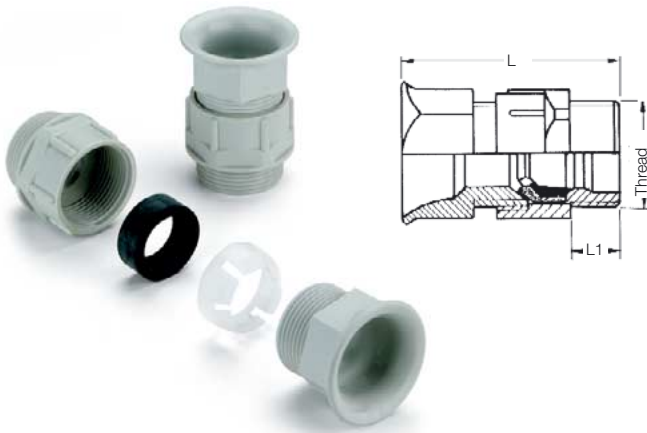
NPT gland brass

VG NPT 3/8" - MS 68	NPT 3/8"	4.0 - 8.0	36	15	17	50	1772370000
VG NPT 1/2" - MS 68	NPT 1/2"	6.0 - 12.0	36	13	22	50	1772380000
VG NPT 3/4" - MS 68	NPT 3/4"	13.0 - 18.0	39	13	30	20	1772390000

all sizes in mm

Cable glands

Plastic cable glands with bending protection



Cable gland with bending protection and internal strain relief. Clamping profile made of Hostaform C.

Cable glands brass with bending protection



Cable gland with bending protection and internal strain relief. Without external strain relief clamp. Clamping profile made of Hostaform C.

Technical data

Material:	Polyamide, glass fibre reinforced
Sealing:	Soft rubber
Temperature:	-10°C...+80°C
Protection class:	IP 65
Colour:	similar Grey RAL 7035

Ordering data

Type	Thread	Clamp range	L	L1	SW	Qty.	Cat. No.
Metric KV cable gland plastic bending protection							
VGM12-K65 BS	M 12 x 1.5	6.0 - 8.0	40	11	19	50	1778750000
VGM16-K65 BS	M 16 x 1.5	6.0 - 8.0	40	11	19	50	1778760000
VGM20-K65 BS	M 20 x 1.5	8.0 - 10.0	45	11	22	50	1778770000
VGM20-K65 BS	M 20 x 1.5	10.0 - 12.0	57	11	24	50	1778780000
VGM25-K65 BS	M 25 x 1.5	12.0 - 14.0	51	11	27	50	1778790000
VGM25-K65 BS	M 25 x 1.5	14.0 - 18.0	53	11	33	25	1778800000
VGM32-K65 BS	M 32 x 1.5	18.0 - 24.0	60	11	42	25	1778810000
PG-KV plastic bending protection							
VG 7-K65 BS	PG 7	4.0 - 6.0	36	8	15	50	1720400000
VG 9-K65 BS	PG 9	6.0 - 8.0	37	8	19	50	1720410000
VG 11-K65 BS	PG 11	8.0 - 10.0	42	8	22	50	1720420000
VG 13.5-K65 BS	PG 13.5	10.0 - 12.0	45	9	24	50	1720430000
VG 16-K65 BS	PG 16	12.0 - 14.0	50	10	27	25	1720440000
VG 21-K65 BS	PG 21	14.0 - 18.0	53	11	32	20	1720450000
VG 29-K65 BS	PG 29	18.0 - 24.0	60	11	42	20	1720460000

all sizes in mm

Technical data

Material:	Nickel plated brass
Sealing:	Soft rubber
Temperature:	-10°C...+80°C
Protection class:	IP 65

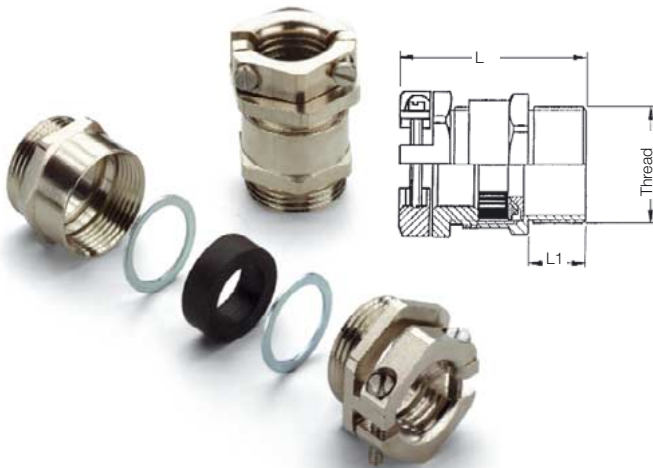
Ordering data

Type	Thread	Clamp range	L	L1	SW1/SW2	Qty.	Cat. No.
PG-KV cable gland Brass bending protection							
VG 9-MS65 BS	PG 9	6.0 - 8.0	35	6	19/15	50	1720340000
VG 11-MS65 BS	PG 11	8.0 - 10.0	35	6	22/19	50	1720350000
VG 13.5-MS65 BS	PG 13.5	10.0 - 12.0	36	6.5	24/20	50	1720360000
VG 16-MS65 BS	PG 16	12.0 - 14.0	40	7	27/30	25	1720370000
VG 21-MS65 BS	PG 21	14.0 - 18.0	44	7	32/34	20	1720380000
VG 29-MS65 BS	PG 29	18.0 - 24.0	50	8	41/46	20	1720390000

all sizes in mm

Cable glands

Cable glands brass IP54 with gripping jaw



With cantered strain relief

Cable glands brass for Ex-areas



For use in hazardous areas. These cable glands are tested for higher safety specifications with certified conformity to approvals LCIE 97ATEX6005X.
Variant for EMC applications are available.

Technical data

Material:	Nickel plated brass
Sealing:	Universal sealing ring neoprene
Temperature:	-30°C ... +90°C
Protection class:	IP54 (with thread sealing ring type GWDR ...-PO = IP65)

Ordering data

Type	Thread	Clamp range	L	L1	SW1/SW2	Qty.	Cat. No.
Metric gland brass IP 54, hexagonal							
VG M12-MS54ZE	M 12 x 1.5	5.0 - 7.0	21.50	6	14	100	1778420000
VG M12-MS54ZE	M 12 x 1.5	4.0 - 9.5	22	6	17	100	1778430000
VG M16-MS54ZE	M 16 x 1.5	4.0 - 9.5	26	6	18	100	1778440000
VG M20-MS54ZE	M 20 x 1.5	6.0 - 11.5	26.50	6.50	22	50	1778450000
VG M20-MS54ZE	M 20 x 1.5	6.0 - 13.5	26.50	6.50	22	50	1778460000
VG M25-MS54ZE	M 25 x 1.5	6.0 - 15.5	27.50	7	30	50	1778470000
VG M25-MS54ZE	M 25 x 1.5	9.0 - 21.5	29.50	7	30	50	1778480000
VG M32-MS54ZE	M 32 x 1.5	17.0 - 29.5	33	8	39	25	1778490000
VG M40-MS54ZE	M 40 x 1.5	17.0 - 29.5	33	8	43	25	1778500000
VG M50-MS54ZE	M 50 x 1.5	23.0 - 36.5	39	9	55	10	1778510000
VG M50-MS54ZE	M 50 x 1.5	29.0 - 42.5	43	9	57	5	1778520000
VG M63-MS54ZE	M 63 x 1.5	35.0 - 46.5	45	10	68	5	1778530000
PG gland brass IP 54, hexagonal							
VG 7-MS54-ZE	PG 7	5.0 - 7.0	27	5	14/16	50	1718800000
VG 9-MS54-ZE	PG 9	4.0 - 11.0	30.5	6	17/19	50	1718810000
VG 11-MS54-ZE	PG 11	6.0 - 13.0	31.5	6	20/22	50	1718820000
VG 13.5-MS54-ZE	PG 13.5	6.0 - 13.0	32	6.5	22/24	50	1718830000
VG 16-MS54-ZE	PG 16	6.0 - 16.0	33	6.5	24/27	25	1718840000
VG 21-MS54-ZE	PG 21	9.0 - 20.0	38	7	30/34	20	1718850000
VG 29-MS54-ZE	PG 29	17.0 - 28.0	43	8	40/42	20	1718860000
VG 36-MS54-ZE	PG 36	23.0 - 34.0	49.5	9	50/52	10	1718870000
VG 42-MS54-ZE	PG 42	29.0 - 40.0	53.5	10	57/62	10	1718880000
VG 48-MS54-ZE	PG 48	35.0 - 46.0	55	10	64/68	5	1718890000

all sizes in mm

Technical data

Material:	Nickel plated brass
Sealing:	Neoprene
Temperature:	-20°C ... +100°C
Protection class:	IP66 (with thread sealing ring Type GWDR ...-NP = IP68/20 bar) ATEX certification available

Ordering data

Type	Thread	Clamp range	L	L1	SW	Qty.	Cat. No.
Metric gland brass-KV for Eex-e							
VG M 16-Exe MS	M 16 x 1.5	7.0 - 11.0	28	8	22	50	1737210000
VG M 20-Exe MS	M 20 x 1.5	8.5 - 13.0	28	8	24	50	1737220000
VG M 25-Exe MS	M 25 x 1.5	13.5 - 18.0	33	9	30	25	1737230000
VG M 32-Exe MS	M 32 x 1.5	17.5 - 25.0	38	10	41	20	1737240000
VG M 40-Exe MS	M 40 x 1.5	24.5 - 33.5	49	11	52	10	1737250000
VG M 50-Exe MS	M 50 x 1.5	33.0 - 43.0	54	12	63	5	1737260000
VG M 63-Exe MS	M 63 x 1.5	43.5 - 55.0	60	13	77	5	1737270000
PG gland brass-KV for Eex-e							
VG 7-Exe MS	PG 7	4.0 - 8.0	24	7	18	50	1718990000
VG 9-Exe MS	PG 9	6.0 - 11.0	28	8	22	50	1719000000
VG 11-Exe MS	PG 11	7.5 - 13.0	28	8	24	50	1719010000
VG 13.5-Exe MS	PG 13.5	7.5 - 13.0	32	8	24	50	1719020000
VG 16-Exe MS	PG 16	12.5 - 18.0	33	9	30	25	1719030000
VG 21-Exe MS	PG 21	17.5 - 23.5	38	10	41	20	1719040000
VG 29-Exe MS	PG 29	24.5 - 31.5	49	11	52	20	1719050000
VG 36-Exe MS	PG 36	33.0 - 40.5	54	12	63	10	1719060000
VG 42-Exe MS	PG 42	33.0 - 43.0	54	12	63	10	1719070000
VG 48-Exe MS	PG 48	42.5 - 52.5	60	13	77	5	1719080000
NPT brass KV for Eex-e							
VG NPT 1/2" Eex-e MS	NPT 1/2"	8.5 - 13.0	36	16	24	50	1778160000
VG NPT 3/4" Eex-e MS	NPT 3/4"	13.5 - 18.0	40	16	30	25	1778150000
VG NPT 1" Eex-e MS	NPT 1"	17.5 - 25.0	48	20	41	1	1778140000
VG NPT 1 1/4" Eex-e MS	NPT 1 1/4"	24.5 - 33.5	58	20	52	1	1778130000
VG NPT 1 1/2" Eex-e MS	NPT 1 1/2"	24.5 - 33.5	58	20	52	1	1778120000
VG NPT 2" Eex-e MS	NPT 2"	33.0 - 43.0	62	20	63	1	1778110000
VG NPT 2 1/2" Eex-e MS	NPT 2 1/2"	43.5 - 55.0	75	28	77	1	1778090000

all sizes in mm

Cable glands

Plastic cable glands for EExe-areas



For use in hazardous areas (EEx e II). These cable glands are tested for higher safety specifications with certified conformity to approvals LCIE 97ATEX6007X.

The clamping profile serves as an internal strain relief. The sealing ring is constructed with a membrane against dust, which can be easily pierced.

Technical data

Material:	Polyamide
Sealing:	Santoprene
Temperature:	-40°C ... +90°C
Protection class:	IP66 (with thread sealing ring) Type GWDR ...-NP = IP68/5 bar) ATEX available
Colour:	similar Black RAL 9005

Ordering data

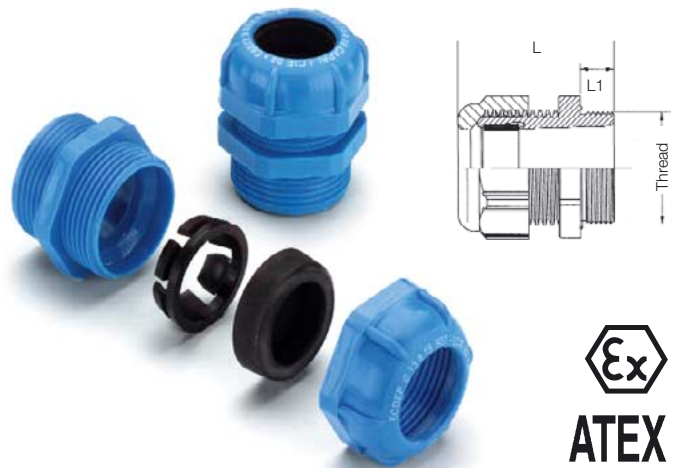
Type	Thread	Clamp range	L	L1	SW	Qty.	Cat. No.
Metric plastic cable glands for EExe-areas							
VG M 16-Exe SW	M 16 x 1.5	5.0 - 8.0	34	12	19	50	1737280000
VG M 20-Exe SW	M 20 x 1.5	8.0 - 13.0	35	12	24	50	1737290000
VG M 25-Exe SW	M 25 x 1.5	13.0 - 19.0	42	13	32	25	1737300000
VG M 32-Exe SW	M 32 x 1.5	17.0 - 25.0	44	15	41	20	1737310000
VG M 40-Exe SW	M 40 x 1.5	24.0 - 32.0	50	15	52	10	1737320000
VG M 50-Exe SW	M 50 x 1.5	29.0 - 38.0	56	16	59	5	1737330000
VG M 63-Exe SW	M 63 x 1.5	36.0 - 44.0	58	16	65	5	1737340000

PG plastic cable glands for EExe-areas

VG 7-Exe SW	PG 7	3.5 - 6.0	27	9	15	50	1569360000
VG 9-Exe SW	PG 9	5.0 - 8.0	31	9	19	50	1490500000
VG 11-Exe SW	PG 11	6.0 - 10.0	31	9	22	50	1490600000
VG 13.5-Exe SW	PG 13.5	8.0 - 13.0	33	10	24	50	1490700000
VG 16-Exe SW	PG 16	10.0 - 15.0	33	10	26	25	1490800000
VG 21-Exe SW	PG 21	13.0 - 19.0	40	11	32	20	1490900000
VG 29-Exe SW	PG 29	17.0 - 25.0	41	12	41	20	1491000000
VG 36-Exe SW	PG 36	24.0 - 32.0	49	14	52	10	1491100000
VG 42-Exe SW	PG 42	28.0 - 38.0	56	16	59	10	1491200000
VG 48-Exe SW	PG 48	34.0 - 44.0	60	16	65	5	1718970000

all sizes in mm

Plastic cable glands for EExi-areas



For use in explosion endangered areas (EEx i). These cable glands are tested for higher safety specifications with certified conformity to approvals LCIE 97ATEX6007X. The clamping profile is used as an internal strain relief. The sealing ring is constructed with a membrane against dust, which can be easily pierced.

Technical data

Material:	Polyamide
Sealing:	Santoprene
Temperature:	-40°C ... +90°C
Protection class:	IP66 (with thread sealing ring) Type GWDR ...-NP = IP68/5 bar) ATEX granted
Colour:	similar Blue RAL 5012

Ordering data

Type	Thread	Clamp range	L	L1	SW	Qty.	Cat. No.
PG plastic cable glands for EExi-areas							
VG M 16-Exi BL	M 16 x 1.5	5.0 - 8.0	34	12	19	50	1737350000
VG M 20-Exi BL	M 20 x 1.5	8.0 - 13.0	35	12	24	50	1737360000
VG M 25-Exi BL	M 25 x 1.5	13.0 - 19.0	42	13	32	25	1737370000
VG M 32-Exi BL	M 32 x 1.5	17.0 - 25.0	44	15	41	20	1737380000
VG M 40-Exi BL	M 40 x 1.5	24.0 - 32.0	50	15	52	10	1737390000
VG M 50-Exi BL	M 50 x 1.5	29.0 - 38.0	56	16	59	5	1737400000
VG M 63-Exi BL	M 63 x 1.5	36.0 - 44.0	58	16	67/65	5	1737410000

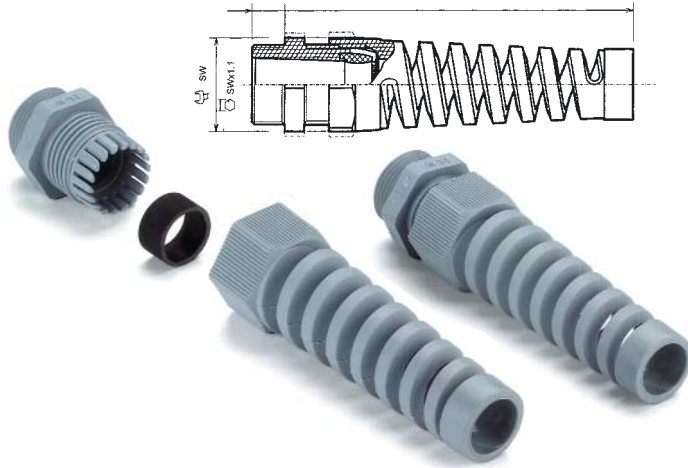
PG plastic cable glands for EExi-areas

VG 7-Exi BL	PG 7	3.5 - 6.0	27	9	15	50	1569370000
VG 9-Exi BL	PG 9	5.0 - 8.0	31	9	19	50	1491300000
VG 11-Exi BL	PG 11	6.0 - 10.0	31	9	22	50	1491400000
VG 13.5-Exi BL	PG 13.5	8.0 - 13.0	33	10	24	50	1491500000
VG 16-Exi BL	PG 16	10.0 - 15.0	33	10	26	25	1491600000
VG 21-Exi BL	PG 21	13.0 - 19.0	40	11	32	20	1491700000
VG 29-Exi BL	PG 29	17.0 - 25.0	41	12	41	20	1491800000
VG 36-Exi BL	PG 36	24.0 - 32.0	49	14	52	10	1491900000
VG 42-Exi BL	PG 42	28.0 - 38.0	56	16	59	10	1492000000
VG 48-Exi BL	PG 48	34.0 - 44.0	60	16	65	5	1718980000

all sizes in mm

Cable glands

Plastic cable glands with strain relief spiral cap



Cable gland specially for moveable connections.; Approvals to VDE and UL; halogen-free.

Reduced clamping range on request

EN 50262: metric

Technical data

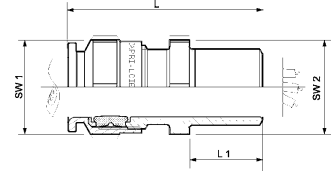
Material:	Polyamide 6
Sealing:	Neoprene
Temperature:	-40°C...+70°C (peak 150°C)
Protection class:	IP 68 / 5 bar with GWDR
Colour:	similar grey RAL 7035 (on request 9005)

Ordering data

Type	Thread	Clamp range	L	L1	SW	Qty.	Cat. No.
Metric.plastic-KV with strain relief spiral cap							
VGM12-K68 SKS	M 12 x 1.5	3.0 - 6.5	66.5	8	15	100	1776700000
VGM16-K68 SKS	M 16 x 1.5	5.0 - 10.0	80	10	22	50	1776710000
VGM20-K68 SKS	M 20 x 1.5	6.0 - 12.0	106	11	24	50	1778860000
VGM20-K68 SKS	M 20 x 1.5	10.0 - 14.0	106	15	27	50	1776720000
VGM25-K68 SKS	M 25 x 1.5	13.0 - 18.0	129	15	33	25	1776730000
PG plastic cable glands with strain relief spiral cap							
VG 7-K68 SKS	PG 7	3.0 - 6.5	62	8	15	50	1720470000
VG 9-K68 SKS	PG 9	4.0 - 8.0	78	8	19	50	1720480000
VG 11-K68 SKS	PG 11	5.0 - 10.0	84	8	22	50	1720490000
VG 13.5-K68 SKS	PG 13.5	6.0 - 12.0	105	9	24	50	1720500000
VG 16-K68 SKS	PG 16	10.0 - 14.0	117	10	27	25	1720510000
VG 21-K68 SKS	PG 21	13.0 - 18.0	130	11	33	20	1720520000

all sizes in mm

Cable Gland ADE 1F



For use in hazardous areas

EEx e II,
EEx d IIB,
EEx d II C ≤ 2000 cm³

These cable glands are certified in accordance with LCIE 97ATEX6008X.

Technical data

Material:	Nickel plated brass (on request stainless steel)
Sealing:	Neoprene
Temperature:	-40 °C - 100 °C
Protection class:	IP 68 (10 bar) ATEX available

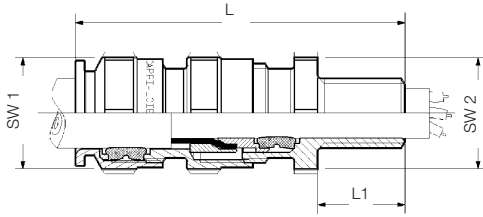
Ordering data

Type	Thread	Protecting cap	Clamp range	L	L1	SW1	SW2	Qty.	Cat. No.
Metric cable glands									
VG ADE 1/M 12 Exe/d	M 12 x 1.5	4	4.0 - 8.0	35	15	15	15	5	1736690000
VG ADE 1/M 16 Exe/d	M 16 x 1.5	5	6.0 - 12.0	37	15	19	19	5	1736700000
VG ADE 1/M 20 Exe/d	M 20 x 1.5	6	8.5 - 16.0	40	15	24	24	2	1736710000
VG ADE 1/M 25 Exe/d	M 25 x 1.5	7	12.0 - 20.5	42	15	30	30	2	1736720000
VG ADE 1/M 32 Exe/d	M 32 x 1.5	8	16.0 - 27.5	49	15	41	41	2	1736730000
VG ADE 1/M 40 Exe/d	M 40 x 1.5	9	21.0 - 34.0	51	15	48	48	2	1736740000
VG ADE 1/M 50 Exe/d	M 50 x 1.5	10	27.0 - 41.0	55	16	55	55	1	1736750000
VG ADE 1/M 63 Exe/d	M 63 x 1.5	12	40.0 - 56.0	60	17	72	72	1	1736760000
VG ADE 1/M 75 Exe/d	M 75 x 1.5	13	47.0 - 65.0	67	18	85	85	1	1736770000
VG ADE 1/M 80 Exe/d	M 80 x 2	14	54.0 - 73.0	76	20	95	95	1	1736780000
VG ADE 1/M 90 Exe/d	M 90 x 2	15	63.0 - 82.0	83	22	110	110	1	1736790000
VG ADE 1/M 100 Exe/d	M 100 x 2	16	72.0 - 92.0	84	22	120	120	1	1736800000

all sizes in mm

Cable glands

ADE 4F



For use in hazardous areas:
 EEx e II,
 EEx d IIB,
 EEx d II C ≤ 2000 cm³

These cable glands are certified in accordance with
 LCIE 97ATEX6008X.

On request: silicone sealing ring, halogen-free,
 Working temperature: -70 °C - +220 °C.

Technical data

Material:	Nickel plated brass (on request stainless steel)
Sealing:	Neoprene
Temperature:	-40 °C - 100 °C
Protection class:	IP 68 (10 bar)
	ATEX available

Ordering data

Type	Thread	Sealing ring	Cable Ø outside	Armoured	Cable Ø inside	L	L1	SW1	SW2	Qty.	Cat. No.
Metric gland											
VG ADE 4F/M 12 Exe/d	M 12 x 1.5	5	6.0 - 12.0	0 - 0.9	4.0 - 8.0	51	15	19	19	5	1736810000
VG ADE 4F/M 16 Exe/d	M 16 x 1.5	6	8.5 - 16.0	0 - 1.25	6.0 - 12.0	57	15	24	24	5	1736820000
VG ADE 4F/M 20 Exe/d	M 20 x 1.5	7	12.0 - 21.0	0 - 1.25	8.5 - 15.5	61	15	30	30	2	1736830000
VG ADE 4F/M 25 Exe/d	M 25 x 1.5	8	16.0 - 27.5	0 - 1.6	12.0 - 20.5	71	15	41	41	2	1736840000
VG ADE 4F/M 32 Exe/d	M 32 x 1.5	9	21.0 - 34.0	0 - 1.6	16.0 - 27.5	78	15	48	48	2	1736850000
VG ADE 4F/M 40 Exe/d	M 40 x 1.5	10	27.0 - 41.0	0 - 2	21.0 - 34.0	83	15	55	55	2	1736860000
VG ADE 4F/M 50 Exe/d	M 50 x 1.5	11	33.0 - 48.0	0 - 2.5	27.0 - 41.0	90	16	64	64	1	1736870000
VG ADE 4F/M 63 Exe/d	M 63 x 1.5	13	47.0 - 65.0	0 - 2.5	40.0 - 56.0	102	17	85	85	1	1736880000
VG ADE 4F/M 75 Exe/d	M 75 x 1.5	14	54.0 - 74.0	0 - 2.5	47.0 - 65.0	110	18	95	95	1	1736890000
VG ADE 4F/M 80 Exe/d	M 80 x 2	15	63.0 - 83.0	0 - 3.15	54.0 - 73.0	124	20	110	110	1	1736900000
VG ADE 4F/M 90 Exe/d	M 90 x 2	16	72.0 - 93.0	0 - 3.15	63.0 - 82.0	130	22	120	120	1	1736910000

all sizes in mm

EMC cable glands



High shielding factor up to 100 dB. An endless lock washer is pressed against the cable armour by two conical rings; thus guaranteeing a reliable and safe contact. This ensures that the shield braiding is inserted into the enclosure.

Technical data

Material:	Nickel plated brass
Sealing:	TPE-V /thermoplastic Elastomer
O-Ring:	Perbunan
Temperature:	-40°C ... +135°C (peak 150°C)
Protection class:	IP 68

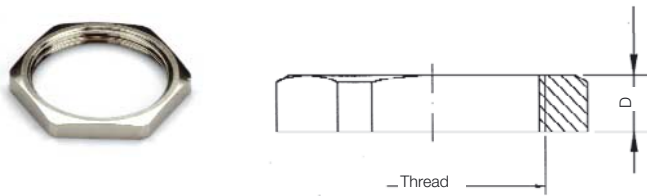
Ordering data

Type	Thread	Clamp range	Armour-Ø	L	SW	Qty.	Cat. No.
Metric cable glands brass							
VG EMC M18x1.5	M 18x1.5	6.0 - 9.5	3.0 - 7.0	26.7	24	5	1706920000
VG EMC M20x1.5	M 20x1.5	7.0 - 11.0	4.0 - 8.5	26.7	24	5	1706940000
VG EMC M24x1.5	M 24x1.5	16.5 - 14.0	8.0 - 12.0	33.5	30	5	1706930000
VG EMC M25x1.5	M 25x1.5	16.5 - 14.0	8.0 - 12.0	33.5	30	5	1706950000
PG cable gland brass							
VG EMC Pg 7/9	PG 7 / 9	4.0 - 6.0	1.5 - 4.0	32.9	17	20	1713870000
VG EMC Pg 9/11	PG 9 / 11	6.5 - 9.5	2.5 - 6.5	32.9	20	20	1706860000
VG EMC Pg 11	PG 11	6.0 - 9.0	3.5 - 7.5	39.6	24	20	1706870000
VG EMC Pg 13.5	PG 13.5	7.0 - 10.5	4.0 - 8.5	39.0	24	10	1706880000
VG EMC Pg 16	PG 16	10.0 - 14.0	8.0 - 13.0	40.5	30	10	1706890000
VG EMC Pg 16	PG 16	14.0 - 18.0	8.0 - 13.0	40.5	30	10	1713880000
VG EMC Pg 21	PG 21	14.0 - 18.0	10.0 - 15.0	40.5	35	10	1706900000
VG EMC Pg 21	PG 21	17.0 - 28.0	12.5 - 17.5	40.5	35	10	1713890000
VG EMC Pg 29	PG 29	22.0 - 26.0	15.0 - 21.0	43.5	40	5	1706910000
VG EMC Pg 29	PG 29	25.0 - 29.0	18.0 - 25.0	55.3	40	5	1713900000
VG EMC Pg 36	PG 36	32.0 - 27.0	18.0 - 25.0	55.3	40	5	1770410000

all sizes in mm

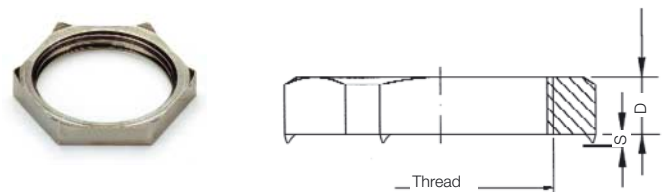
Cable glands

Lock nut brass



Lock nut for securing brass cable glands in accordance with DIN 46320

Lock nut with EMC



These lock nuts are equipped with six cutting elements, which cut into the painted insulating layer of the enclosure; thus creating an optimum contact.

Technical data

Material: Nickel plated brass (on request stainless steel)

Technical data

Material: Nickel plated brass

Ordering data

Type	Thread	D	SW	Qty.	Cat. No.
Metric gland lock nut brass					
SKMU M 12-MS	M 12 x 1.5	2.8	14	50	1772360000
SKMU M 16-MS	M 16 x 1.5	2.8	18	50	1736990000
SKMU M 20-MS	M 20 x 1.5	3	23	50	1737000000
SKMU M 25-MS	M 25 x 1.5	3	28	25	1737010000
SKMU M 32-MS	M 32 x 1.5	4	36	20	1737020000
SKMU M 40-MS	M 40 x 1.5	4.5	44	10	1737030000
SKMU M 50-MS	M 50 x 1.5	5	54	5	1737040000
SKMU M 63-MS	M 63 x 1.5	6	70	5	1737050000
SKMU M 75-MS	M 75 x 1.5	8	85	5	1737060000

PG gland lock nut brass					
SKMU Pg7-MS	PG 7	2.8	15	50	1694070000
SKMU Pg9-MS	PG 9	2.8	18	50	1694080000
SKMU Pg11-MS	PG 11	3.0	21	50	1694090000
SKMU Pg13.5-MS	PG 13.5	3.0	23	50	1694100000
SKMU Pg16-MS	PG 16	3.0	26	25	1694110000
SKMU Pg21-MS	PG 21	3.5	32	20	1719200000
SKMU Pg29-MS	PG 29	4.0	41	20	1719210000
SKMU Pg36-MS	PG 36	5.0	51	10	1719220000
SKMU Pg42-MS	PG 42	5.0	58	10	1719230000
SKMU Pg48-MS	PG 48	5.5	64	5	1719240000

all sizes in mm

Ordering data

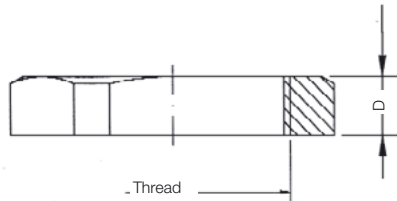
Type	Thread	D	S	SW	Qty.	Cat. No.
Metric gland lock nut EMC brass						
			approx.			
SKMU EMC M10	M 10 x 1	3.10	1.0	12	100	1777600000
SKMU EMC M12	M 12 x 1.5	3.60	1.0	14	100	1777610000
SKMU EMC M16	M 16 x 1.5	3.60	1.0	18	100	1777620000
SKMU EMC M20	M 20 x 1.5	3.60	1.0	23	100	1777630000
SKMU EMC M25	M 25 x 1.5	3.60	1.0	28	50	1777640000
SKMU EMC M32	M 32 x 1.5	4.10	1.0	36	25	1777650000
SKMU EMC M40	M 40 x 1.5	4.60	1.0	44	25	1777660000
SKMU EMC M50	M 50 x 1.5	4.60	1.0	54	10	1777670000
SKMU EMC M63	M 63 x 1.5	6.60	1.0	70	10	1777680000

PG gland lock nut brass with EMC						
SKMU EMC Pg7	PG 7	4.7	1.0	15	20	1718900000
SKMU EMC Pg9	PG 9	4.7	1.0	18	20	1718910000
SKMU EMC Pg11	PG 11	4.7	1.0	21	20	1718920000
SKMU EMC Pg13.5	PG 13.5	4.7	1.0	23	10	1718930000
SKMU EMC Pg16	PG 16	4.7	1.0	26	10	1718940000
SKMU EMC Pg21	PG 21	5.2	1.0	32	10	1718950000
SKMU EMC Pg29	PG 29	5.7	1.0	41	5	1718960000

all sizes in mm

Cable glands

Lock nut Plastic



Lock nut for securing plastic cable glands in accordance with DIN 46320.

Technical data

Material:	Polyamide, glass fibre reinforced
Temperature:	-40°C ... +70°C
Colour:	similar grey RAL 7035
DIN:	46320

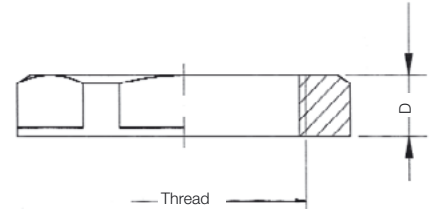
Ordering data

Type	Thread	D	SW	Qty.	Cat. No.
Metric gland lock nut plastic grey					
SKMU M12-K GR	M 12 x 1.5	5	18	50	1772440000
SKMU M16-K GR	M 16 x 1.5	5	22	50	1772450000
SKMU M20-K GR	M 20 x 1.5	6	26	50	1772460000
SKMU M25-K GR	M 25 x 1.5	6	32	25	1772470000
SKMU M32-K GR	M 32 x 1.5	7	41	20	1772480000
SKMU M40-K GR	M 40 x 1.5	7	50	20	1772490000
SKMU M50-K GR	M 50 x 1.5	8	60	10	1772500000
SKMU M63-K GR	M 63 x 1.5	8	75	10	1772510000

PG gland lock nut plastic grey					
SKMU Pg7-K GR	PG 7	5.0	19	50	1697440000
SKMU Pg9-K GR	PG 9	5.0	22	50	1697450000
SKMU Pg11-K GR	PG 11	5.0	24	50	1697460000
SKMU Pg13.5-K GR	PG 13.5	6.0	27	50	1697470000
SKMU Pg16-K GR	PG 16	6.0	30	25	1697480000
SKMU Pg21-K GR	PG 21	7.0	36	20	1698220000
SKMU Pg29-K GR	PG 29	7.0	46	20	1698230000
SKMU Pg36-K GR	PG 36	8.0	60	10	1698240000
SKMU Pg42-K GR	PG 42	8.0	65	10	1698250000
SKMU Pg48-K GR	PG 48	8.0	70	5	1719090000

all sizes in mm

Lock nut Plastic Ex



Lock nut for securing cable glands used in Ex-areas in accordance with LCIE 97ATEX6007X.

Technical data

Material:	Polyamide
Temperature:	-40°C ... +70°C
Colour:	similar black RAL 9005

Ordering data

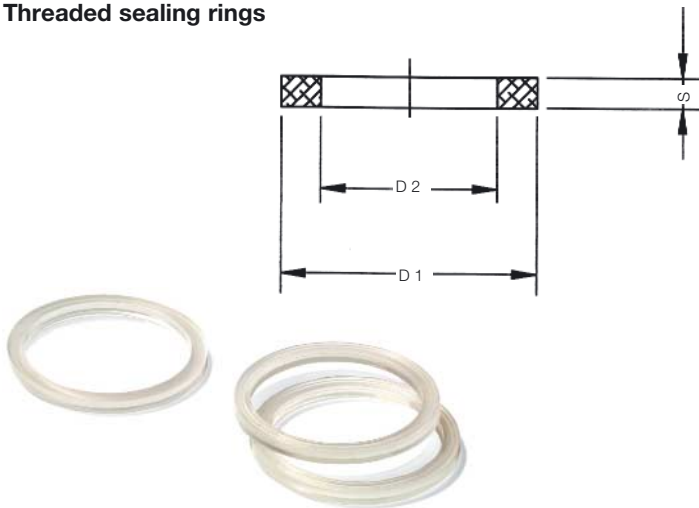
Type	Thread	D	SW	Qty.	Cat. No.
Metric gland lock nut plastic Ex					
SKMU M 16-K SW	M 16 x 1.5	5.0	22	50	1736920000
SKMU M 20-K SW	M 20 x 1.5	6.0	26	50	1736930000
SKMU M 25-K SW	M 25 x 1.5	6.0	32	25	1736940000
SKMU M 32-K SW	M 32 x 1.5	7.0	41	20	1736950000
SKMU M 40-K SW	M 40 x 1.5	7.0	50	10	1736960000
SKMU M 50-K SW	M 50 x 1.5	8.0	60	5	1736970000
SKMU M 63-K SW	M 63 x 1.5	8.0	75	5	1736980000

PG gland lock nut plastic Ex					
SKMU Pg7-K SW	PG 7	5.0	19	50	1719100000
SKMU Pg9-K SW	PG 9	5.0	22	50	1719110000
SKMU Pg11-K SW	PG 11	5.0	24	50	1719120000
SKMU Pg13.5-K SW	PG 13.5	6.0	27	50	1719130000
SKMU Pg16-K SW	PG 16	6.0	30	25	1719140000
SKMU Pg21-K SW	PG 21	7.0	36	20	1719150000
SKMU Pg29-K SW	PG 29	7.0	46	20	1719160000
SKMU Pg36-K SW	PG 36	8.0	60	10	1719170000
SKMU Pg42-K SW	PG 42	8.0	65	10	1719180000
SKMU Pg48-K SW	PG 48	8.0	70	5	1719190000

all sizes in mm

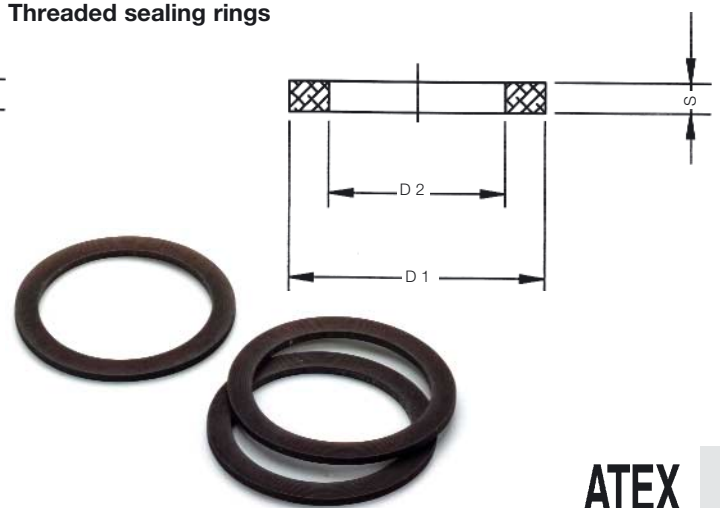
Cable glands

Threaded sealing rings



To increase the protection class of cable glands.

Threaded sealing rings



To increase the protection class of cable glands in Ex areas in accordance with LCIE 97ATEX6007X.

ATEX

Technical data

Material:	Polyethylene
DIN:	46320

Ordering data

Type	Thread	D1	D2	S	Qty.	Cat. No.
Metric threaded sealing rings, polyethylene						
GWDR M12-PO	M 12 x 1.5	16	12	1.5	100	1777920000
GWDR M16-PO	M 16 x 1.5	20	16	1.5	100	1777930000
GWDR M20-PO	M 20 x 1.5	24	20	2.0	100	1777940000
GWDR M25-PO	M 25 x 1.5	29	25	2.0	100	1777950000
GWDR M32-PO	M 32 x 1.5	36	32	2.0	50	1777960000
GWDR M40-PO	M 40 x 1.5	44	40	2.0	50	1777970000
GWDR M50-PO	M 50 x 1.5	54	50	2.0	25	1777980000
GWDR M63-PO	M 63 x 1.5	67	63	2.0	10	1777990000

Type	Thread	D1	D2	S	Qty.	Cat. No.
PG Threaded sealing rings, polyethylene						
GWDR Pg7-PO	PG 7	16.5	12.5	1.6	50	1719440000
GWDR Pg9-PO	PG 9	19	15.3	1.6	50	1719450000
GWDR Pg11-PO	PG 11	22.5	18.6	1.8	50	1719460000
GWDR Pg13.5-PO	PG 13.5	25	20.4	1.8	50	1719470000
GWDR Pg16-PO	PG 16	27	22.5	1.8	25	1719480000
GWDR Pg21-PO	PG 21	33.5	28.5	2.2	20	1719490000
GWDR Pg29-PO	PG 29	43.5	37.0	2.2	20	1719500000
GWDR Pg36-PO	PG 36	55	47.0	2.7	10	1719510000
GWDR Pg42-PO	PG 42	63	54.0	3.2	10	1719520000
GWDR Pg48-PO	PG 48	69	59.3	3.2	5	1719530000

all sizes in mm

Technical data

Material:	Neoprene
DIN:	46320

Ordering data

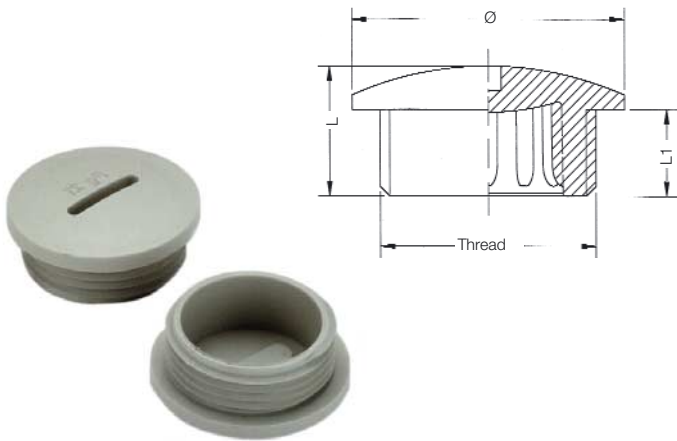
Type	Thread	D1	D2	S	Qty.	Cat. No.
Metric threaded sealing rings, neoprene						
GWDR M 16-NP	M 16	22	16	1.2	20	1736230000
GWDR M 20-NP	M 20	24	20	1.2	20	1736240000
GWDR M 25-NP	M 25	30	25	1.5	20	1736250000
GWDR M 32-NP	M 32	42	32	1.5	20	1736260000
GWDR M 40-NP	M 40	52	40	1.5	10	1736270000
GWDR M 50-NP	M 50	63	50	1.5	10	1736280000
GWDR M 63-NP	M 63	77	63	2	10	1736290000

Type	Thread	D1	D2	S	Qty.	Cat. No.
PG threaded sealing rings, neoprene						
GWDR Pg7-NP	PG 7	17	11.6	1.2	50	1719540000
GWDR Pg9-NP	PG 9	21	14.0	1.2	50	1719550000
GWDR Pg11-NP	PG 11	24	17.0	1.2	50	1719560000
GWDR Pg13.5-NP	PG 13.5	27	19.5	1.2	50	1719570000
GWDR Pg16-NP	PG 16	30	22.5	1.2	25	1719580000
GWDR Pg21-NP	PG 21	35	28.3	1.5	20	1719590000
GWDR Pg29-NP	PG 29	45	37.0	1.5	20	1719600000
GWDR Pg36-NP	PG 36	60	47.0	1.5	10	1719610000
GWDR Pg42-NP	PG 42	65	54.0	1.5	10	1719620000
GWDR Pg48-NP	PG 48	71	59.3	1.5	5	1719630000

all sizes in mm

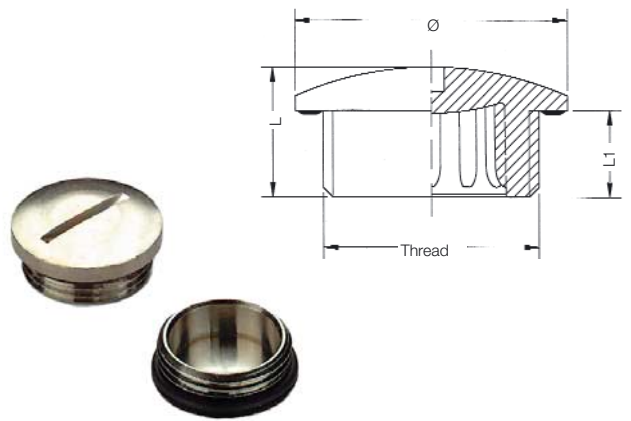
Cable glands

Sealing plug, plastic



Glass-fibre reinforced polyamide offers excellent resistance to numerous chemicals.

Sealing plug, brass



Self-sealing version with O-ring made of perbunan. Also available with a hexagon head.

Technical data

Material:	Polyamide, glass fibre reinforced
Temperature:	-40°C ... +100°C
Protection class:	IP54 (with thread sealing ring Type GWDR ...-PO = IP66)
Colour:	similar Grey RAL 7035
DIN:	46320

Technical data

Material:	Nickel plated brass
Sealing:	O-Ring Perbunan
Temperature:	-40°C ... +100°C
Protection class:	IP65

Ordering data

Type	Thread	L	L1	Head Ø	Qty.	Cat. No.
Metric sealing plug, plastic						
VP M12-K54	M12 x 1.5	10.0	6	15	100	1776930000
VP M16-K54	M16 x 1.5	11.5	7	19	100	1776920000
VP M20-K54	M20 x 1.5	12.5	7.5	22	100	1776910000
VP M25-K54	M25 x 1.5	15.0	11	27	100	1776900000
VP M32-K54	M32 x 1.5	16.0	11	34	100	1776940000
VP M40-K54	M40 x 1.5	18.0	12	42	50	1776950000
VP M50-K54	M50 x 1.5	20.0	13	52	50	1776960000
VP M63-K54	M63 x 1.5	20.0	14	65	50	1776970000

Type	Thread	L	L1	Head Ø	Qty.	Cat. No.
PG sealing plug, plastic						
VP 7-K54	PG 7	8	6	15	50	1719250000
VP 9-K54	PG 9	9	6	19	50	0294760000
VP 11-K54	PG 11	10.5	6.5	22	50	0294860000
VP 13.5-K54	PG 13.5	9.5	6	25	50	0294960000
VP 16-K54	PG 16	9.5	6	27	25	0295060000
VP 21-K54	PG 21	11	8	33	20	0295160000
VP 29-K54	PG 29	12	8	44	20	0501160000
VP 36-K54	PG 36	15	10	55	10	0501260000
VP 42-K54	PG 42	16	10	62	10	0501360000
VP 48-K54	PG 48	16	12	69	5	1719260000

all sizes in mm

Ordering data

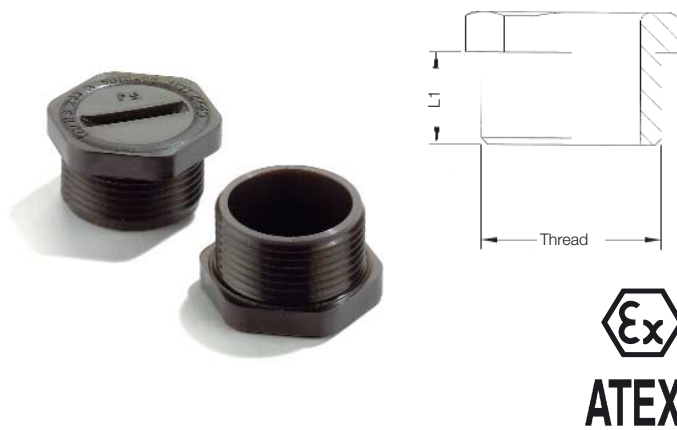
Type	Thread	L	L1	Head-Ø	Qty.	Cat. No.
Metric sealing plug, brass						
VP M16 - MS65	M 16	5.0	18	100	100	1777730000
VP M20 - MS65	M 20	6.5	22	100	100	1777740000
VP M25 - MS65	M 25	7.0	28	100	100	1777750000
VP M32 - MS65	M 32	8.0	35	50	50	1777760000
VP M40 - MS65	M 40	8.0	45	50	50	1777770000
VP M50 - MS65	M 50	9.0	55	25	25	1777780000
VP M63 - MS65	M 63	10.0	68	10	10	1777790000

Type	Thread	L	L1	Head-Ø	Qty.	Cat. No.
PG sealing plug, brass						
VP 7-MS65	PG 7	8	5	16	50	0521600000
VP 9-MS65	PG 9	7.9	4.5	19	50	0294700000
VP 11-MS65	PG 11	7.9	4.5	22	50	0294800000
VP 13.5-K65	PG 13.5	9.5	6	24	50	0294900000
VP 16-MS65	PG 16	9	6	26	25	0295000000
VP 21-MS65	PG 21	10	6	32	20	0295100000
VP 29-MS65	PG 29	12	8	39	20	0501100000
VP 36-MS65	PG 36	15	9	50	10	0501200000
VP 42-MS65	PG 42	16	10	57	10	0501300000
VP 48-MS65	PG 48	16	10	64	5	1719270000

all sizes in mm

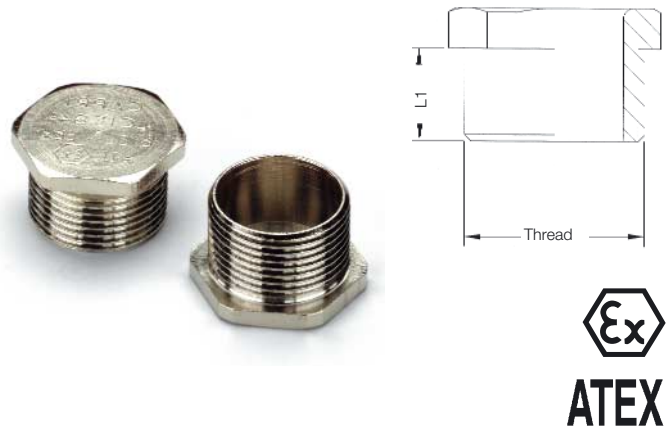
Cable glands

Sealing plug plastic EExe



Sealing plugs for Ex areas in accordance with LCIE 97ATEX6003X. Also available with metric ISO thread

Sealing plug brass EExe / EExd



Hexagon head version for Ex-areas (EExe II). Approvals in accordance with LCIE 98ATEX0001X. Also available with metric ISO thread.

Technical data

Material:	Polyamide
Temperature:	-40°C ... +100°C
Protection class:	IP54 (with thread sealing ring Type GWDR ...-PO = IP66) ATEX granted
Colour:	similar Black RAL 9005

Ordering data

Type	Thread	L	L1	SW	Qty.	Cat. No.
Metric sealing plug, plastic EExe						
VP M 16-Exe SW	M 16 x 1.5	19	15	19	50	1737070000
VP M 20-Exe SW	M 20 x 1.5	19	15	23	50	1737080000
VP M 25-Exe SW	M 25 x 1.5	20	15	28	25	1737090000
VP M 32-Exe SW	M 32 x 1.5	20.5	15	36	20	1737100000
VP M 40-Exe SW	M 40 x 1.5	20.5	15	44	10	1737110000
VP M 50-Exe SW	M 50 x 1.5	21	15	54	5	1737120000
VP M 63-Exe SW	M 63 x 1.5	21.5	15	67	5	1737130000

PG sealing plug, plastic EExe

VP 7-Exe SW	PG 7	12	8	15	50	1719280000
VP 9-Exe SW	PG 9	14.5	10	19	50	1719290000
VP 11-Exe SW	PG 11	15	10.5	22	50	1569380000
VP 13.5-Exe SW	PG 13.5	16	11	24	50	1569390000
VP 16-Exe SW	PG 16	17	12	27	25	1569400000
VP 21-Exe SW	PG 21	18	12.5	32	20	1569410000
VP 29-Exe SW	PG 29	19	13.5	40	20	1719300000
VP 36-Exe SW	PG 36	21	15	54	10	1719310000
VP 42-Exe SW	PG 42	21.5	15	59	10	1719320000
VP 48-Exe SW	PG 48	22	15.5	64	5	1719330000

all sizes in mm

Technical data

Material:	Nickel plated brass
Temperature:	-40°C ... +100°C
Protection class:	IP54 (with thread sealing ring Type GWDR ...-NP = IP66) ATEX granted

Ordering data

Type	Thread	L	L1	SW	Qty.	Cat. No.
Metric sealing plug, brass EExe						
VP M 16-Exe SW	M 16 x 1.5	18	15	18	50	1737140000
VP M 20-Exe SW	M 20 x 1.5	18	15	23	50	1737150000
VP M 25-Exe SW	M 25 x 1.5	18.5	15	28	25	1737160000
VP M 32-Exe SW	M 32 x 1.5	19	15	36	20	1737170000
VP M 40-Exe SW	M 40 x 1.5	19	15	44	10	1737180000
VP M 50-Exe SW	M 50 x 1.5	21	16	54	5	1737190000
VP M 63-Exe SW	M 63 x 1.5	24	17	67	5	1737200000

PG sealing plug, brass EExe

VP 7-Exe MS	PG 7	18	15	15	50	1719340000
VP 9-Exe MS	PG 9	18	15	18	50	1719350000
VP 11-Exe MS	PG 11	18	15	21	50	1719360000
VP 13.5-Exe MS	PG 13.5	18	15	23	50	1719370000
VP 16-Exe MS	PG 16	18	15	26	25	1719380000
VP 21-Exe MS	PG 21	18	15	32	20	1719390000
VP 29-Exe MS	PG 29	19	15	41	20	1719400000
VP 36-Exe MS	PG 36	20	15	51	10	1719410000
VP 42-Exe MS	PG 42	20	15	58	10	1719420000
VP 48-Exe MS	PG 48	20.5	15	64	5	1719430000

all sizes in mm

Cable glands

Adaptors



Technical data

Material:	Nickel plated brass
Temperature:	-40°C ... +100°C
Protection class:	IP54 (with thread sealing ring Type GWDR ...-NP = IP66)
Approval:	in accordance with LCIE 97ATEX6001X

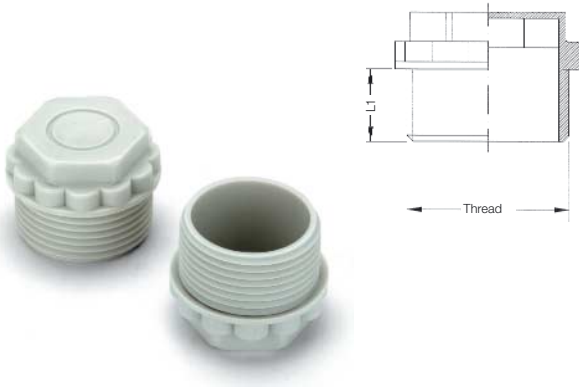
**Metric PG adaptors, available soon.
Please contact us**

Male thread	3" NPT	2 1/2" NPT	2" NPT	1 1/2" NPT	1 1/4" NPT	1" NPT	3/4" NPT	1/2" NPT	M 75	M 63	M 50	M 40	M 32	M 25	M 20	M 16
Female thread																
M 16	1737420000	1737430000	1737440000	1737450000	1737460000	1737470000	1737480000	1737490000	1737500000	1737510000	1737520000	1737530000	1737540000	1737550000	1737560000	1737570000
M 20	1737580000	1737590000	1737600000	1737610000	1737620000	1737630000	1737640000	1737650000	1737660000	1737670000	1737680000	1737690000	1737700000	1737710000	1737720000	1737730000
M 25	1737740000	1737750000	1737760000	1737770000	1737780000	1737790000	1737800000	1737810000	1737820000	1737830000	1737840000	1737850000	1737860000	1737870000	1737880000	
M 32	1737890000	1737900000	1737910000	1737920000	1737930000	1737940000	1737950000		1737960000	1737970000	1737980000	1737990000	1738000000	1738010000		
M 40	1738020000	1738030000	1738040000	1738050000	1738060000	1738070000			1738080000	1738090000	1738100000	1738110000	1738120000			
M 50	1738130000	1738140000	1738150000	1738160000	1738170000				1738180000	1738190000	1738200000	1738210000				
M 63	1738220000	1738230000	1738240000	1738250000					1738260000	1738270000	1738280000					
M 75	1738290000	1738300000	1738310000						1738320000	1738330000						
1/2" NPT	1738340000	1738350000	1738360000	1738370000	1738380000	1738390000	1738400000	1738410000	1738420000	1738430000	1738440000	1738450000	1738460000	1738470000	1738480000	1738490000
3/4" NPT	1738500000	1738510000	1738520000	1738530000	1738540000	1738550000	1738560000	1738570000	1738580000	1738590000	1738600000	1738610000	1738620000	1738630000	1738640000	
1" NPT	1738650000	1738660000	1738670000	1738680000	1738690000	1738700000			1738710000	1738720000	1738730000	1738740000	1738750000	1738760000		
1 1/4" NPT	1738770000	1738780000	1738790000	1738800000	1738810000	1738820000			1738830000	1738840000	1738850000	1738860000	1738870000			
1 1/2" NPT	1738880000	1738890000	1738900000	1738910000	1738920000				1738930000	1738940000	1738950000	1738960000				
2" NPT	1738970000	1738980000	1738990000	1739000000					1739010000	1739020000	1739030000					
2 1/2" NPT	1739040000	1739050000	1739060000						1739070000	1739080000						
3" NPT	1739090000	1739100000							1739110000							

Cable glands

Stopper

Seal stopper



Closed version which can be used as a simple sealing plug

Technical data

Material:	Polyethylene
Temperature:	-20°C ... +70°C
Protection class:	IP 54
Colour:	similar grey RAL 7035

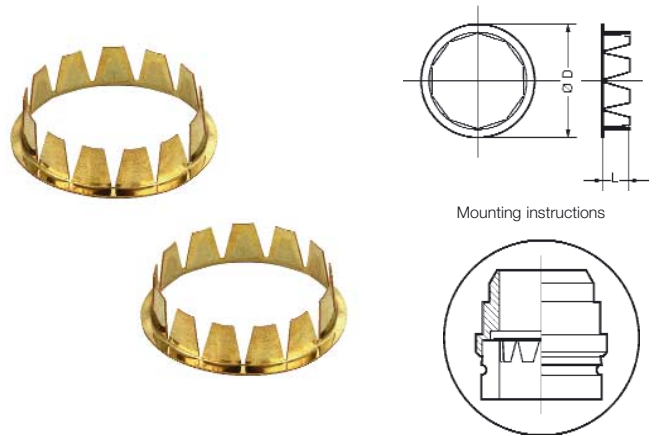
Ordering data

Type	Thread	L1	Qty.	Cat. No.
PG seal stopper				
DN Pg9	PG 9	9.5	50	1719640000
DN Pg11	PG 11	10	50	1719650000
DN Pg13.5	PG 13.5	12	50	1719660000
DN Pg16	PG 16	12	25	1719670000
DN Pg21	PG 21	14	20	1719680000
DN Pg29	PG 29	16	20	1719690000
DN Pg36	PG 36	19	10	1719700000
DN Pg42	PG 42	23	10	1719710000
DN Pg48	PG 48	24	5	1719720000

all sizes in mm

Accessories

Earthing washer, brass for lead-sheathed cables



In order to improve conductivity, the earthing washer is inserted into the cable gland when using lead-sheathed cables.

Please refer to the mounting instructions.

Technical data

Material:	brass
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Ordering data

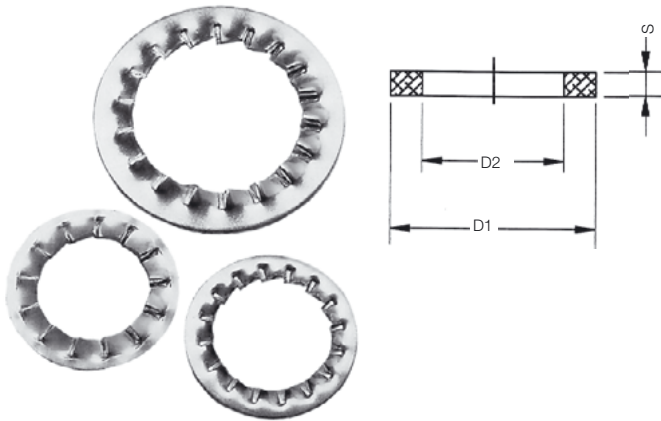
Type	Cable Ø	D	L	Qty.	Cat. No.
EA VS No. 6	6.0 - 11.0	13.9	4	20	1736370000
EA VS No. 7	9.0 - 15.0	18.3	4.8	20	1736380000
EA VS No. 8	12.0 - 20.0	23.8	5.7	20	1736390000
EA VS No. 9	18.0 - 26.5	31	7.2	20	1736400000
EA VS No. 10	21.0 - 32.5	38.3	8.2	20	1736410000
EA VS No. 11	28.0 - 39.5	45.3	8.8	20	1736420000
EA VS No. 12	33.0 - 46.5	52.8	9.5	20	1736430000
EA VS No. 13	40.0 - 54.5	60.8	10.1	10	1736440000
EA VS No. 14	46.5 - 61.0	71	11.4	10	1736450000
EA VS No. 15	54.0 - 72.5	80.5	12.6	10	1736460000
EA VS No. 16	63.0 - 81.5	89.5	12.6	5	1736470000

all sizes in mm

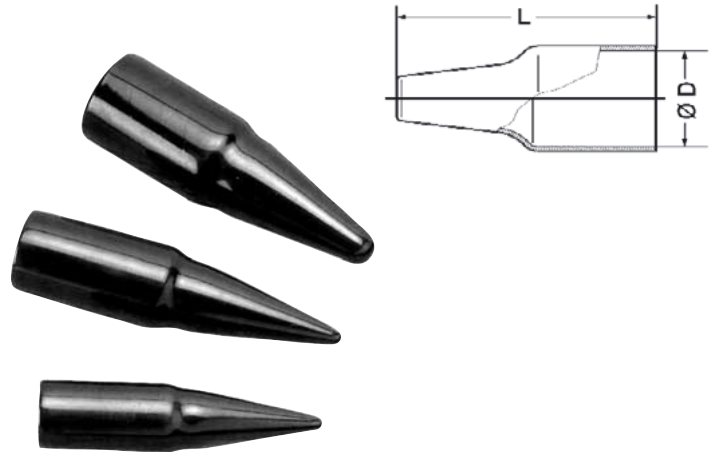
Cable glands

Accessories

Serrated lock washer



Protecting cap (shroud)



The protective cap is simply slid or pulled over the cable gland. The use of protective caps achieves a more effective sealing of the cable glands via the exterior cable sheath. This method of sealing protects cable glands in corrosive atmospheres.

Technical data

Material:	Steel, nickel plated

Technical data

Material:	PVC
Temperature:	-40 °C - 100 °C
Colour:	Black

Ordering data

Type	Thread	D1	D2	S	Qty.	Cat. No.
Metric safety washers						
SZS M 16	M 16	-	-	-	10	1736300000
SZS M 20	M 20	32.8	21.5	1.5	10	1736310000
SZS M 25	M 25	39.8	26.5	1.9	10	1736320000
SZS M 32	M 32	49.3	32.8	1.5	10	1736330000
SZS M 40	M 40	64.5	42.2	1.8	5	1736340000
SZS M 50	M 50	80	53	1.8	5	1736350000
SZS M 63	M 63	100	64	1.9	5	1736360000

all sizes in mm

Ordering data

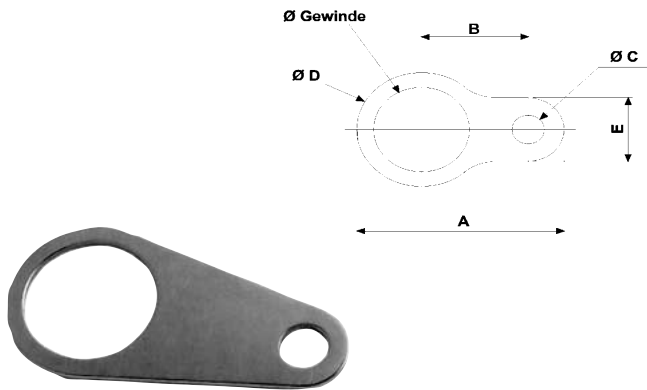
Type	Cable Ø	D	L	L1	Qty.	Cat. No.
Protection cap No. 4	6.0 - 12.0	20	90	42	20	1736560000
Protection cap No. 5	6.0 - 12.0	20	90	42	20	1736570000
Protection cap No. 6	8.5 - 16.0	25	110	50	20	1736580000
Protection cap No. 7	10.0 - 21.0	31	110	50	20	1736590000
Protection cap No. 8	16.0 - 27.5	43	125	60	20	1736600000
Protection cap No. 9	21.0 - 34.0	50	135	70	20	1736610000
Protection cap No. 10	27.0 - 41.0	57	150	75	20	1736620000
Protection cap No. 11	33.0 - 48.0	67	165	80	10	1736630000
Protection cap No. 12	40.0 - 56.0	75	170	82	10	1736640000
Protection cap No. 13	47.0 - 65.0	89	190	97	10	1736650000
Protection cap No. 14	54.0 - 74.0	100	205	105	5	1736660000
Protection cap No. 15	63.0 - 83.0	115	245	120	5	1736670000
Protection cap No. 16	72.0 - 93.0	125	245	120	5	1736680000

all sizes in mm

Cable glands

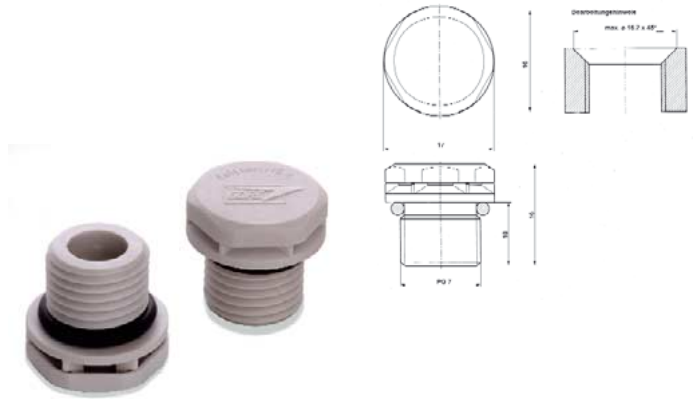
Accessories

Earthing ring, brass



The earthing ring is slid over the entry thread. An improved connection between the enclosure and earth or other conductive components is created by the use of earthing rings.

Pressure compensating elements



Enclosures for electrical and electronic modules are used in environments with harsh climate changes. Temperature fluctuations can lead to considerable pressure fluctuations within a liquid-tight container. If negative pressure levels resulting from temperature fluctuations are sufficient, moist air will penetrate in to the enclosure to compensate the pressure. After a number of temperature fluctuation cycles, condensation can form in the enclosure if ventilation via the seal is inadequate.

Our GORE-TEX® pressure compensation element, **DAE PG**, protects electrical and electronic components against failure: the enclosure can "breathe" even though according to IP standards it is liquid-tight.

Technical data

Material: Nickel plated brass

Ordering data

Type	Thread	A	B	C	D	E	Qty.	Cat. No.
Metric safety washers, brass								
EA-RING MS/M 16	M 16	48.75	30	6.75	24.50	13	20	1736480000
EA-RING MS/M 20	M 20	53.80	33	7	28.60	13	20	1736490000
EA-RING MS/M 25	M 20	61.50	36	10.50	34	17	20	1736500000
EA-RING MS/M 32	M 32	73	41	12.20	42	22	20	1736510000
EA-RING MS/M 40	M 40	86.50	44.50	13.50	54	30	10	1736520000
EA-RING MS/M 50	M 50	111.50	58	13.50	67	40	10	1736530000
EA-RING MS/M 63	M 63	125.50	67	13.50	77	40	10	1736540000
EA-RING MS/M 75	M 75	137.50	73	13.50	89	40	10	1736550000

all sizes in mm

Technical data

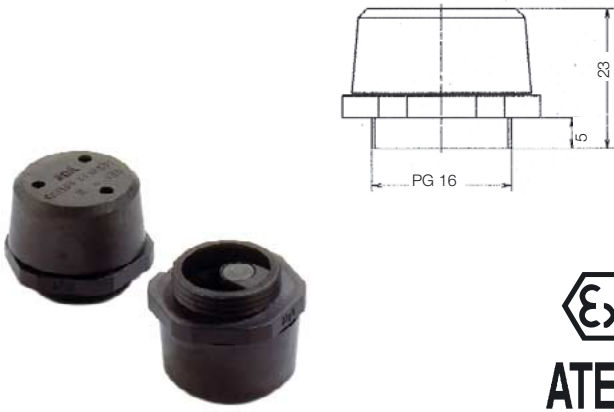
Operating temperature	- 40°C to + 100°C
Protection class	IP 69 K
Material	PBT- GF 20
Colour	similar to grey RAL 7038 / black RAL 9005
Connection thread	PG7
Osmotic potential of membrane	> 0.6 bar (membrane side)
Air flow rate, at 70 mbar.	≥ 12l /h
Membrane characteristics	water and oil resistant
Weathering behaviour (Xenotest 3.600 h)	No or very slight yellowing and alteration of the surface
	No significant alteration to the mechanical characteristics

Ordering data

Type	Thread	Qty.	Cat. No.
DAE PG 7 grey	PG7	10	1753530000
DAE M 12 black	M12	10	1806480000

Cable glands

Drain stopper



We recommend the use of EWS drain stoppers to prevent the building up of condensation water within enclosures, and also to guarantee sufficient ventilation.

Technical data

Material:	Polyamide
Temperature:	-20°C ... +70°C
Protection class:	IP 65
Colour:	similar black RAL 9005

Ordering data

Type	Thread	Qty.	Cat. No.
EWS PG16	PG 16	25	1719730000
EWS M 25x1.5	M 25 x 1.5	25	1719740000

Breather Drains













Technical data

Material:	Körper	BD 1	Blank brass or stainless steel 1.4404
		BD 2	Blank brass or stainless steel 1.4404
		DLP	Blank brass or stainless steel 1.4404
Filter		BD 1	Sinter nickel - chrom insert
		BD 2	Sinter nickel - chrom insert
		DLP	Sinter nickel - chrom insert
Sealing		BD 1	Nylon seal
		BD 2	Nitril O-ring
		DLP	Nitril O-ring
Mounting:		BD 1	Direct mounting in available M 16 x 1.5 connection thread or with lock nut in 16-mm round hole
		BD 2	Flanged fixing made with four M 4 hexagon head screws washer and self locking lock nut
		DLP	Direct mounting in available M 20 x 1.5 connection thread or with lock nut in 20 mm round hole
Protection class:		BD 1	IP 54 in accordance with IEC 529
		BD 2	IP 54 in accordance with IEC 529
		DLP	IP 66
Approvals:		BD 1	EEx e II i.a.w. EN 50019 Components certification 86B3174U
		BD 2	EEx e II i.a.w. EN 50019 Components certification 86B3174U
		DLP	EEx e II i.a.w. SIRA99ATEX3050U

Ordering data

Type	Material	Qty.	Cat. No.
BD 1	Brass	1	3883400000
BD 1	Stainless steel	1	3883500000
BD 2	Brass	1	3884300000
BD 2	Stainless steel	1	3884400000
DLP	Brass	1	3080760000
DLP	Stainless steel	1	3080770000



Technical Appendix – Table Of Contents		Page
Which enclosure for which application?		67
Product overview, enclosures		68 - 71
Q Range Sheet steel enclosures		72 - 73
NexT Range Large sheet steel enclosures		74 - 75
TB Range Sheet steel enclosures		76 - 77
STB Range Small sheet steel enclosures		78 - 81
K Range Aluminum enclosures		82 - 95
POK Range Polyester enclosures		96 - 107
TBF Range Polyester enclosures		108 - 111
MPC Range Small to medium sized polycarbonate enclosures		112 - 117
FPC Range Medium sized polycarbonate enclosures		118 - 121
GPS Range Polystyrene enclosures		122 - 131
Assembly plan		132 - 133
IP protection classes		134
Protection classes according to NEMA, UL, CSA		135
Hazardous areas		136
Labeling in accordance with ATEX		137

Technical Appendix

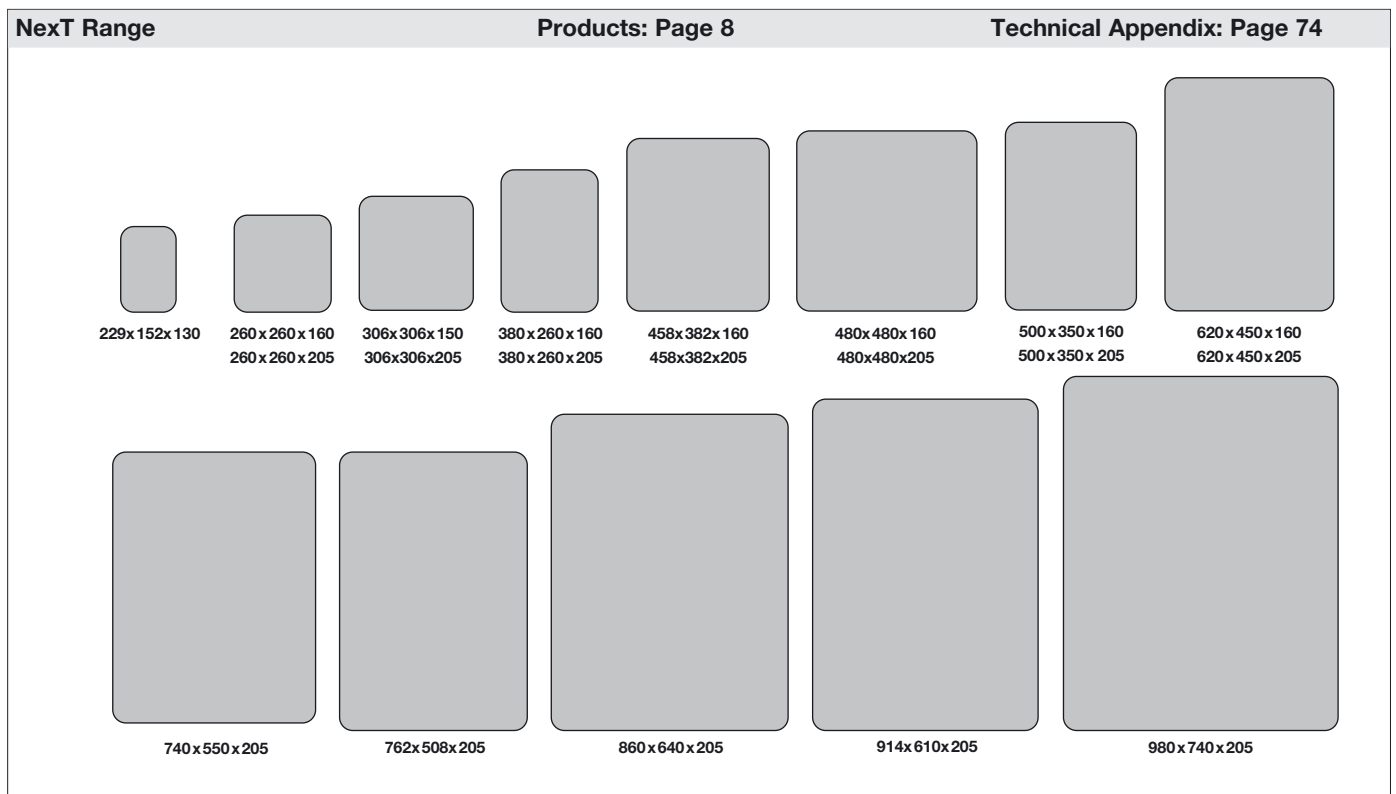
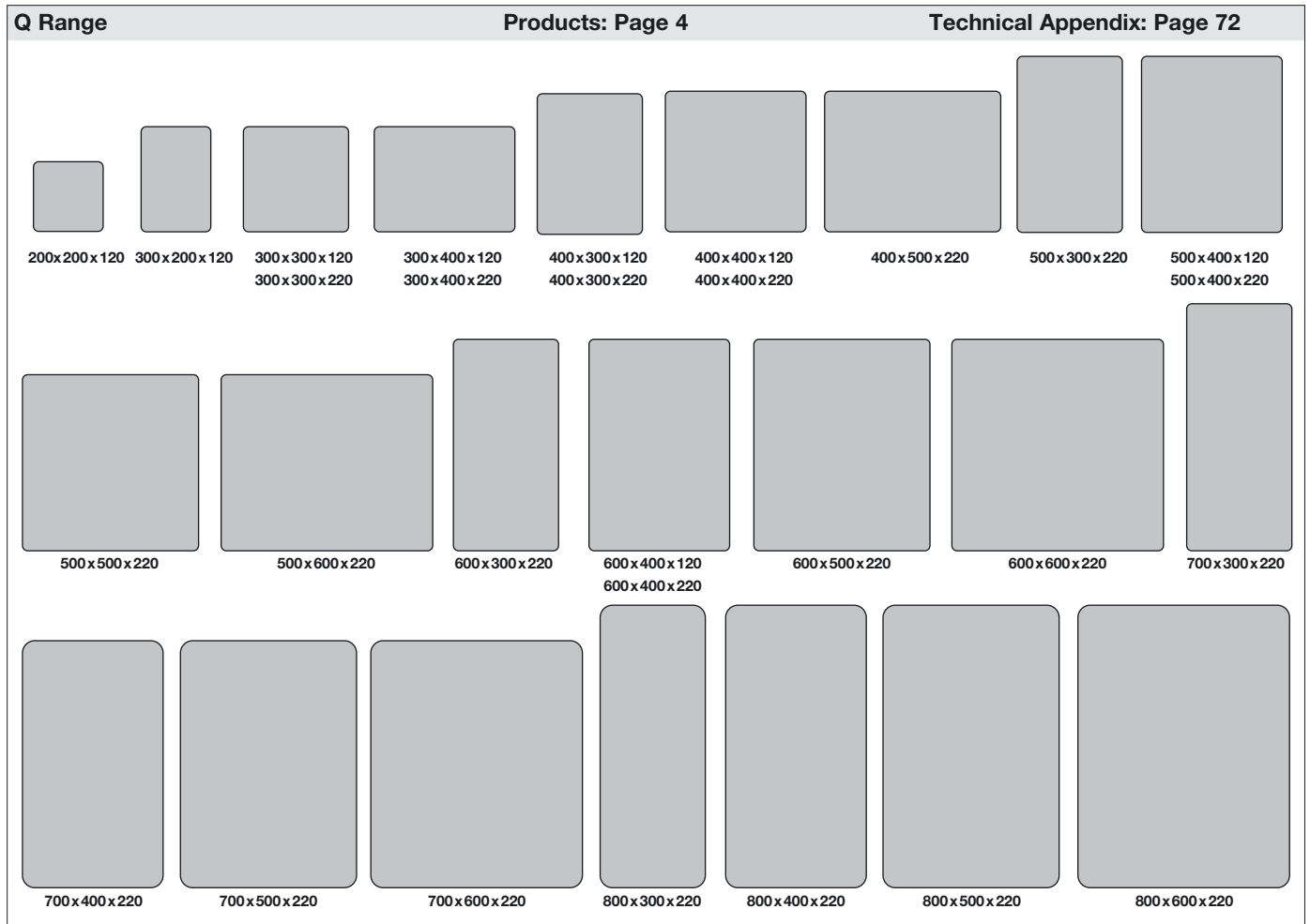
Enclosure

Material	Type	Surface	Insert	Advantages
Stainless steel	Q NexT TB STB	Burnished, brushed	Indoors Outdoors Chemicals, Industry, Food and drinks, tropics	Corrosion resistant: sea water/chemicals/ atmospheres Shipping Maintenance-free
Sheet metal	Q NexT TB STB	Polyester powder paint (baked)	Indoors Outdoors, protected	Corrosion resistant: chemicals/ atmospheres Robust Easy to mount Maintenance-free
Die-cast aluminum	K	Untreated or painted	Indoors Outdoors	Corrosion resistant (sea water/weather resistant.) Low weight Easy to mount Torsionally rigid Maintenance-free
Polyester GRP	POK TBF		Indoors Outdoors	Corrosion resistant: sea water Weather resistant Low weight Maintenance-free Good insulating characteristics
Polycarbonate	MPC FPC		Indoors Outdoors Resistant against diluted acids and chemicals Offshore	With extensive accessories in numerous variants Good electrical characteristics Low weight Maintenance-free
Polystyrene	GPS		Indoors	Numerous variants Impact resistant, low weight Maintenance-free

Material	Type	Lowest temperature (°C)	Highest temperature (°C)	Highest contin. temperature (°C)	Behaviour in fire, base (UL94)	Behaviour in fire, lid (UL94)	Halogen-free	Cadmium-free	Chemical resistant	UV resistant	Sea water resistant	Oxygen content (%)	Surface resistance (Ohm)	Impact resistance (Nm)	Protection class i.a.w. EN60529
Steel (painted)	Q	-20		+80					good	very good	not suitable				65
	NexT	-40	+100/1h	+85					good	very good	not suitable			7	66
	TB	-40	+100/1h	+85					good	very good	not suitable			7	66 + 67
	STB	-20		+85					good	very good	not suitable			7	66
Stainless steel	Q	-20		+80					very good	very good	very good				65
	NexT	-40	+100/1h	+85					very good	very good	very good			7	66
	TB	-40	+100/1h	+85					very good	very good	very good			7	66 + 67
	STB	-20		+85					very good	very good	very good			7	66
Aluminum	K	-30		+80					good	very good	good			7	66 + 67
Polyester	POK	-40		+90	V0	V0	Yes	Yes	good	very good	very good		10 ¹²	7	66
	TBF	-40		+130	HB	HB/V2	Yes	Yes	good	very good	very good	26	10 ¹²	4	66 + 67
Polycarbonate	MPC	-50		+130	V2	V2	Yes	Yes	good	good	very good	24	10 ¹⁰	4	66 + 67
	FPC	-50		+130	V2	V2	Yes	Yes	good	good	very good	24	10 ¹⁰	7	66 + 67
Polystyrene	GPS	-40		+70	V2	V2			good	average-	good		10 ¹⁰	7	66

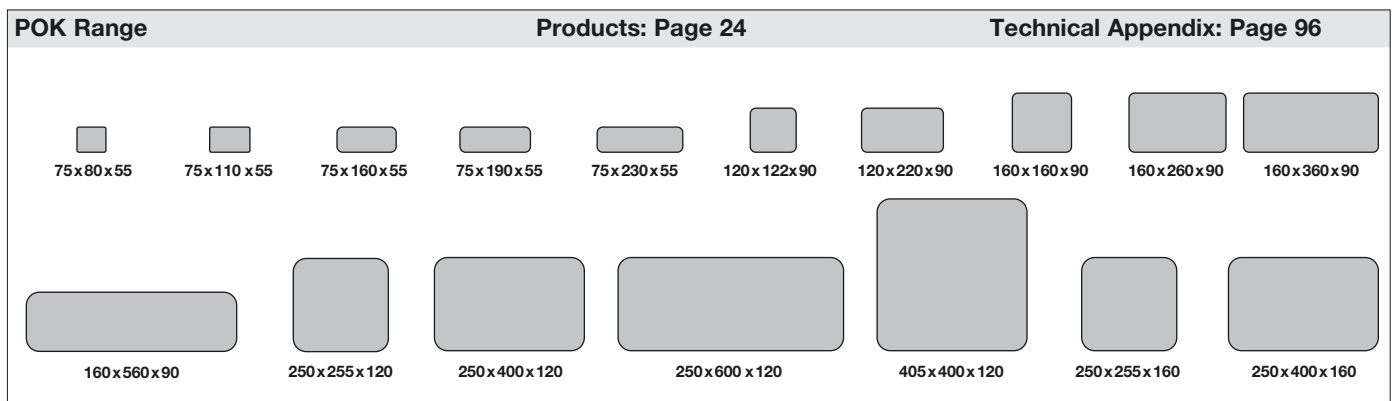
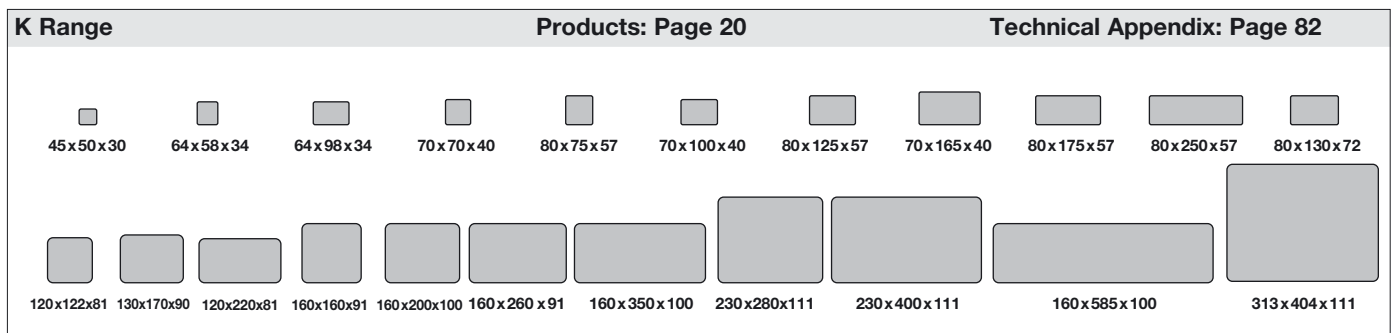
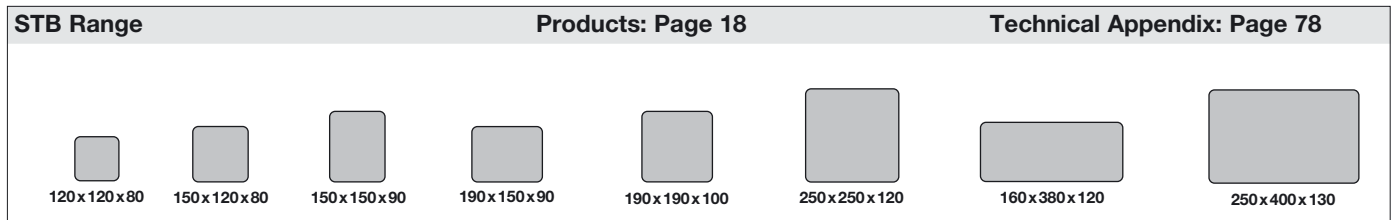
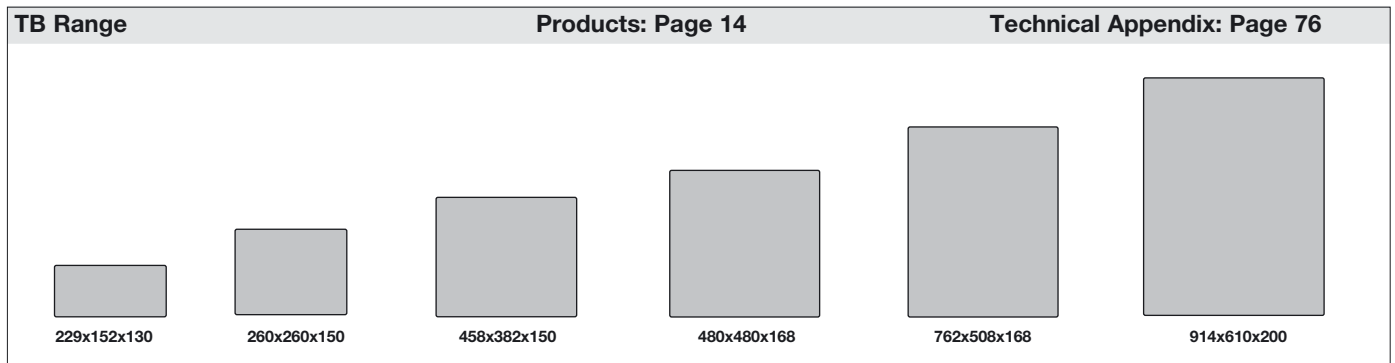
Technical Appendix

Product overview, Enclosure



Technical Appendix










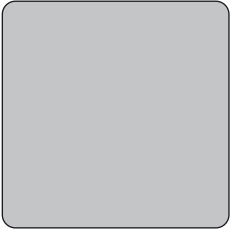
Product overview, enclosures














Technical Appendix









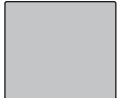
Technical Appendix

Product overview, enclosures

TBF Range	Products: Page 28						Technical Appendix: Page 108		
									
186x151x139	302x186x175	302x302x175	372x302x175	488x302x175 488x302x210	558x302x175 558x302x210	603x302x175 603x302x210	603x372x175 603x372x210	603x603x175 603x603x210	

MPC Range	Products: Page 32				Technical Appendix: Page 112	
						
75x125x75 75x125x125	125x125x75	125x175x75 125x175x100 125x175x125	175x175x75 175x175x150	175x250x100		

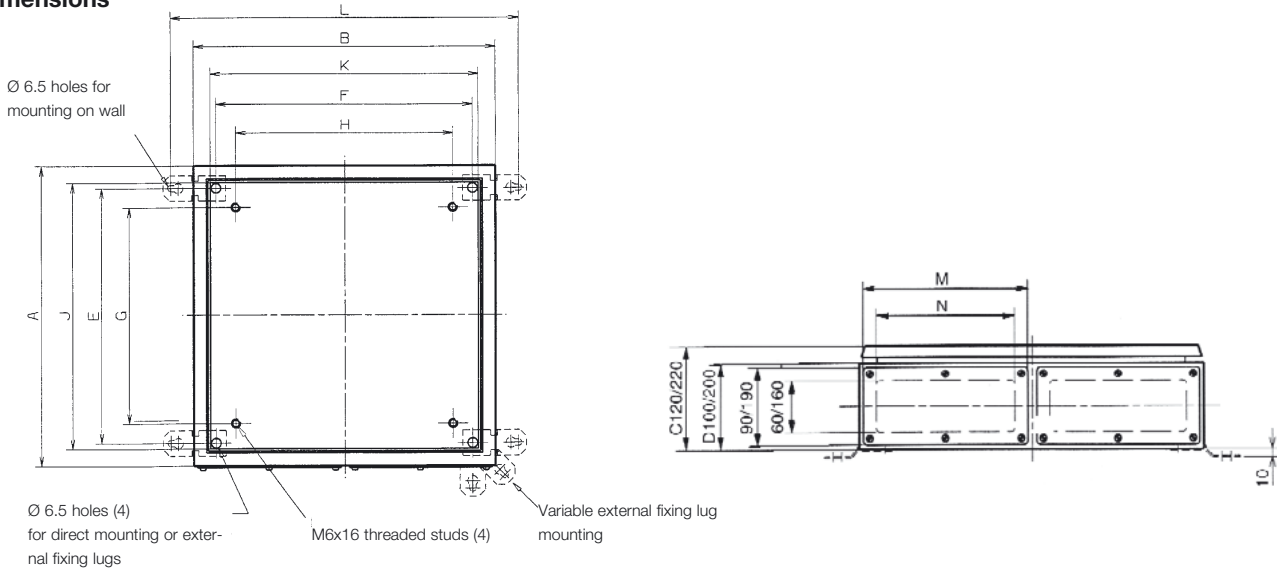
FPC Range	Products: Page 36					Technical Appendix: Page 118
						
200x200x130	200x300x130	200x400x130	300x300x130	300x400x130	400x600x130	

GPS Range	Products: Page 40							Technical Appendix: Page 122	
									
65x65x57	94x65x57	110x110x66	110x110x90	130x94x57	130x130x75	180x110x90	254x180x90	360x254x111	

Cable glands	Products: Page 44		
			
Plastic cable glands	Brass cable glands	Sealing plugs	

Technical Appendix – Q Range

Dimensions



Enclosure range dimensions (all in mm)

Enclosure type	A	B	C	D	E	F	G	H	J	K	L	M	N
120mm high	Length	Width	Depth										
20/20/12	200	200	120	100	140	140	88	88	155	155	260	190	160
30/20/12	300	200	120	100	240	140	188	88	255	155	260	190	160
30/30/12	300	300	120	100	240	240	188	188	255	255	360	277	247
30/40/12*	300	400	120	100	240	340	188	288	255	355	460	190/190	160/160
40/30/12	400	300	120	100	340	240	288	188	355	255	360	277	247
40/40/12*	400	400	120	100	340	340	288	288	355	355	460	190/190	160/160
50/40/12*	500	400	120	100	440	340	388	288	455	355	460	190/190	160/160
60/40/12*	600	400	120	100	540	340	488	288	555	355	460	190/190	160/160

*These enclosures have two flange plates of the same size

Enclosure type	A	B	C	D	E	F	G	H	J	K	L	M	N
220mm high	Length	Width	Depth										
30/30/22	300	300	220	200	240	240	188	188	255	255	360	277	247
30/40/22*	300	400	220	200	240	340	188	288	255	355	460	190/190	160/160
40/30/22	400	300	220	200	340	240	288	188	355	255	360	277	247
40/40/22*	400	400	220	200	340	340	288	288	355	355	460	190/190	160/160
40/50/22**	400	500	220	200	340	440	288	388	355	455	560	190/277	160/247
50/30/22	500	300	220	200	440	240	388	188	455	255	360	277	247
50/40/22*	500	400	220	200	440	340	388	288	455	355	460	190/190	160/160
50/50/22**	500	500	220	200	440	440	388	388	455	455	560	190/277	160/247
50/60/22*	500	600	220	200	440	540	388	488	455	555	660	277/277	247/247
60/30/22	600	300	220	200	540	240	488	188	555	255	360	277	247
60/40/22*	600	400	220	200	540	340	488	288	555	355	460	190/190	160/160
60/50/22**	600	500	220	200	540	440	488	388	555	455	560	190/277	160/247
60/60/22*	600	600	220	200	540	540	488	488	555	555	660	277/277	247/247
70/30/22	700	300	220	200	640	240	588	188	655	255	360	277	247
70/40/22*	700	400	220	200	640	340	588	288	655	355	460	190/190	160/160
70/50/22**	700	500	220	200	640	440	588	388	655	455	560	190/277	160/247
70/60/22*	700	600	220	200	640	540	588	488	655	555	660	277/277	247/247
80/30/22*	800	300	220	200	740	240	688	188	755	255	360	277	247
80/40/22*	800	400	220	200	740	340	688	288	755	355	460	190/190	160/160
80/50/22**	800	500	220	200	740	440	688	388	755	455	560	190/277	160/247
80/60/22*	800	600	220	200	740	540	688	488	755	555	660	277/277	247/247

*These enclosures have two flange plates of the same size

** These enclosures have two flange plates of different sizes

Technical Appendix – Q Range

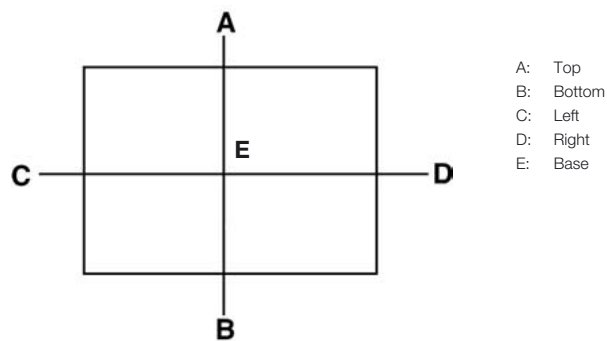
Cable entries

Gland size		Enclosure type									
		Q 20/20/12	Q 30/20/12	Q 30/30/12	Q 30/40/12	Q 40/30/12	Q 40/40/12	Q 50/40/12	Q 60/40/12	Q 30/30/22	Q 30/40/22
Metric	M 16	10	10	18	20	18	20	20	20	54	60
	M 20	4	4	7	8	7	8	8	8	27	38
	M 25	3	3	5	6	5	6	6	6	20	24
	M 32	2	2	4	4	4	4	4	4	12	16
PG	PG 7	24	24	39	48	39	48	48	48	117	144
	PG 9	14	14	20	28	20	28	28	28	70	94
	PG 11	12	12	18	24	18	24	24	24	54	72
	PG 13,5	10	10	16	20	16	20	20	20	48	60
	PG 16	8	8	14	16	14	16	16	16	35	48
	PG 21	4	4	6	8	6	8	8	8	24	32
	PG 29	3	3	5	6	5	6	6	6	15	18

Gland size		Enclosure type									
		Q 40/30/22	Q 40/40/22	Q 40/50/22	Q 50/30/22	Q 50/40/22	Q 50/50/22	Q 50/60/22	Q 60/30/22	Q 60/40/22	Q 60/50/22
Metric	M 16	54	60	84	54	60	84	108	54	60	84
	M 20	27	38	46	27	38	46	54	27	38	46
	M 25	20	24	32	20	24	32	40	20	24	32
	M 32	12	16	20	12	16	20	24	12	16	20
PG	PG 7	117	144	189	117	144	189	234	117	144	189
	PG 9	70	94	117	70	94	117	140	70	94	117
	PG 11	54	72	90	54	72	90	108	54	72	90
	PG 13,5	48	60	78	48	60	78	96	48	60	78
	PG 16	35	48	59	35	48	59	70	35	48	59
	PG 21	24	32	40	24	32	40	48	24	32	40
	PG 29	15	18	24	15	18	24	30	15	18	24

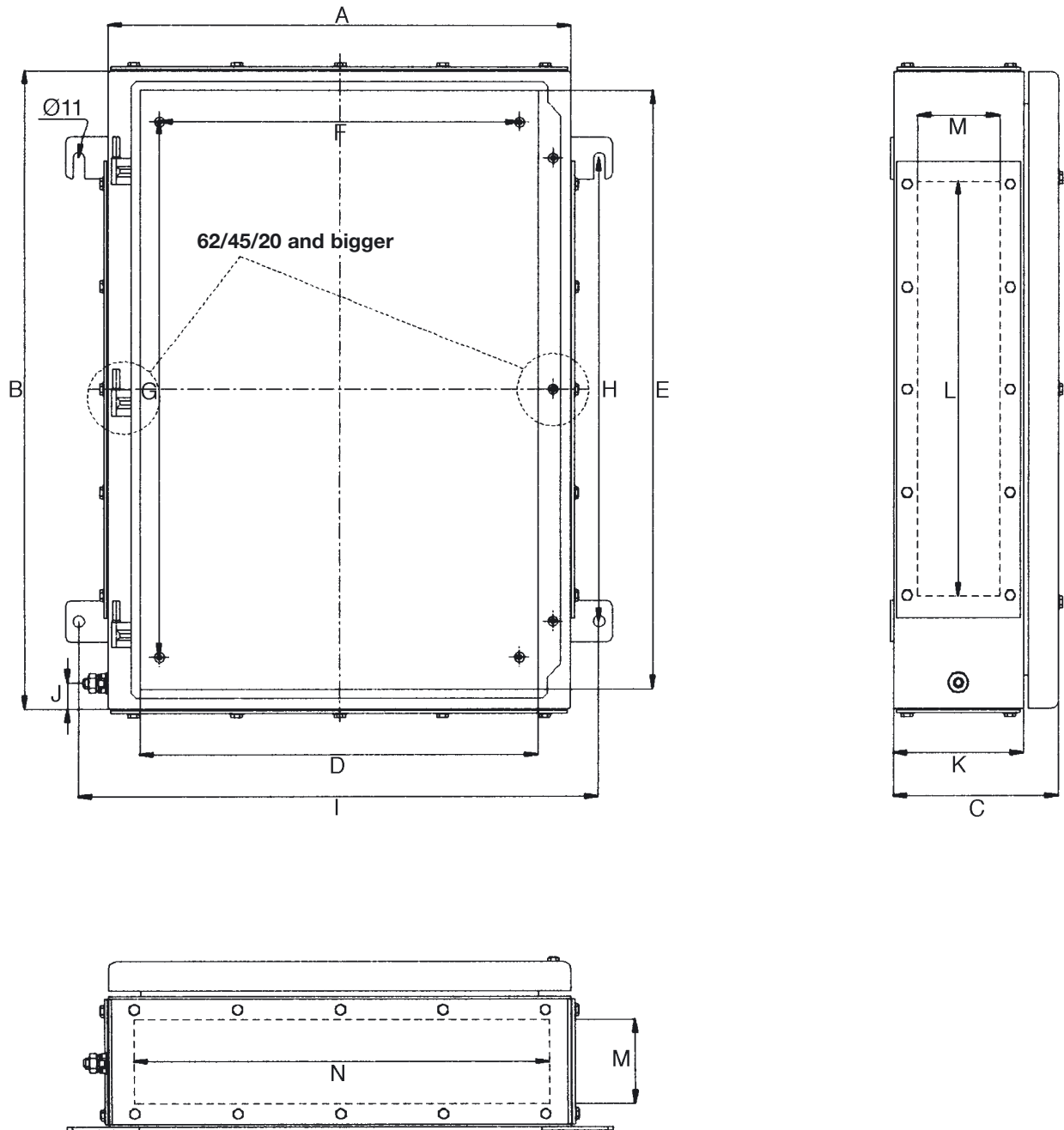
Gland size		Enclosure type									
		Q 60/60/22	Q 70/30/22	Q 70/40/22	Q 70/50/22	Q 70/60/22	Q 80/30/22	Q 80/40/22	Q 80/50/22	Q 80/60/22	
Metric	M 16	108	54	60	84	108	54	60	84	108	
	M 20	54	27	38	46	54	27	38	46	54	
	M 25	40	20	24	32	40	20	24	32	40	
	M 32	24	12	16	20	24	12	16	20	24	
PG	PG 7	234	117	144	189	234	117	144	189	234	
	PG 9	140	70	94	117	140	70	94	117	140	
	PG 11	108	54	72	90	108	54	72	90	108	
	PG 13,5	96	48	60	78	96	48	60	78	96	
	PG 16	70	35	48	59	70	35	48	59	70	
	PG 21	48	24	32	40	48	24	32	40	48	
	PG 29	30	15	18	24	30	15	18	24	30	

Enclosure side identification



Technical Appendix – NexT Range

Dimensions



NexT enclosure range dimensions (all in mm)

CODE	TYPE	A	B	C	D	E	F	G	H	I	J	K	L	M	N
NexT*	22/15/13**	229	152	130	89	190		127**	152	208	25	102	108	58	108
NexT	26/26/16 (26/26/20)	260	260	160 (205)	197	221	160	160	170	316	25	126 (172)	114	80 (124)	214
NexT*	30/30/16 (30/30/20)	306	306	160 (205)	243	267	206	206	203	361	25	126 (172)	left 214 right 261	80 (108)	261
NexT	38/26/16 (38/26/20)	380	260	160 (205)	197	341	160	280	250	316	25	126 (172)	214	80 (108)	214
NexT*	45/38/16 (45/38/20)	458	382	160	319	419	282	358	305	437	25	172	337	80 (124)	337
NexT*	48/48/16 (48/48/20)	480	480	160 (205)	417	441	380	380	327	535	25	172	left 337 right 404	80 (124)	404
NexT	50/35/16 (50/35/20)	500	350	160 (205)	287	461	250	400	350	406	25	172	304	80 (124)	304
NexT	62/45/16 (62/45/20)	620	450	160 (205)	387	581	350	520	450	506	25	172	404	80 (124)	404
NexT	74/55/20	740	550	205	487	701	450	640	540	606	25	172	504	124	504
NexT*	76/50/20	762	508	205	445	723	408	662	508	564	25	172	594	108	464
NexT	86/64/20	860	640	205	577	821	540	760	570	696	25	172	2 x 304	124	594
NexT*	91/61/20	914	610	205	547	875	510	814	559	666	25	172	567	108	566
NexT	98/74/20	980	740	205	677	941	640	880	700	796	25	172	2 x 404	124	2 x 304

* Note: Please subtract 30 mm from the size "I" when using flanges on the sides.

** Note: The NexT 22/15/13 has only two centrally mounted stand-off pillars.

Technical Appendix – NexT Range

Cable entries

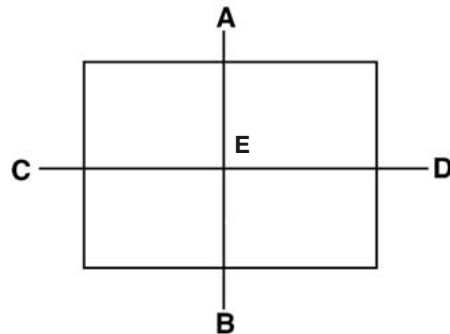
Gland size		Size of flange plate (maximum number of glands per plate)						
		94 x 144	116 x 298	116 x 374	120 x 154	116 x 254	120 x 344	120 x 444
Metric	M 16	8	14	18	9	27	38	20
	M 20	8	14	18	6	16	20	10
	M 25	4	5	7	3	9	12	6
	M 32	3	4	5	2	5	7	3
	M 40	2	3	4	1	4	6	3
	M 50	2	2	4	1	3	5	2
Pg*	Pg 7	8	14	18	9	27	38	20
	Pg 9	8	14	18	9	27	38	20
	Pg 11	8	14	18	9	27	38	20
	Pg 13.5	10	8	18	26	16	20	10
	Pg 16	10	14	18	6	16	20	10
	Pg 21	4	5	7	3	9	12	6
	Pg 29	3	4	5	2	5	7	3
	Pg 36	3	3	4	1	4	6	3
	Pg 42	2	2	4	1	3	5	2
	Pg 48	2	2	4				2

* must be fitted with locknut

Gland size		Size of flange plate (maximum number of glands per plate)					
		164 x 154	164 x 254	164 x 344	164 x 444	164 x 634	144 x 602
Metric	M 16	18	35	40	53	80	45
	M 20	12	24	24	30	48	45
	M 25	6	12	18	24	36	24
	M 32	4	8	10	14	20	9
	M 40	2	5	7	11	14	8
	M 50	1	3	4	5	8	6
Pg*	Pg 7	15	28	40	53	80	45
	Pg 9	15	28	40	53	80	45
	Pg 11	15	28	40	53	80	45
	Pg 13.5	15	28	24	30	68	45
	Pg 16	11	23	24	30	48	45
	Pg 21	8	15	18	24	36	24
	Pg 29	5	8	10	14	20	9
	Pg 36	3	6	7	11	14	8
	Pg 42	3	4	4	5	8	6
	Pg 48	3	3	4	5		

* must be fitted with locknut

Enclosure side identification

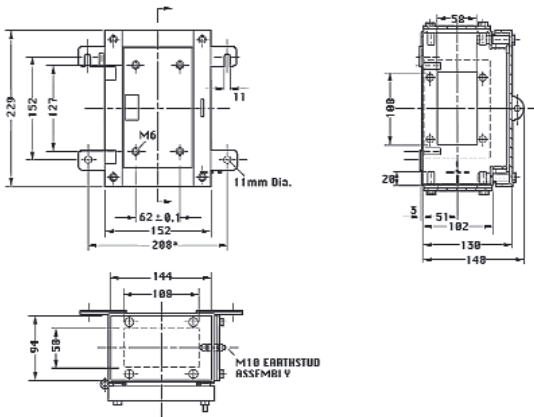


- A: Top
- B: Bottom
- C: Left
- D: Right
- E: Base

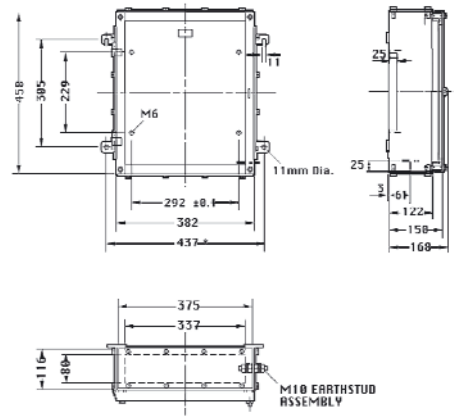
Technical Appendix – TB Range

Dimensions

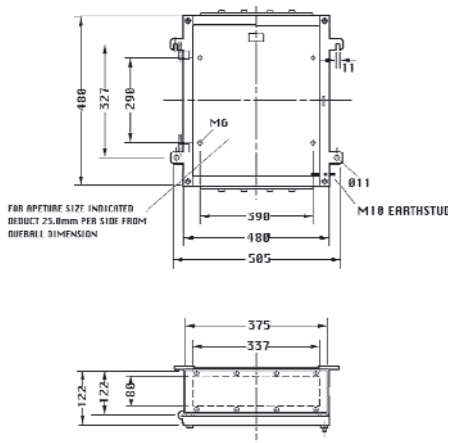
TB 10



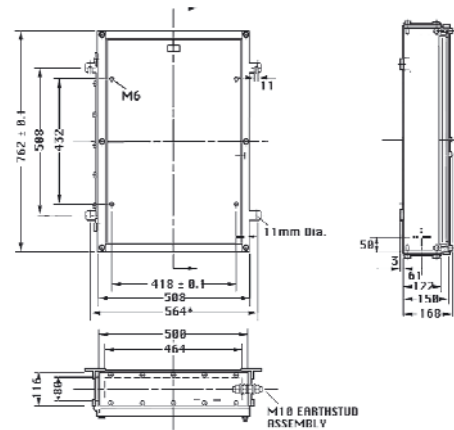
TB 12



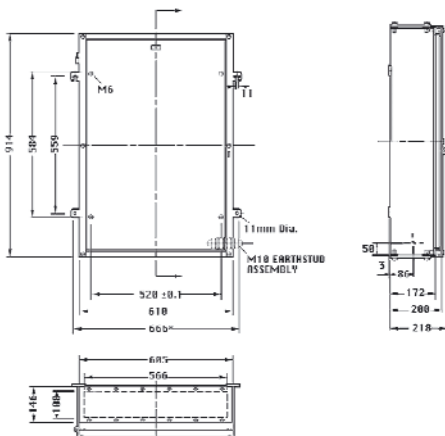
TB 12 A



TB 13



TB 14



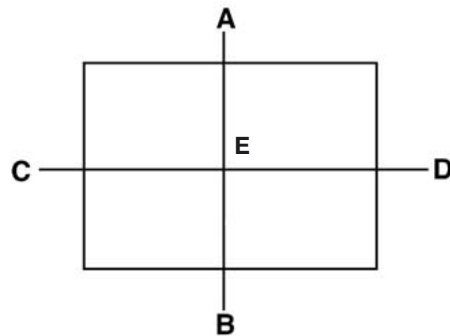
Technical Appendix – TB Range

Cable entries

Gland size		Enclosure type					
		TB 10		TB 11		TB 12	
		Side A / B	Side C / D	Side A / B	Side C / D	Side A / B	Side C / D
Metric	M 16	6	6	26	14	29	29
	M 20	3	3	14	8	18	18
	M 25	2	2	8	4	10	10
	M 32	1	1	4	2	6	6
	M 40	-	-	3	2	5	5
	M 50	-	-	3	2	4	4
PG	PG 11	5	5	26	14	29	29
	PG 13,5	4	4	16	8	23	23
	PG 16	3	3	14	8	18	18
	PG 21	2	2	10	6	16	16
	PG 29	1	1	6	3	7	7
	PG 36	-	-	4	2	5	5
	PG 42	-	-	3	2	4	4
	PG 48	-	-	3	2	4	4

Gland size		Enclosure type					
		TB 12a		TB 13		TB 14	
		Side A / B	Side C / D	Side A / B	Side C / D	Side A / B	Side C / D
Metric	M 16	29	29	42	42	72	72
	M 20	18	18	24	24	42	42
	M 25	10	10	14	14	24	24
	M 32	6	6	8	8	18	18
	M 40	5	5	7	7	8	8
	M 50	4	4	6	6	7	7
PG	PG 11	29	29	42	42	72	72
	PG 13,5	23	23	28	28	51	51
	PG 16	18	18	26	26	48	48
	PG 21	16	16	22	22	33	33
	PG 29	7	7	10	10	22	22
	PG 36	5	5	7	7	11	11
	PG 42	4	4	6	6	9	9
	PG 48	4	4	6	6	7	7

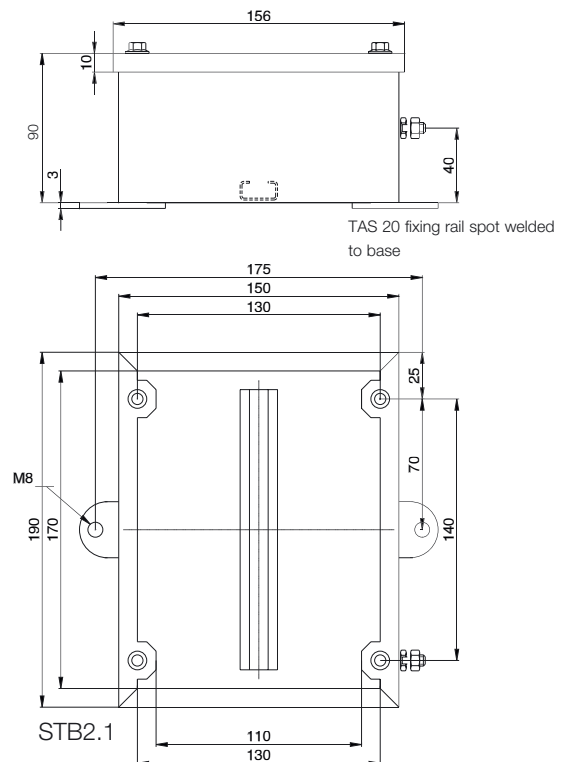
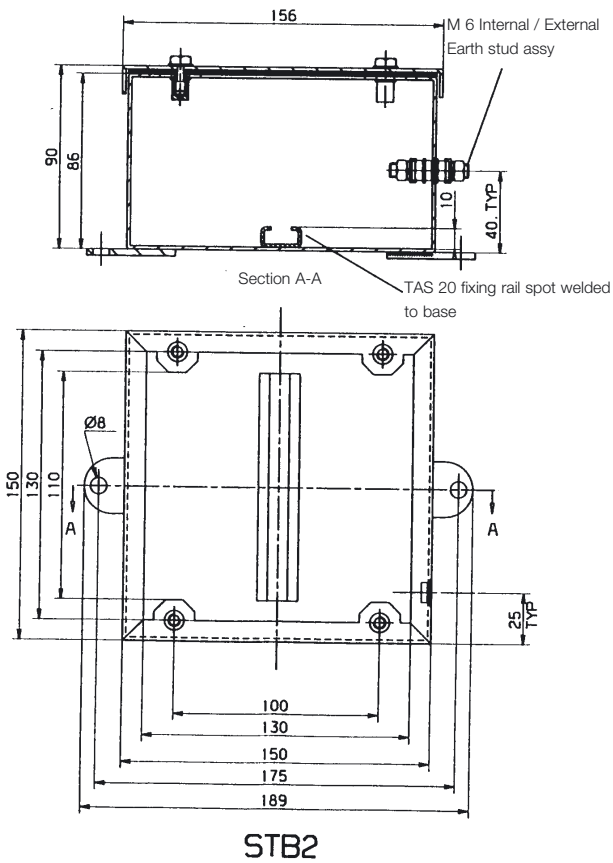
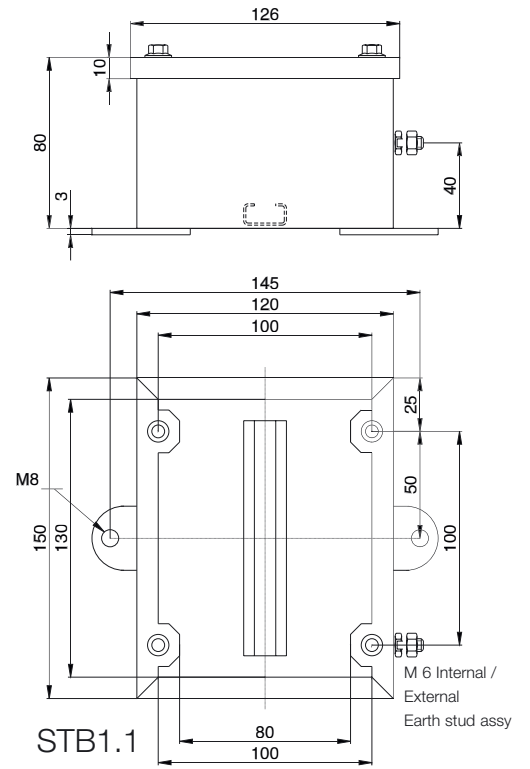
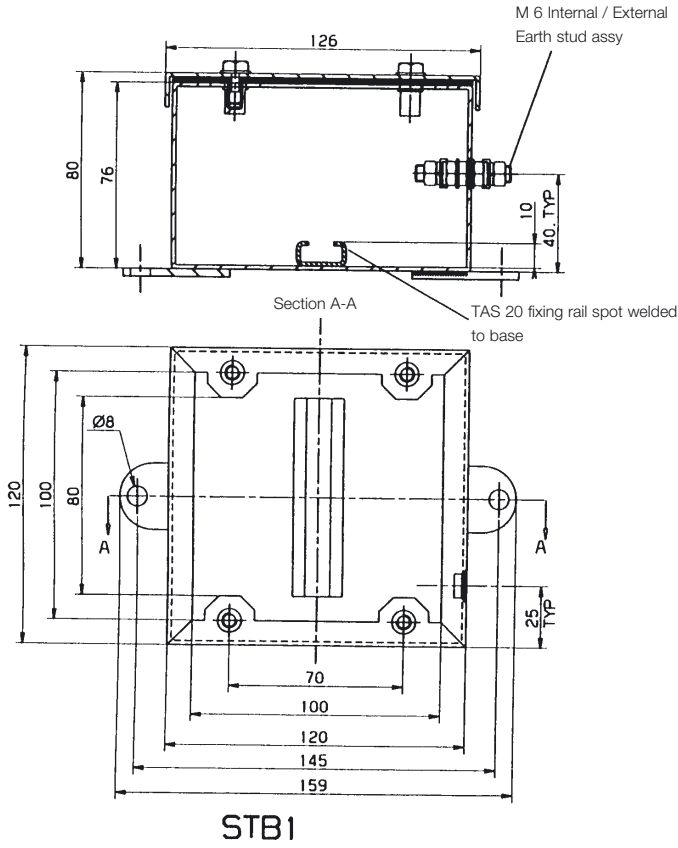
Enclosure side identification



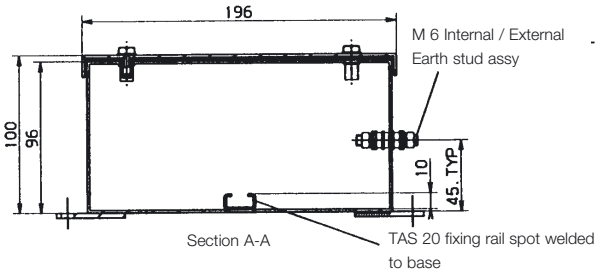
- A: Top
- B: Bottom
- C: Left
- D: Right
- E: Base

Technical Appendix – STB Range

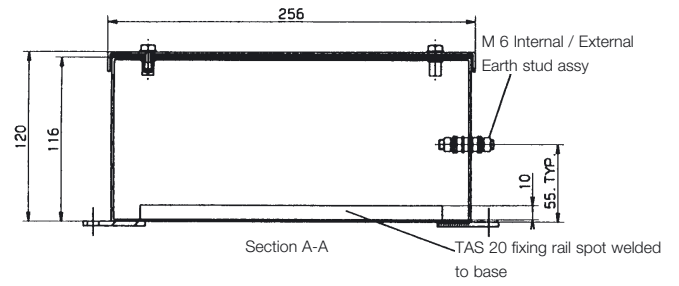
Dimensions STB Range



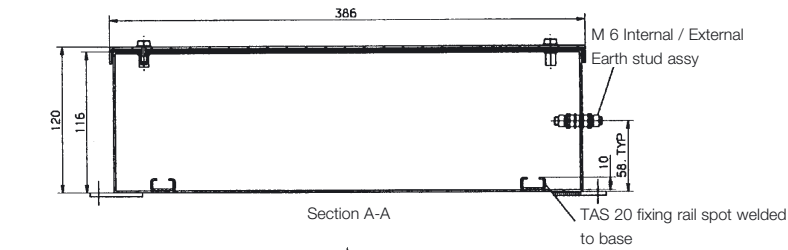
Technical Appendix – STB Range



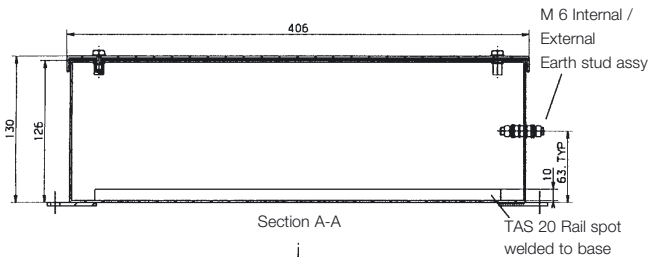
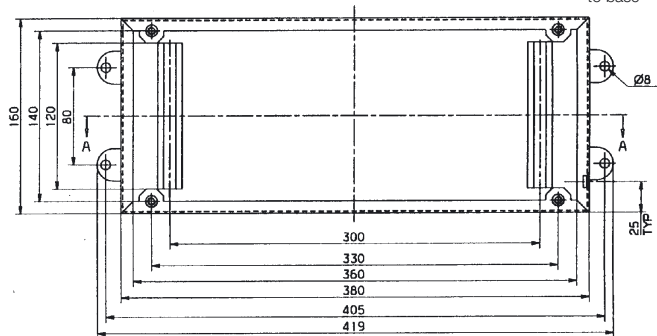
STB3



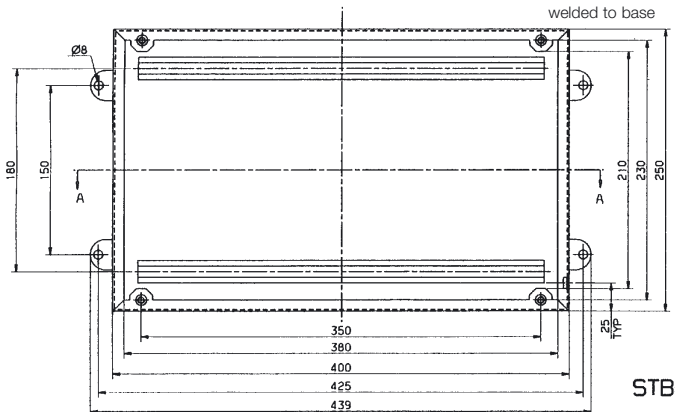
STB4



STB5



STB6



Technical Appendix – STB Range

Cable entries

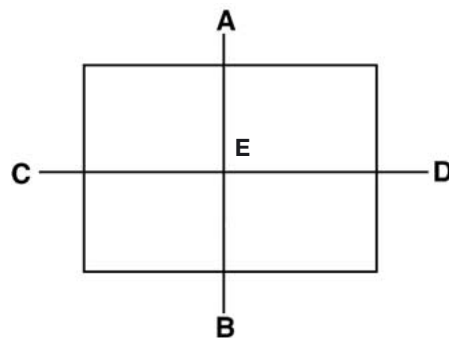
Gland size		Enclosure type											
		STB 1			STB 1.1			STB 2			STB 2.1		
		Side A / B	Side C	Side D	Side A / B	Side C	Side D	Side A / B	Side C	Side D	Side A / B	Side C	Side D
Metric*	M 16	8	8	4	8	10	6	10	10	6	10	17	11
	M 20	3	3	1	3	6	3	6	6	3	6	8	6
	M 25	2	2	1	2	3	2	3	3	2	3	6	4
	M 32	2	2	1	2	2	1	2	2	1	2	3	2
	M 40					2	1	2	2	1	2	2	2
	M 50											2	1
	M 63												
	M 75												
PG*	PG 7	8	8	4	8	10	6	6	6	6	6	17	11
	PG 9	8	8	4	8	8	3	6	6	3	6	17	11
	PG 11	8	8	4	8	8	2	6	6	2	6	17	11
	PG 13,5	3	3	1	3	3	1	3	3		3	8	6
	PG 16	3	3	1	3	3	1	3	3		3	8	6
	PG 21	2	2	1	2	2	1	2	2		2	6	4
	PG 29	2	2	1	2	2	1	1	1		1	3	2
	PG 36							1	1		1	2	2
	PG 42											2	1

* must be fitted with locknut

Gland size		Enclosure type											
		STB 3			STB 4			STB 5			STB 6		
		Side A / B	Side C	Side D	Side A / B	Side C	Side D	Side A / B	Side C	Side D	Side A / B	Side C	Side D
Metric*	M 16	17	17	11	24	24	18	39	15	9	56	32	24
	M 20	8	8	6	15	15	12	24	9	6	30	18	15
	M 25	6	6	4	10	10	8	16	6	4	18	11	8
	M 32	3	3	2	6	6	5	11	4	2	12	8	8
	M 40	2	2	2	4	4	3	6	2	1	7	4	3
	M 50	2	2	1	3	3	2	4	2	1	5	3	2
	M 63					2	2	2	1	1	4	2	2
	M 75										3	2	1
PG*	PG 7	17	17	11	24	24	18	39	15	9	56	32	24
	PG 9	17	17	11	24	24	18	39	15	9	56	32	24
	PG 11	17	17	11	24	24	18	39	15	9	56	32	24
	PG 13,5	8	8	6	15	15	12	24	9	6	30	18	15
	PG 16	8	8	6	15	15	12	24	9	6	30	18	15
	PG 21	6	6	4	10	10	8	16	6	4	18	11	8
	PG 29	3	3	2	6	6	5	11	4	2	12	8	6
	PG 36	2	2	2	4	4	3	6	2	1	7	3	4
	PG 42	2	2	1	3	3	2	4	2	1	5	3	2

* must be fitted with locknut

Enclosure side identification



- A: Top
- B: Bottom
- C: Left
- D: Right
- E: Base

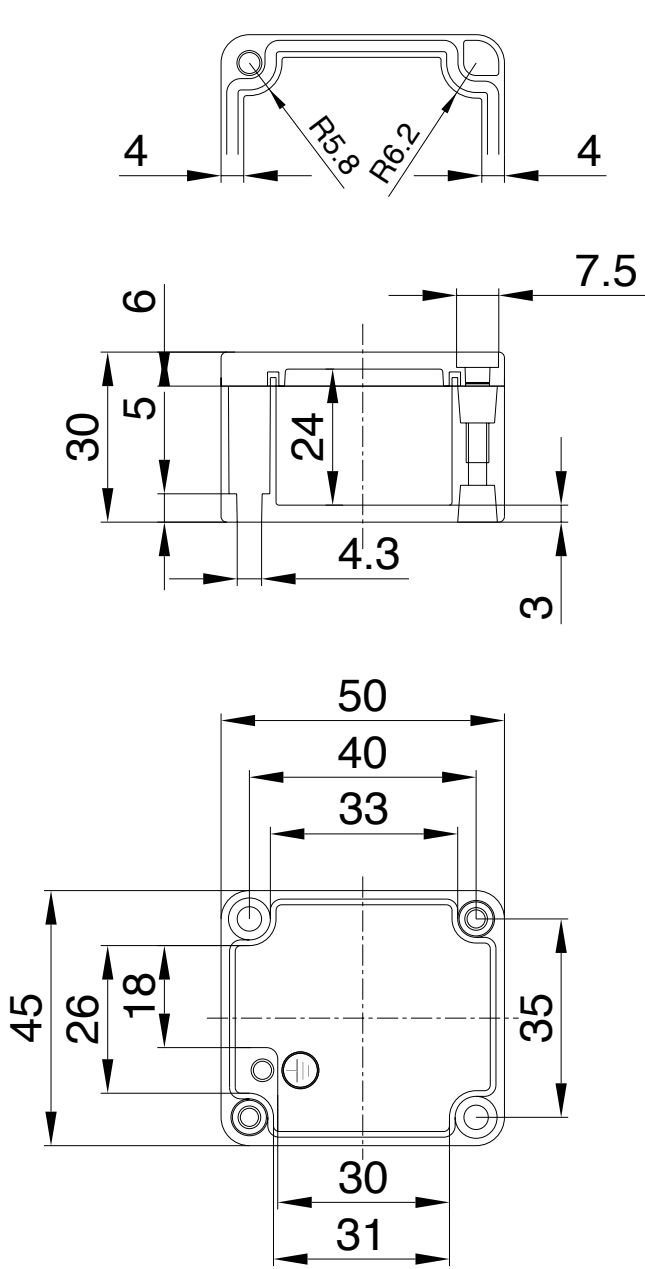


Technical Appendix – K Range

Dimensions

K0

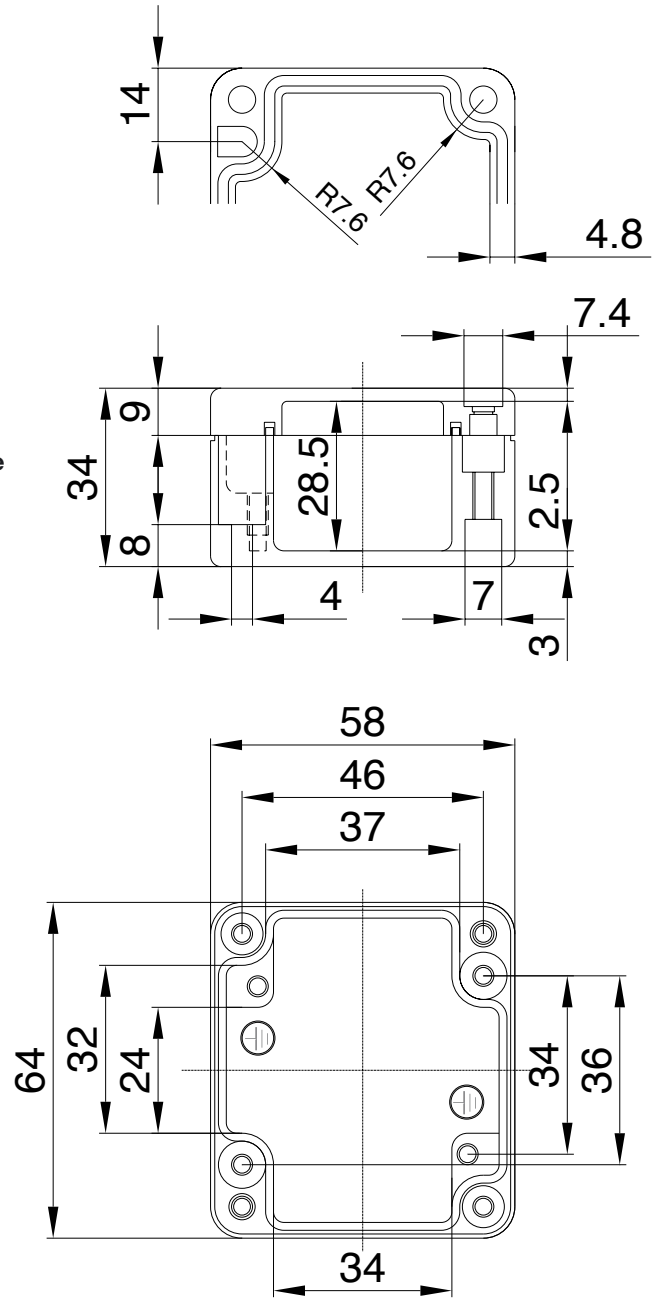
K01



Lid

Side complete

Base

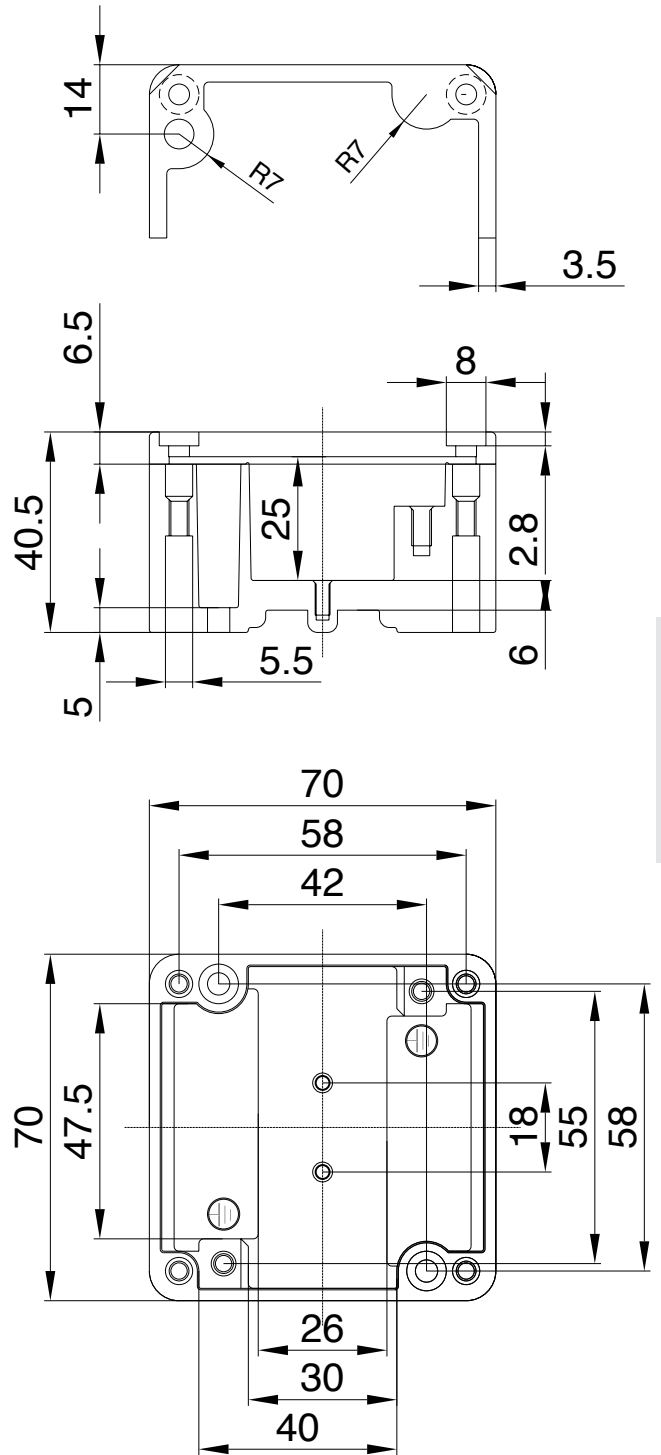
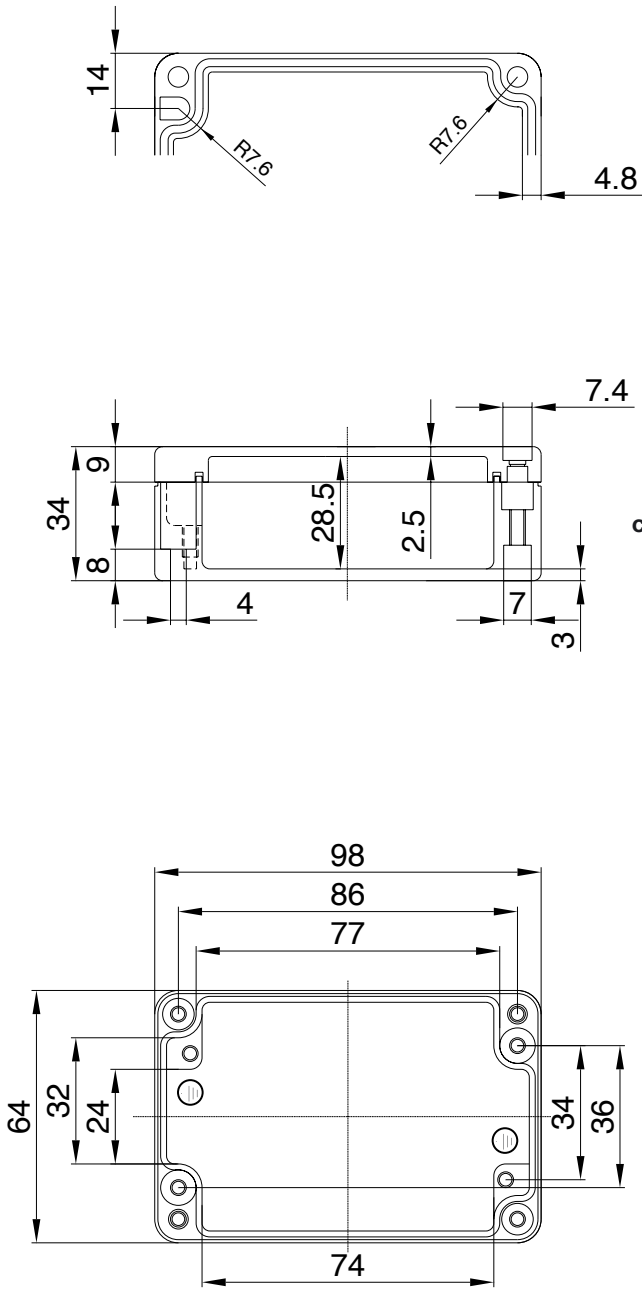


Technical Appendix – K Range

Dimensions

K02

K1



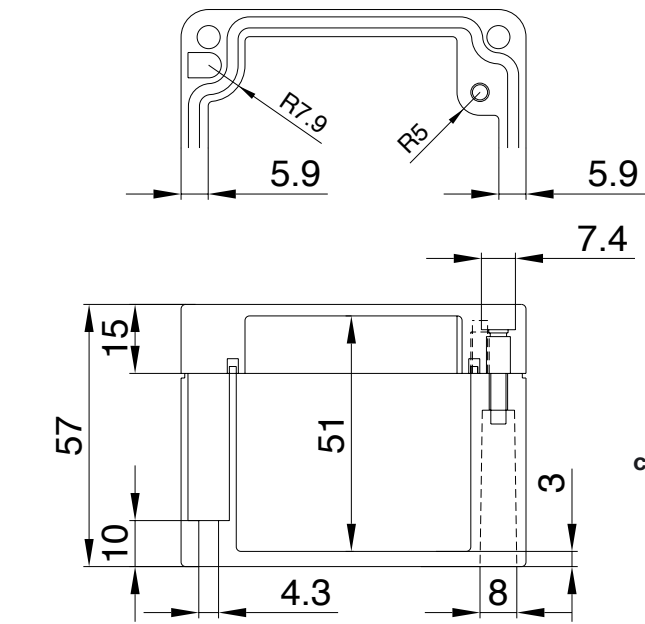
Technical Appendix

Technical Appendix – K Range

Dimensions

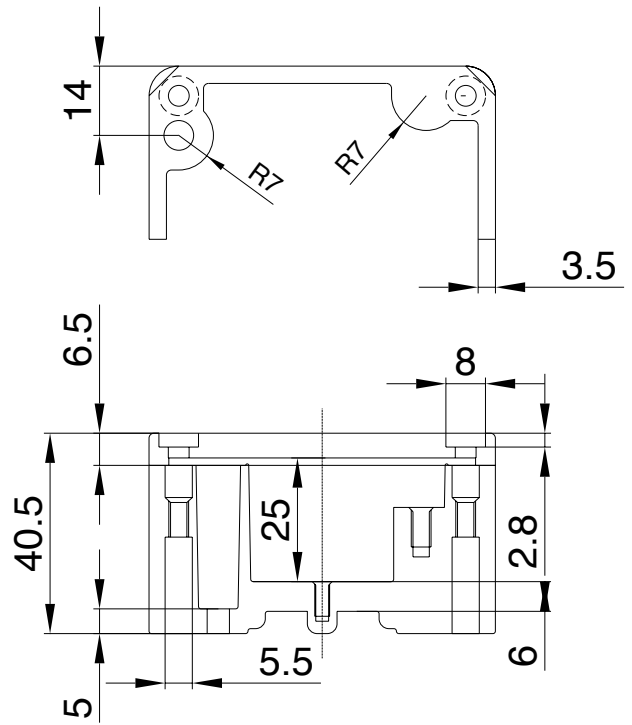
K11

K2

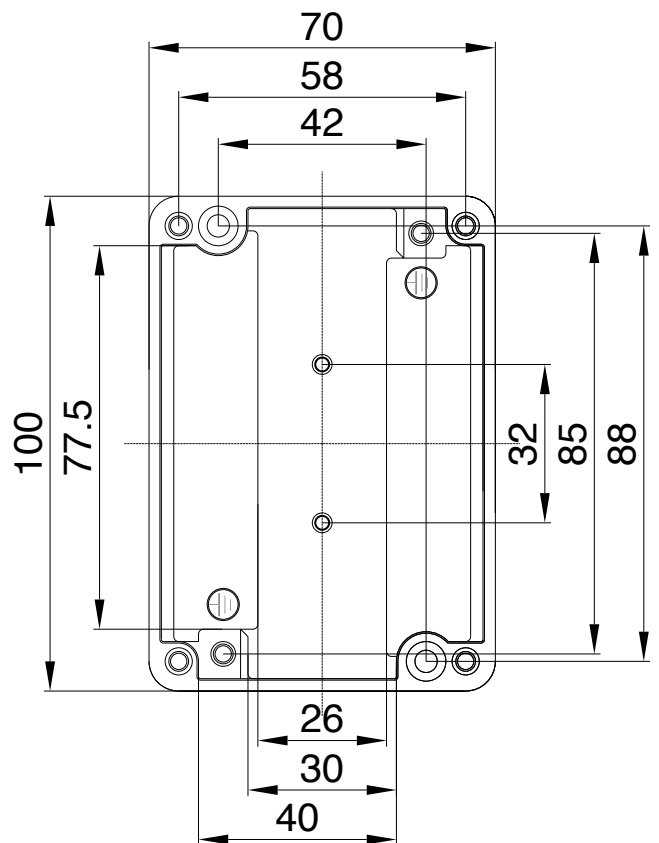
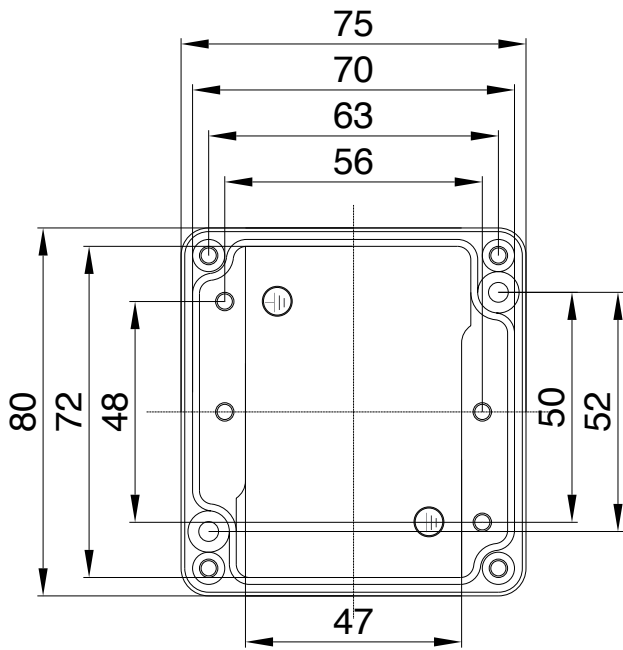


Lid

Side complete



Base

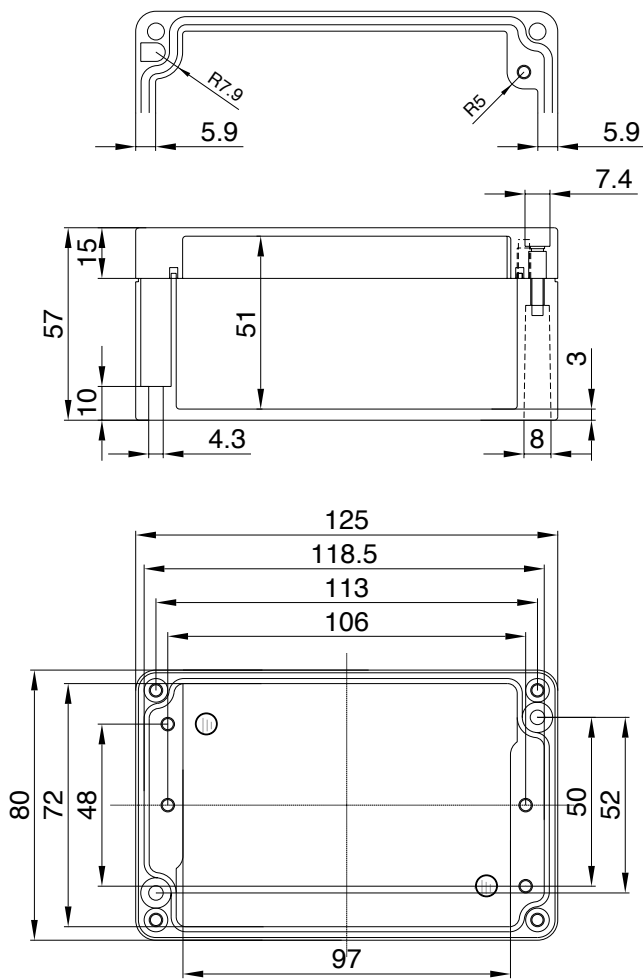


Technical Appendix – K Range

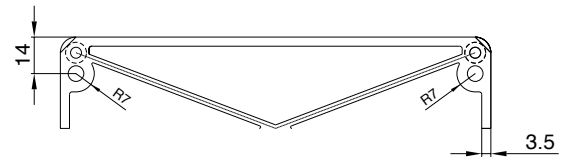
Dimensions

K21

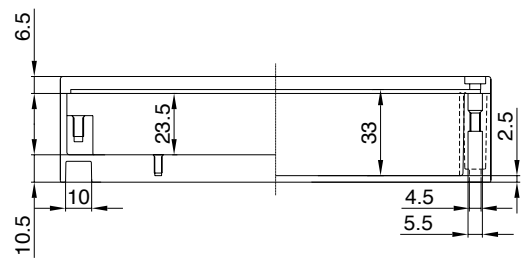
K3



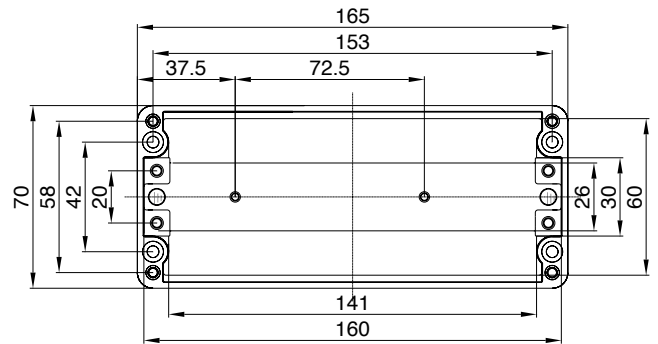
Lid



Side complete



Base



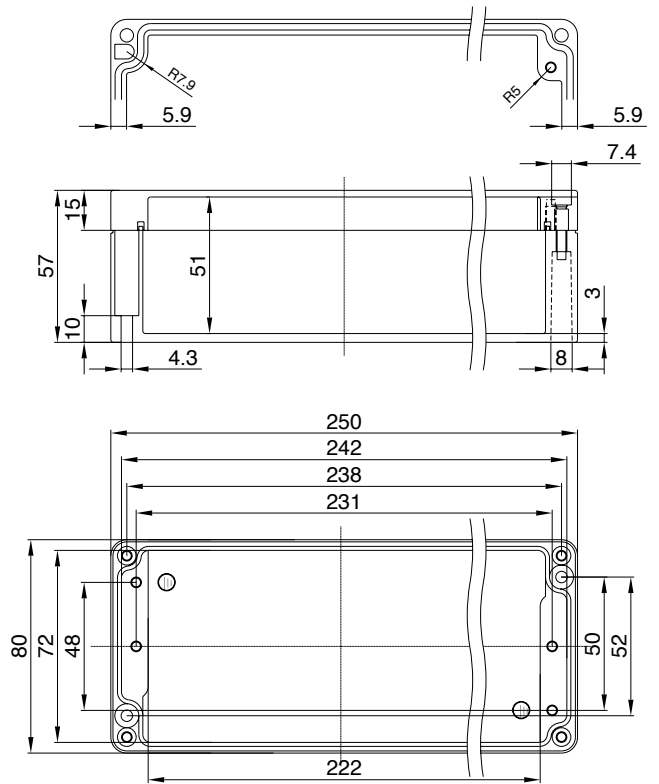
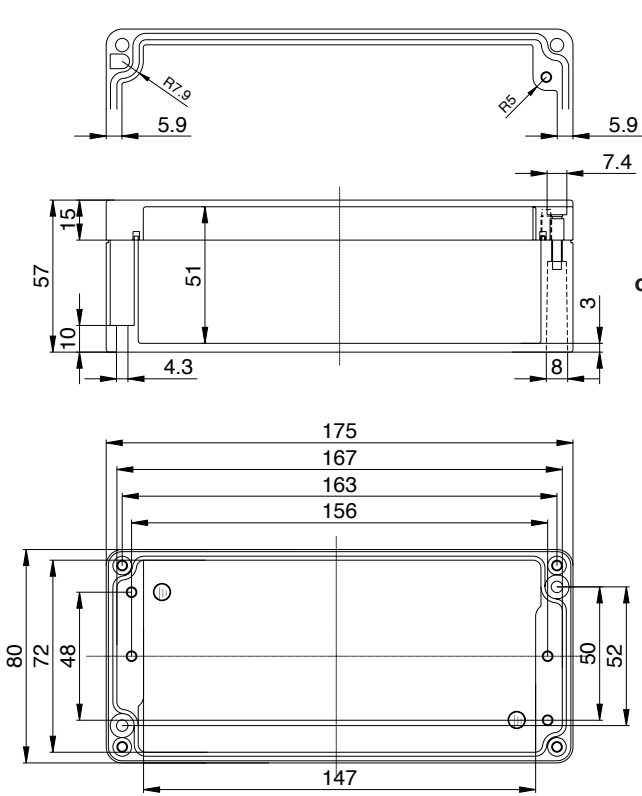
Technical Appendix

Technical Appendix – K Range

Dimensions

K31

K32

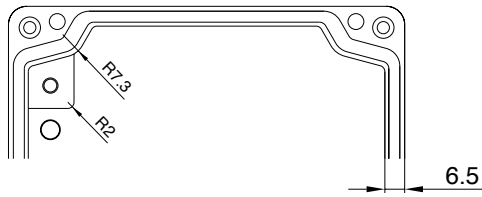


Technical Appendix – K Range

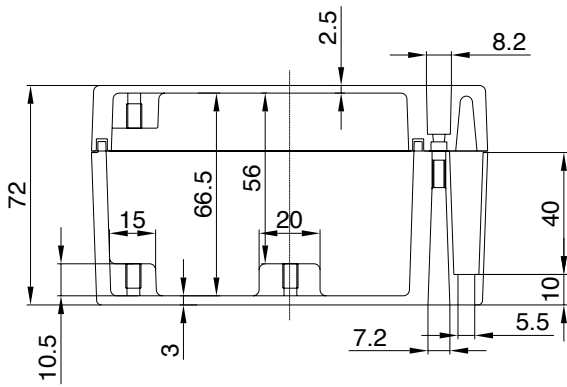
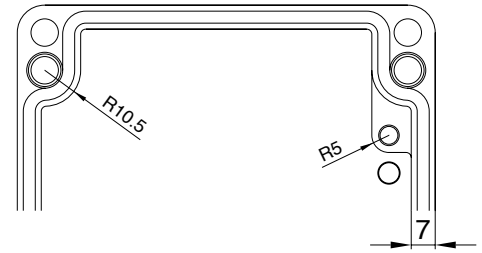
Dimensions

K4

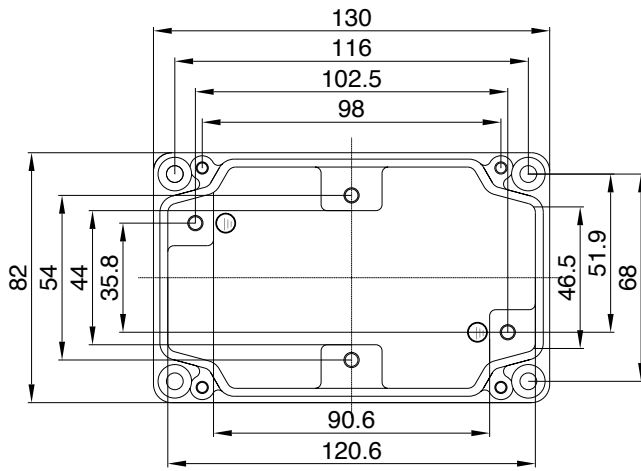
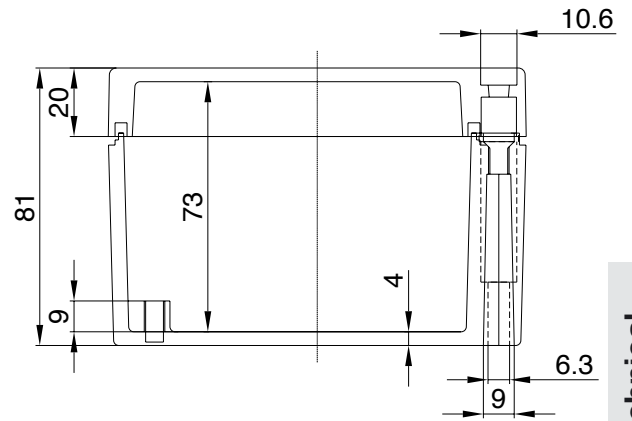
K41



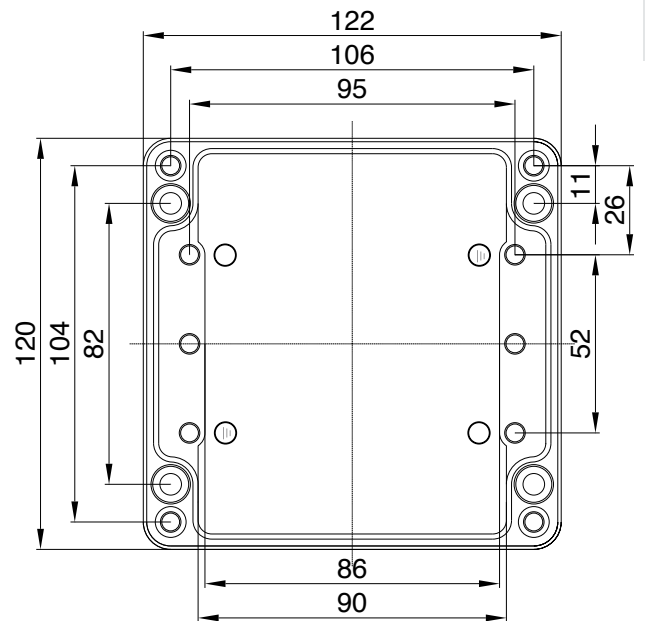
Lid



Side complete



Base



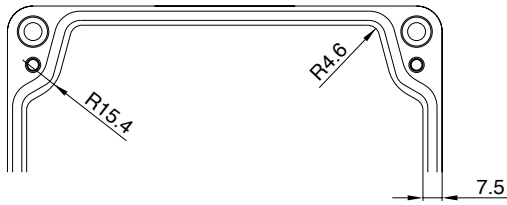
Technical Appendix

Technical Appendix – K Range

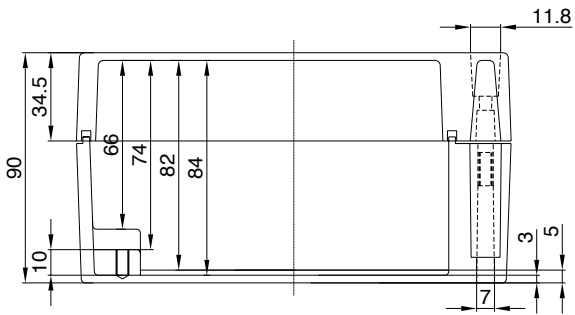
Dimensions

K5

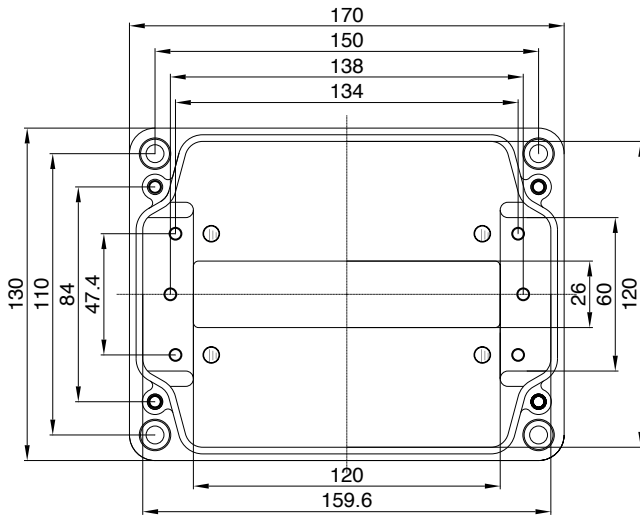
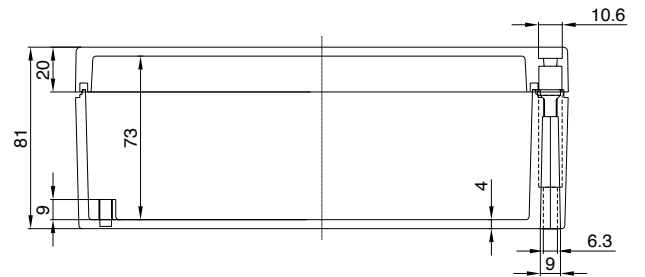
K51



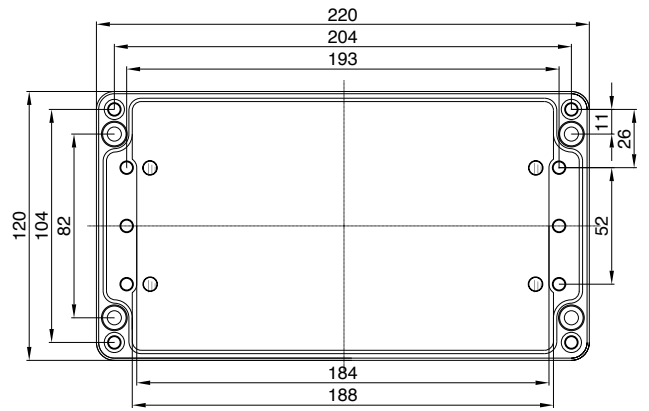
Lid



Side complete



Base

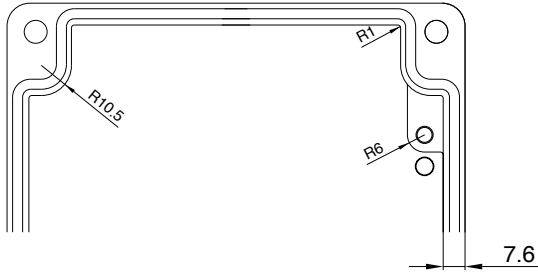


Technical Appendix – K Range

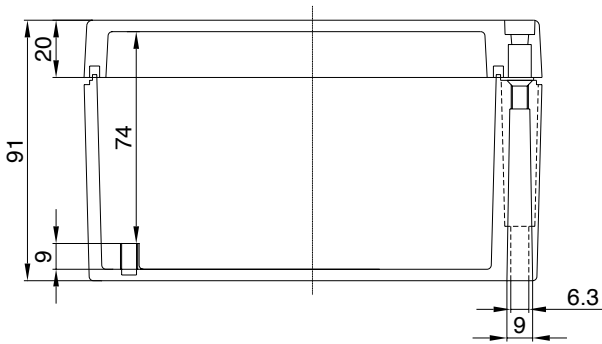
Dimensions

K52

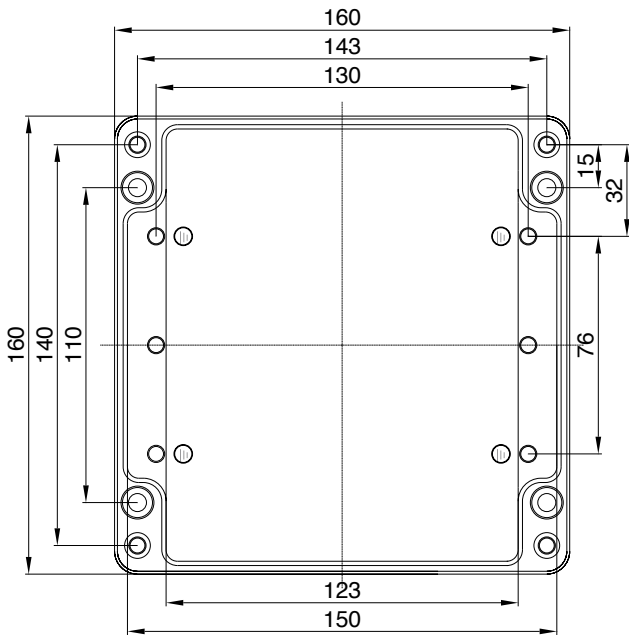
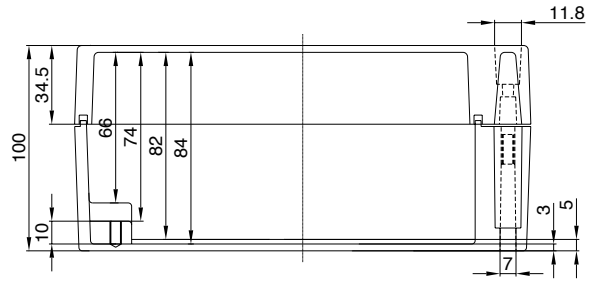
K6



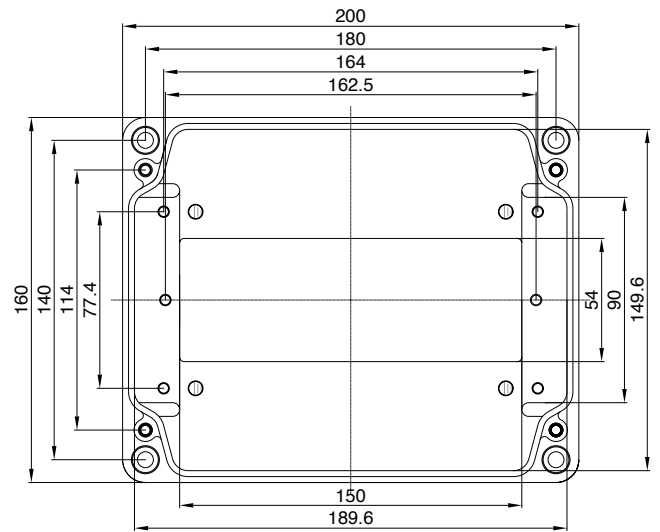
Lid



Side complete



Base



Technical Appendix

Technical Appendix – K Range

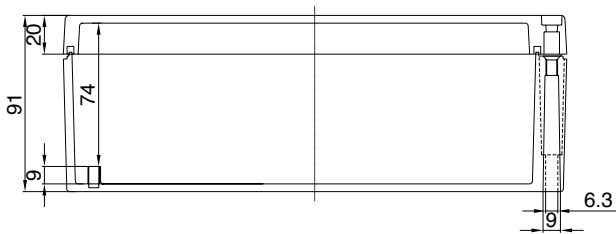
Dimensions

K61

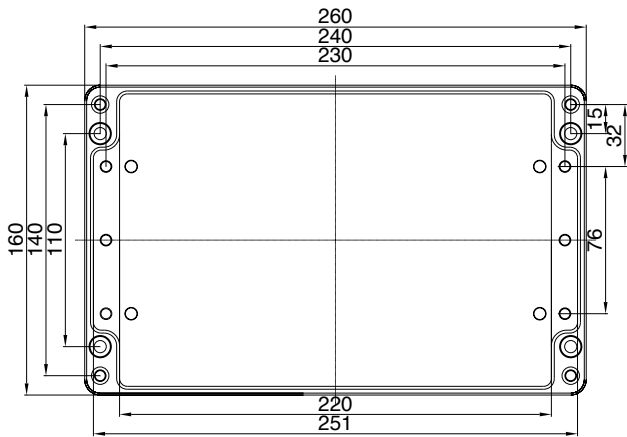
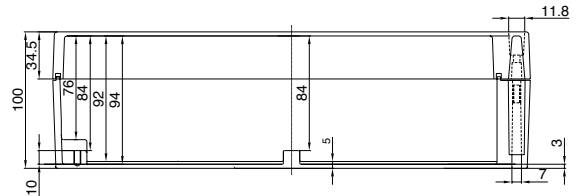
K7



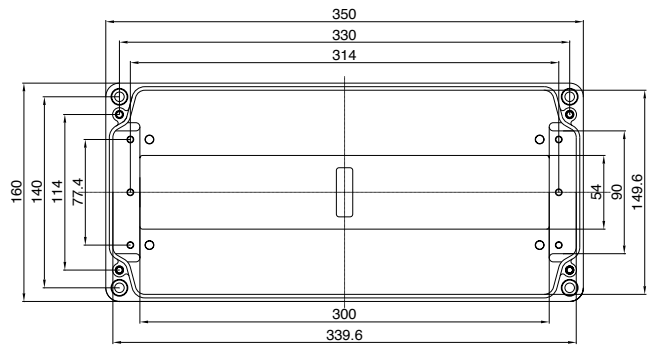
Lid



Side complete



Base

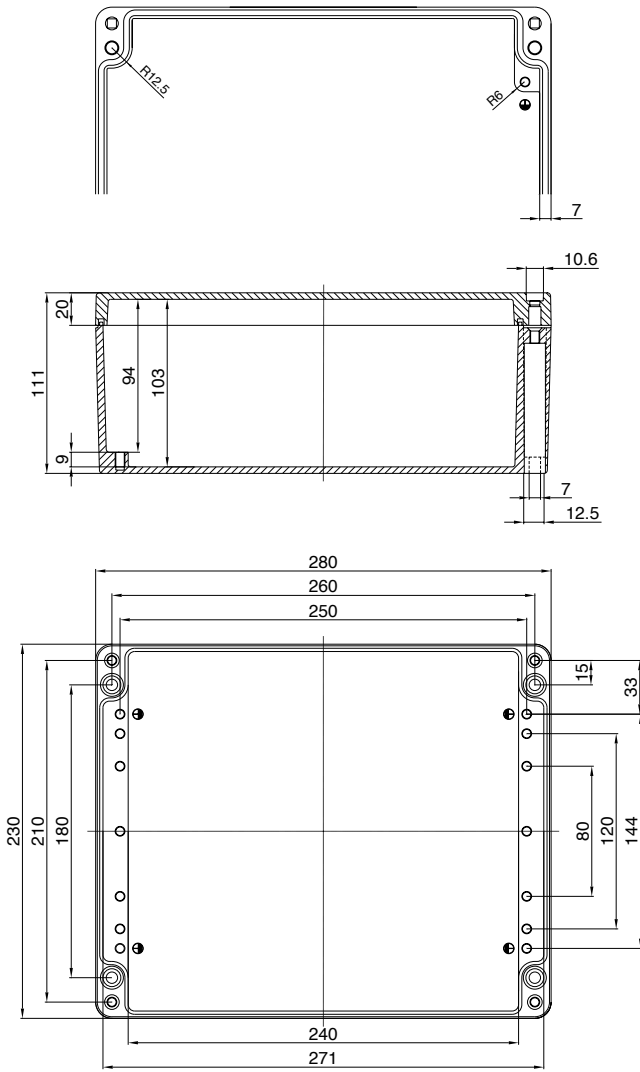


Technical Appendix – K Range

Dimensions

K71

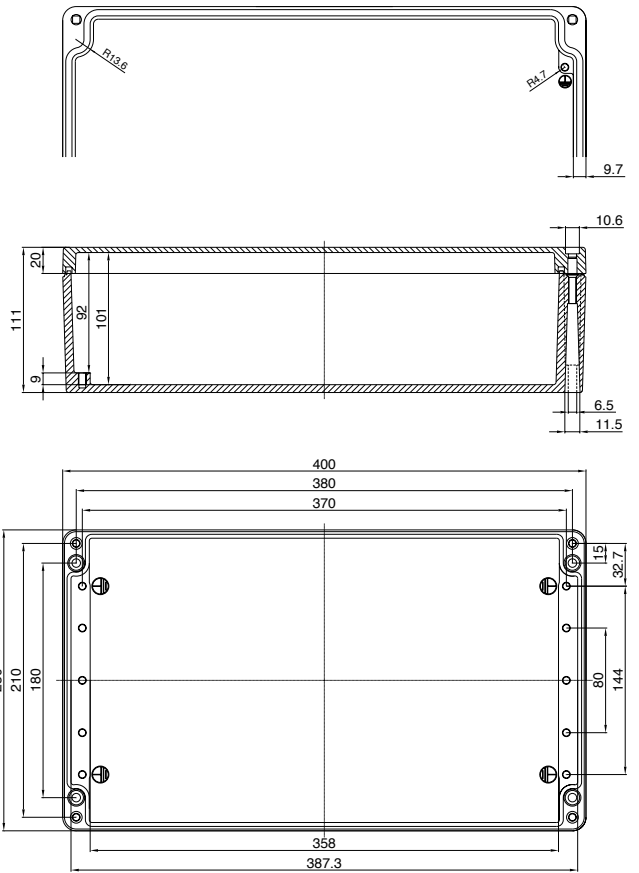
K72



Lid

Side complete

Base



Technical Appendix

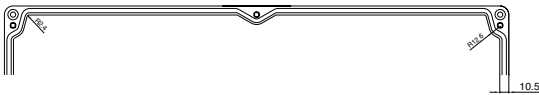
Technical Appendix – K Range

Dimensions

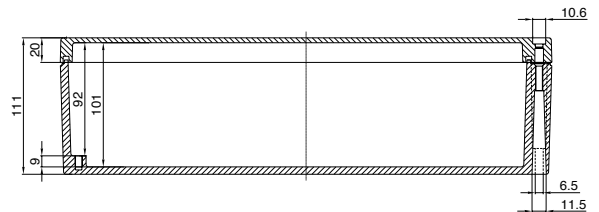
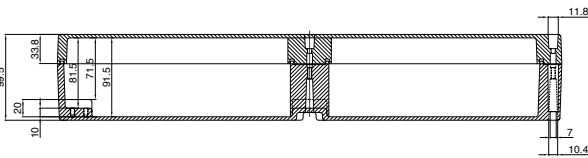
K8

K81

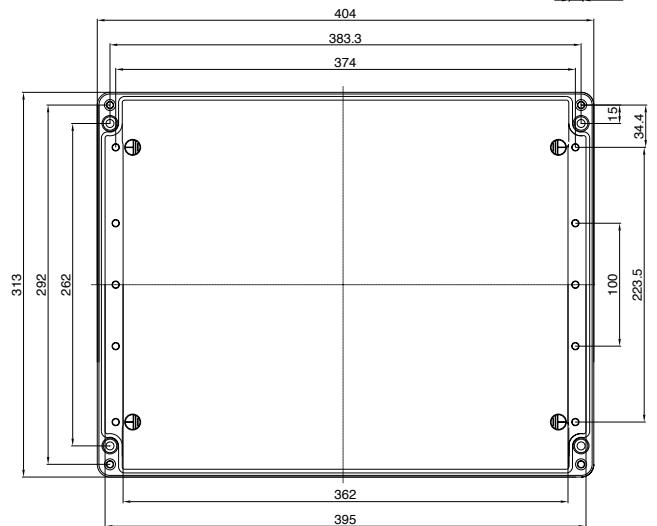
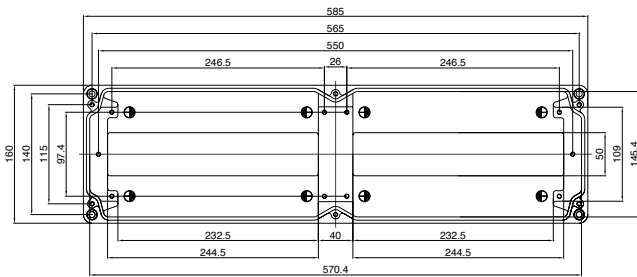
Lid



Side complete



Base



Technical Appendix – K Range

Cable entries

Gland size		Enclosure type							
		K 0		K 01		K 02		K 1	
		Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D
Metric	M 12	1	1	1	1	3	1	3	2
	M 16	-	-	-	-	-	-	2	1
	M 20	-	-	-	-	-	-	-	-
	M 25	-	-	-	-	-	-	-	-
	M 32	-	-	-	-	-	-	-	-
	M 40	-	-	-	-	-	-	-	-
	M 50	-	-	-	-	-	-	-	-
PG	PG 7	1	-	1	1	3	1	2	1
	PG 9	-	-	-	-	-	-	1	1
	PG 11	-	-	-	-	-	-	1	1
	PG 13,5	-	-	-	-	-	-	-	-
	PG 16	-	-	-	-	-	-	-	-
	PG 21	-	-	-	-	-	-	-	-
	PG 29	-	-	-	-	-	-	-	-
	PG 36	-	-	-	-	-	-	-	-
	PG 42	-	-	-	-	-	-	-	-

Gland size		Enclosure type							
		K 11		K 2		K 21		K 3	
		Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D
Metric	M 12	2	1	3	1	8	2	6	-
	M 16	2	1	3	1	2	1	6	-
	M 20	1	1	-	-	3	1	4	-
	M 25	1	-	-	-	2	-	-	-
	M 32	-	-	-	-	-	-	-	-
	M 40	-	-	-	-	-	-	-	-
	M 50	-	-	-	-	-	-	-	-
PG	PG 7	2	2	3	1	4	2	6	-
	PG 9	1	1	3	1	3	1	5	-
	PG 11	1	-	2	-	3	1	5	-
	PG 13,5	1	-	-	-	-	-	-	-
	PG 16	1	-	-	-	-	-	-	-
	PG 21	-	-	-	-	-	-	-	-
	PG 29	-	-	-	-	-	-	-	-
	PG 36	-	-	-	-	-	-	-	-
	PG 42	-	-	-	-	-	-	-	-

Gland size		Enclosure type							
		K 31		K 32		K 4		K 41	
		Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D
Metric	M 12	13	2	10	2	1	3	11	4
	M 16	6	1	9	1	1	3	6	2
	M 20	5	1	7	1	1	2	3	1
	M 25	4	-	-	-	1	2	2	1
	M 32	-	-	-	-	-	-	1	1
	M 40	-	-	-	-	-	-	1	-
	M 50	-	-	-	-	-	-	-	-
PG	PG 7	6	2	10	2	2	3	6	4
	PG 9	5	1	9	1	1	3	6	2
	PG 11	5	1	8	1	1	2	5	2
	PG 13,5	4	-	7	-	1	2	2	1
	PG 16	4	-	6	-	-	2	2	1
	PG 21	-	-	-	-	-	-	1	-
	PG 29	-	-	-	-	-	-	-	-
	PG 36	-	-	-	-	-	-	-	-
	PG 42	-	-	-	-	-	-	-	-

Technical Appendix – K Range

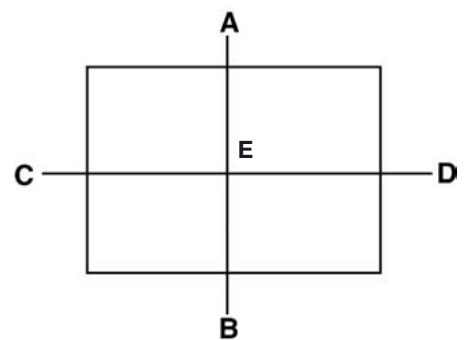
Cable entries

Gland size		Enclosure type							
		K 5		K 51		K 52		K 6	
		Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D
Metric	M 12	10	4	16	4	15	6	12	6
	M 16	8	2	14	3	12	6	10	6
	M 20	4	1	6	1	6	2	4	2
	M 25	3	1	5	1	3	2	3	2
	M 32	2	-	4	1	2	1	3	1
	M 40	-	-	-	-	2	-	-	-
	M 50	-	-	-	-	-	-	-	-
PG	PG 7	10	2	16	4	14	6	12	6
	PG 9	8	2	14	2	8	6	10	5
	PG 11	4	1	12	2	8	3	9	3
	PG 13,5	3	1	5	2	6	2	4	2
	PG 16	3	1	5	1	3	2	4	2
	PG 21	2	-	4	-	2	1	3	1
	PG 29	-	-	-	-	2	-	-	-
	PG 36	-	-	-	-	-	-	-	-
	PG 42	-	-	-	-	-	-	-	-

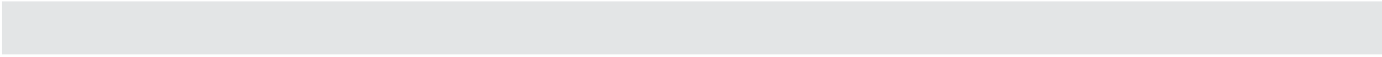
Gland size		Enclosure type							
		K 61		K 7		K 71		K 72	
		Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D
Metric	M 12	29	6	28	6	42	21	64	18
	M 16	16	6	24	6	27	12	42	15
	M 20	13	2	9	2	14	10	33	8
	M 25	5	2	7	2	12	4	18	6
	M 32	4	1	6	1	5	3	14	2
	M 40	-	-	-	-	4	2	6	2
	M 50	-	-	-	-	3	-	5	-
PG	PG 7	27	6	26	6	40	21	62	21
	PG 9	16	6	22	5	27	17	42	17
	PG 11	14	3	20	3	24	10	36	10
	PG 13,5	12	2	9	2	14	8	22	8
	PG 16	6	2	8	2	12	8	18	7
	PG 21	4	1	6	1	5	3	7	3
	PG 29	3	-	-	-	4	2	6	2
	PG 36	-	-	-	-	3	2	4	2
	PG 42	-	-	-	-	2	-	4	-

Gland size		Enclosure type			
		K 8		K 81	
		Side A/B	Side C/D	Side A/B	Side C/D
Metric	M 12	40	8	66	30
	M 16	36	6	42	26
	M 20	14	2	33	14
	M 25	12	2	18	11
	M 32	8	1	14	4
	M 40	-	-	6	3
	M 50	-	-	5	-
PG	PG 7	40	6	62	30
	PG 9	36	5	42	26
	PG 11	30	3	36	16
	PG 13,5	14	2	22	14
	PG 16	12	2	18	11
	PG 21	10	1	7	5
	PG 29	-	-	6	4
	PG 36	-	-	5	3
	PG 42	-	-	4	-

Enclosure side identification



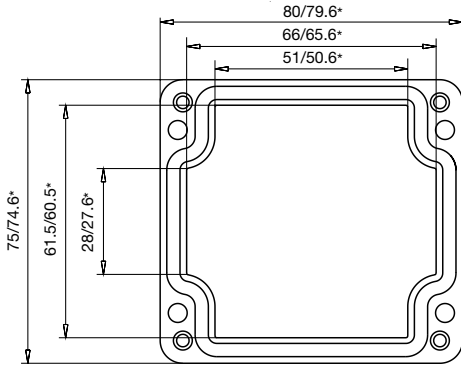
- A: Top
- B: Bottom
- C: Left
- D: Right
- E: Base



Technical Appendix – POK Range

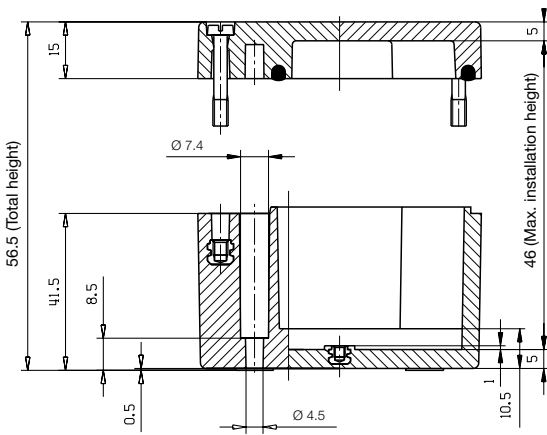
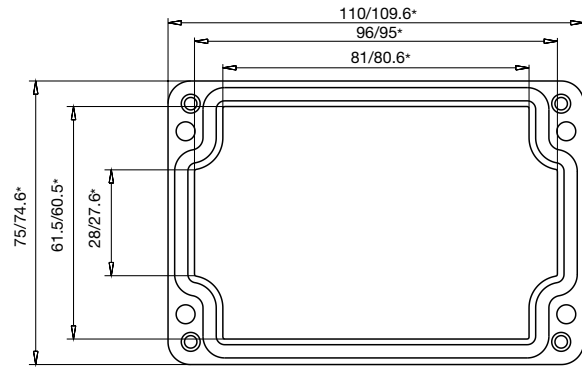
Dimensions

POK 1

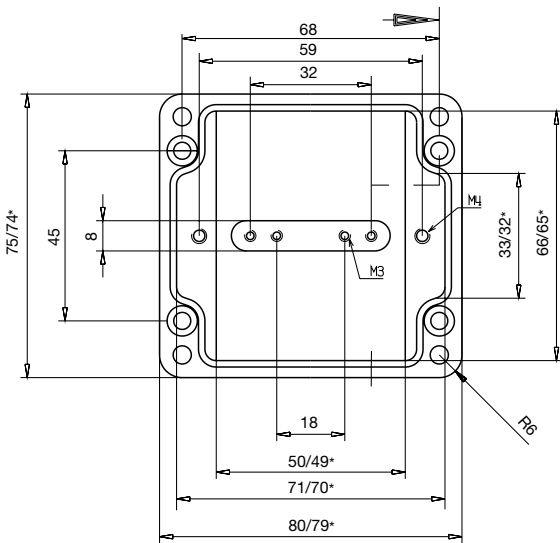
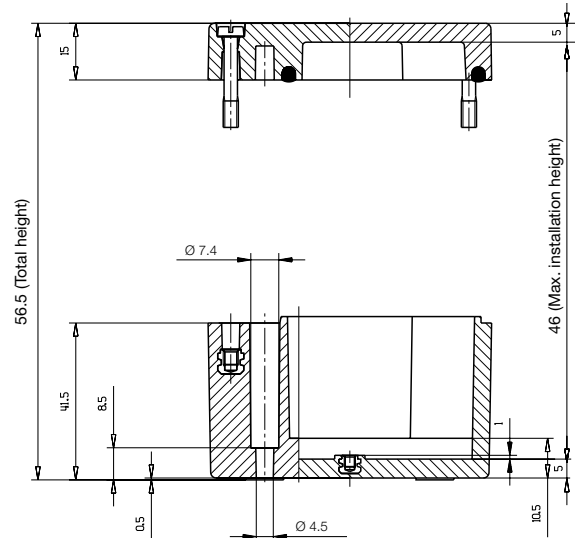


POK 2

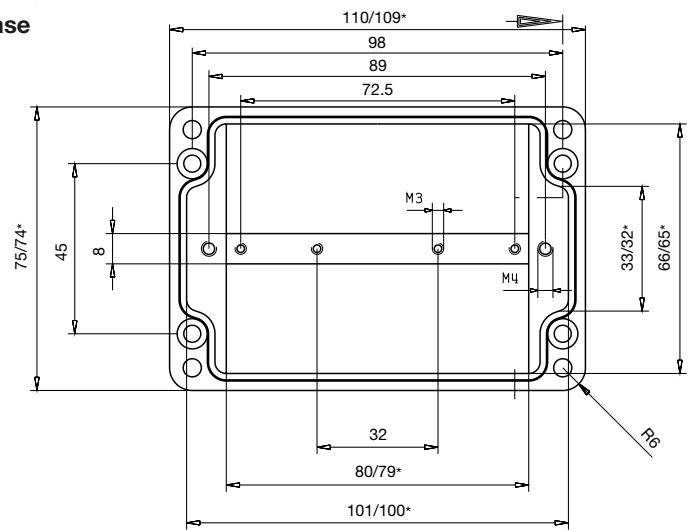
Lid



Side complete



Base

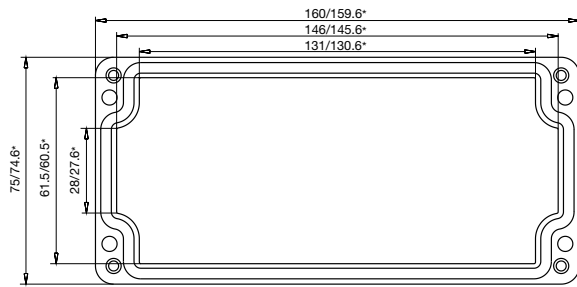


Technical Appendix – POK Range

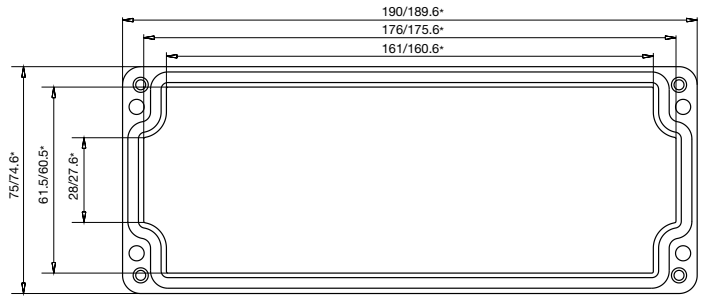
Dimensions

POK 3

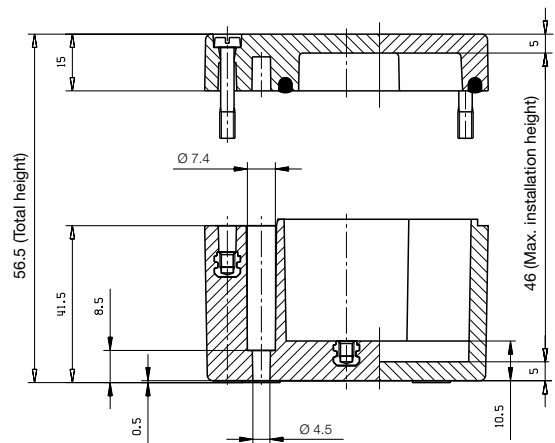
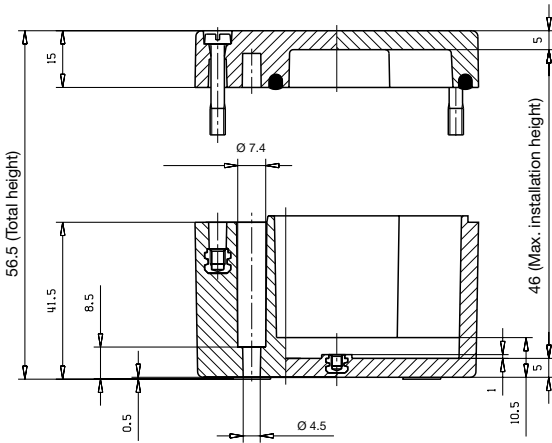
POK 31



Lid

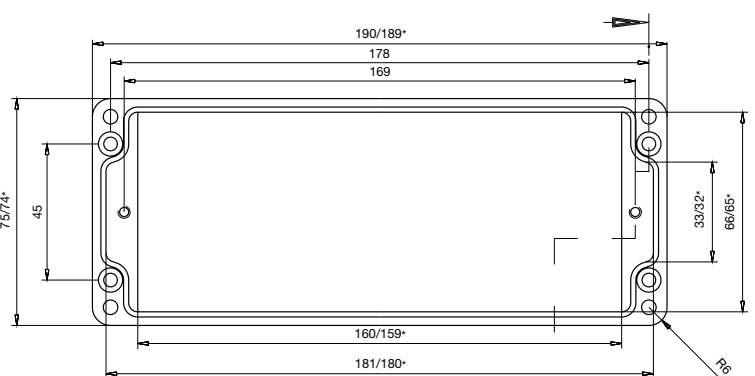
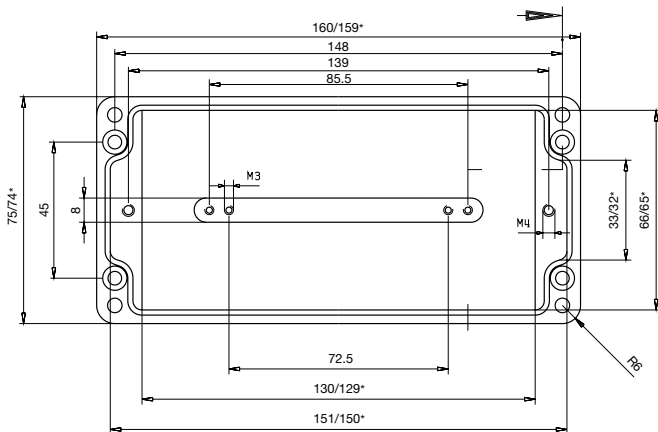


Side complete



Technical Appendix

Base



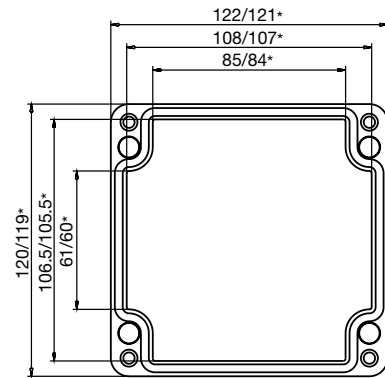
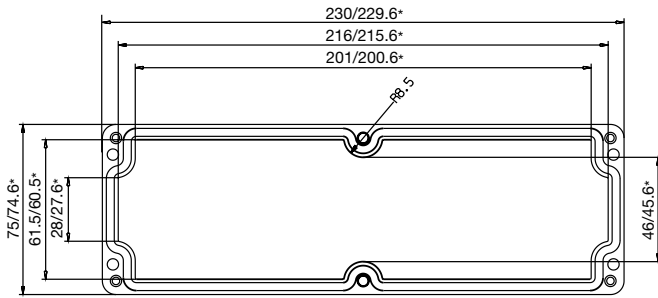
Technical Appendix – POK Range

Dimensions

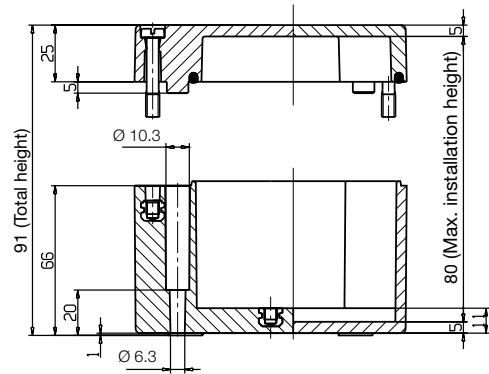
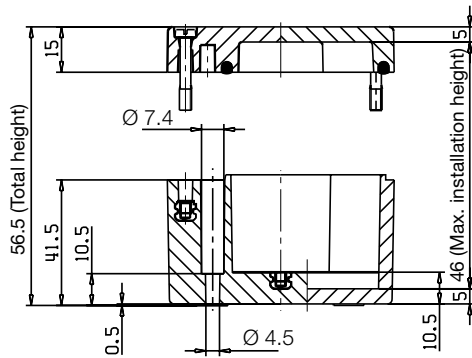
POK 32

POK 4

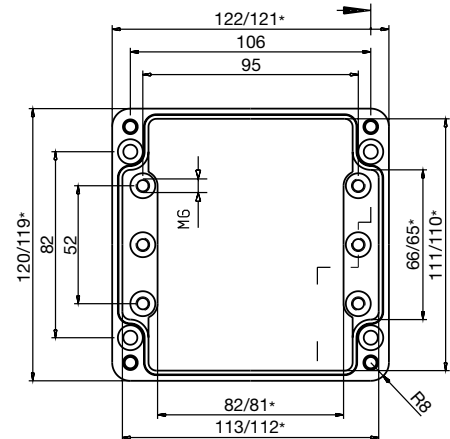
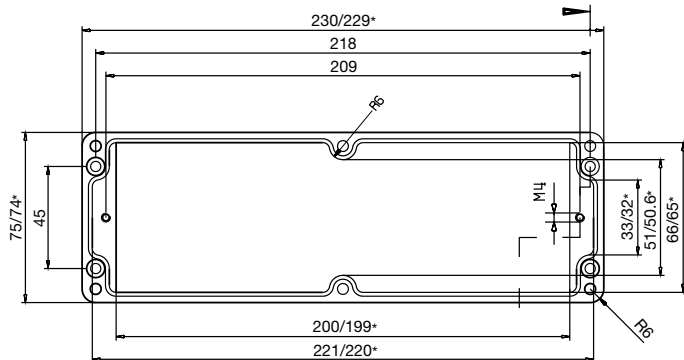
Lid



Side complete



Base

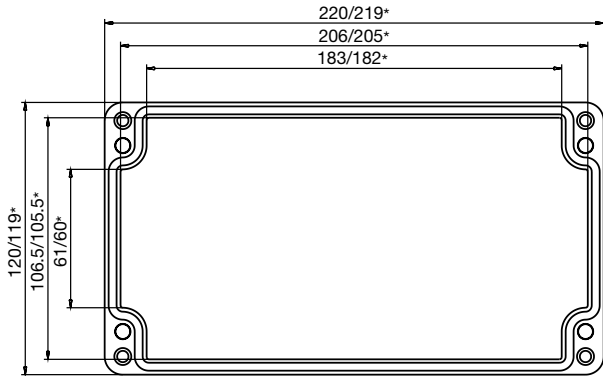


Technical Appendix – POK Range

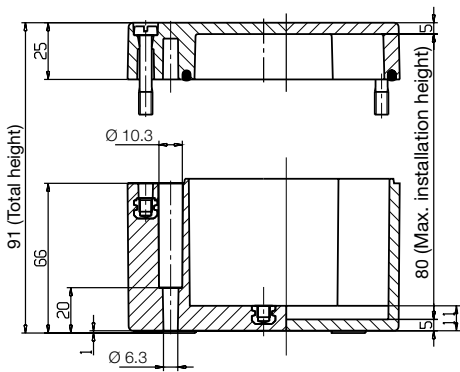
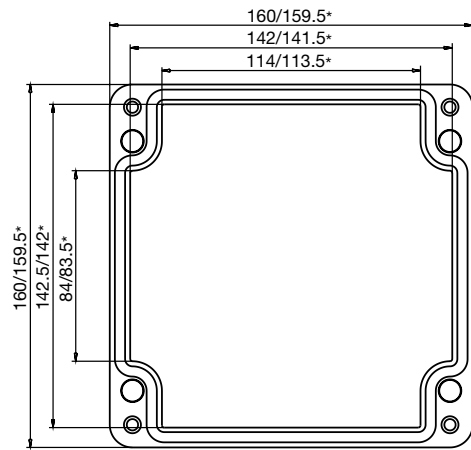
Dimensions

POK 5

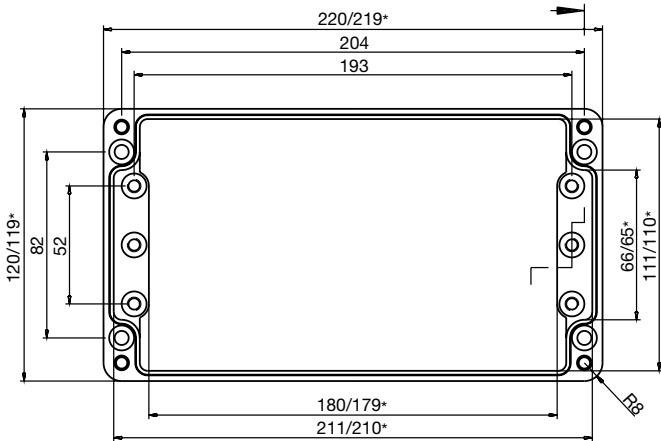
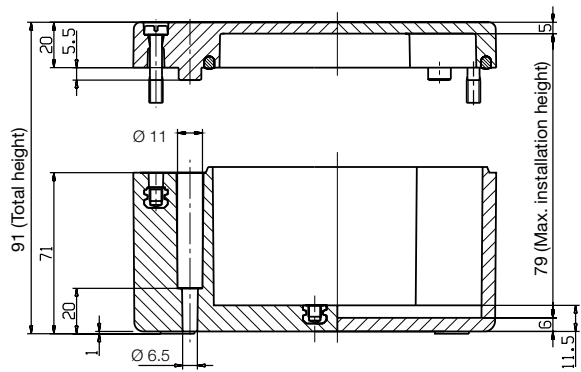
POK 51



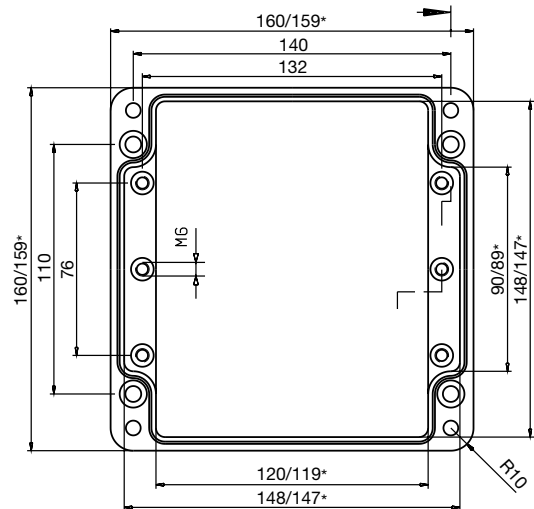
Lid



Side complete



Base

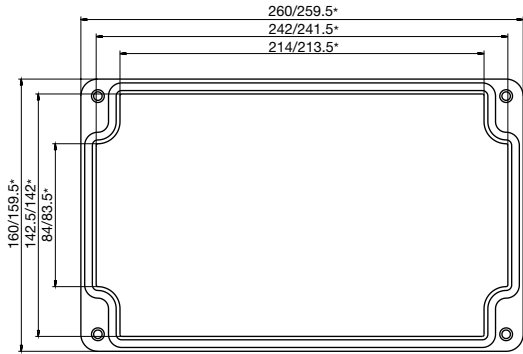


Technical Appendix – POK Range

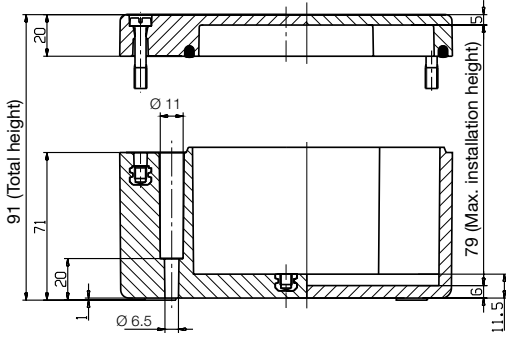
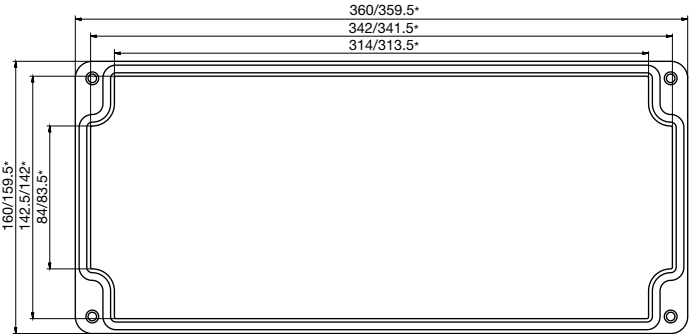
Dimensions

POK 6

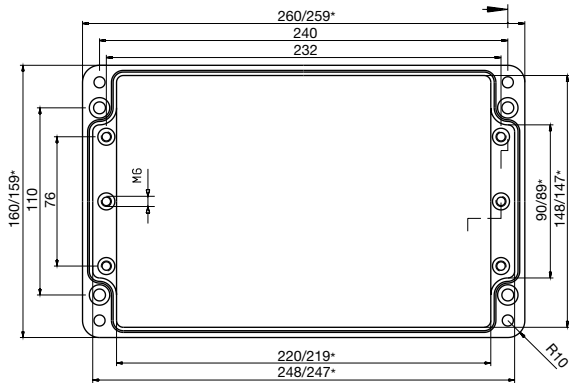
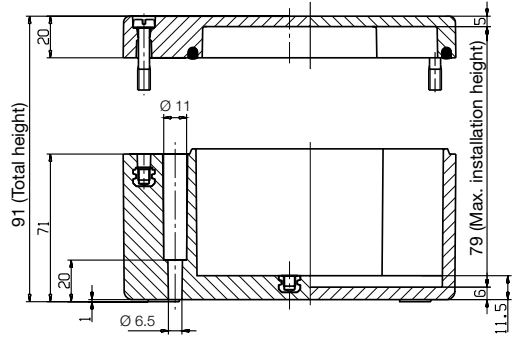
POK 7



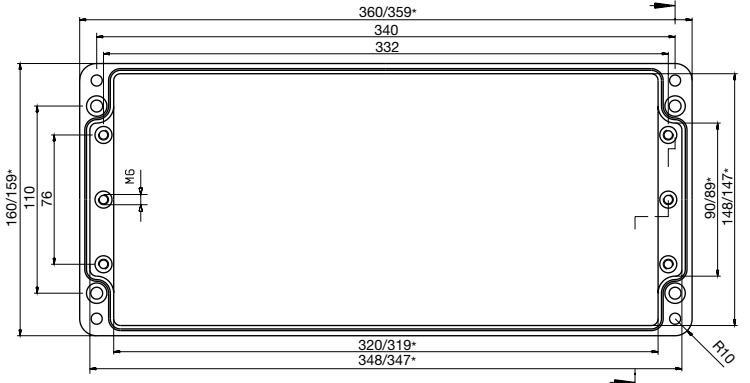
Lid



Side complete



Base



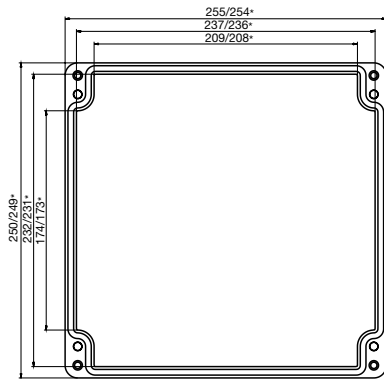
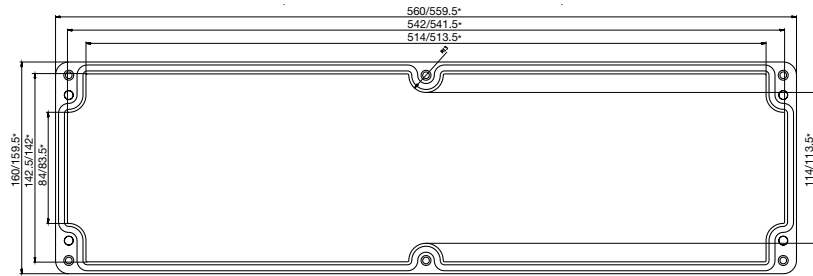
Technical Appendix – POK Range

Dimensions

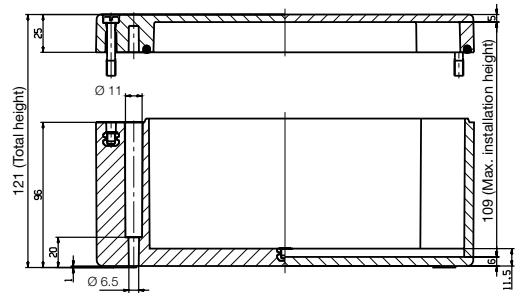
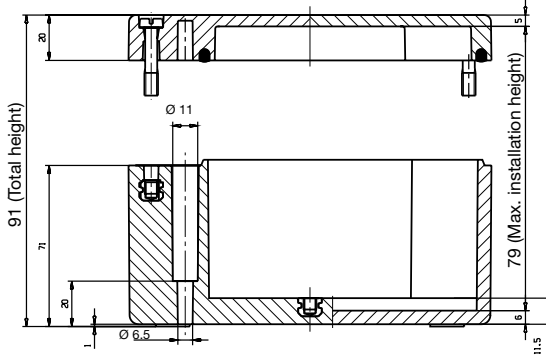
POK 71

POK 8

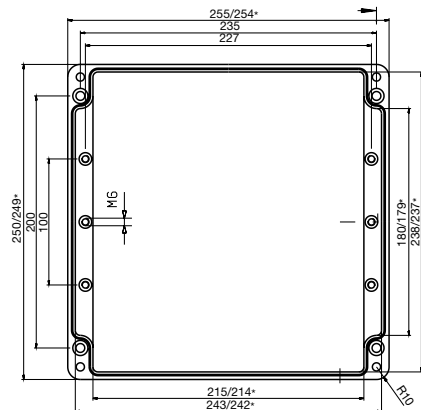
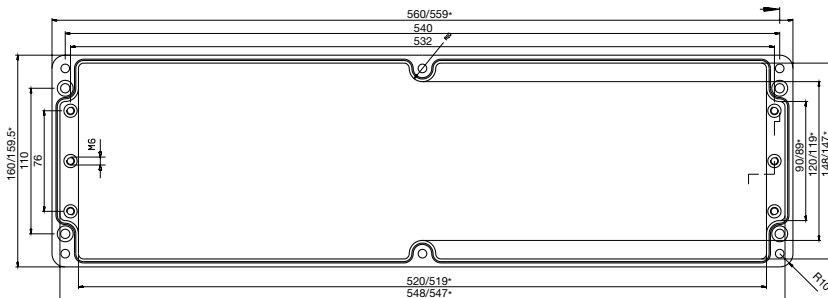
Lid



Side complete



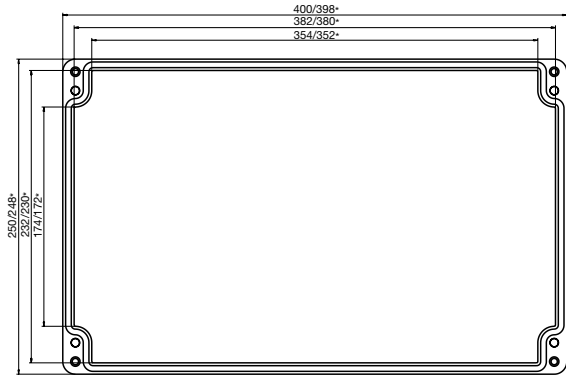
Base



Technical Appendix – POK Range

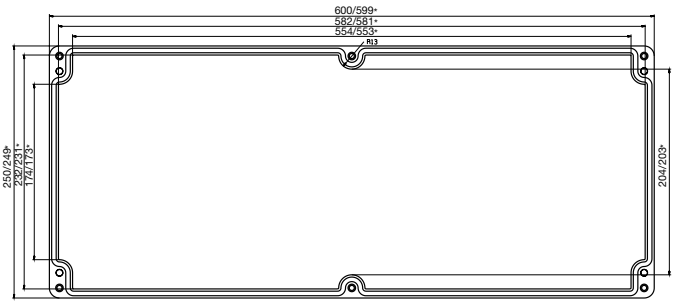
Dimensions

POK 9

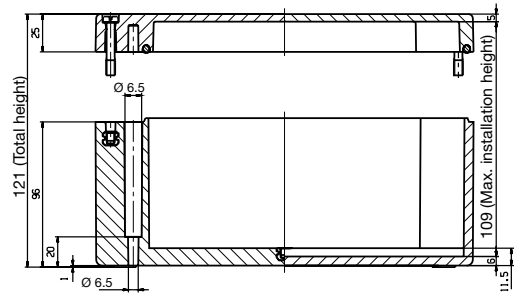
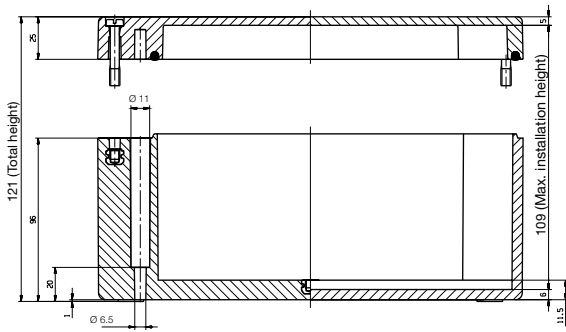


POK 91

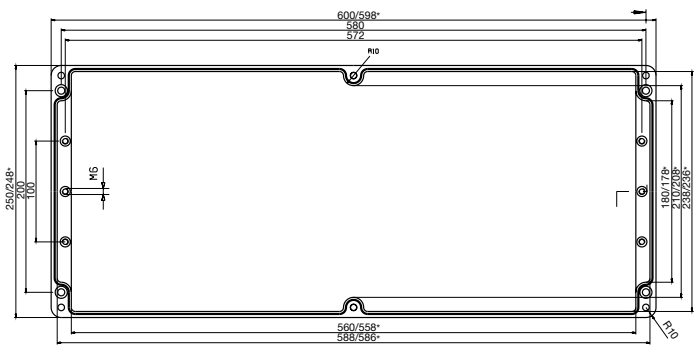
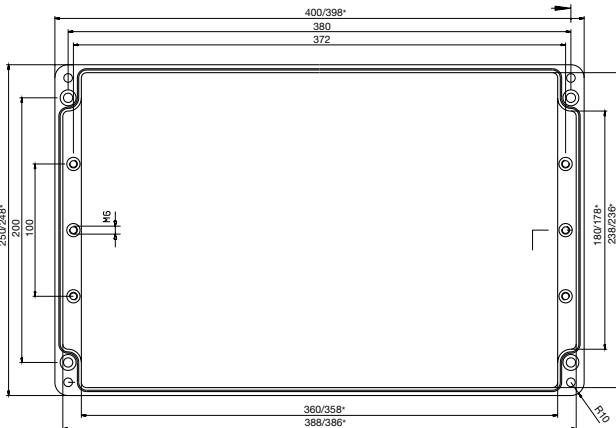
Lid



Side complete



Base



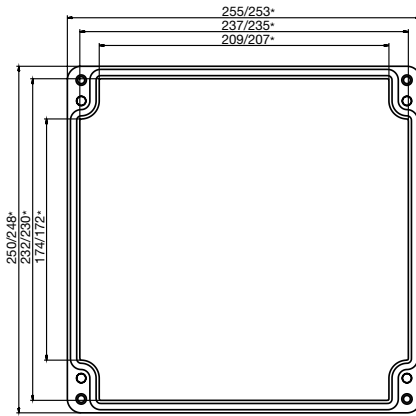
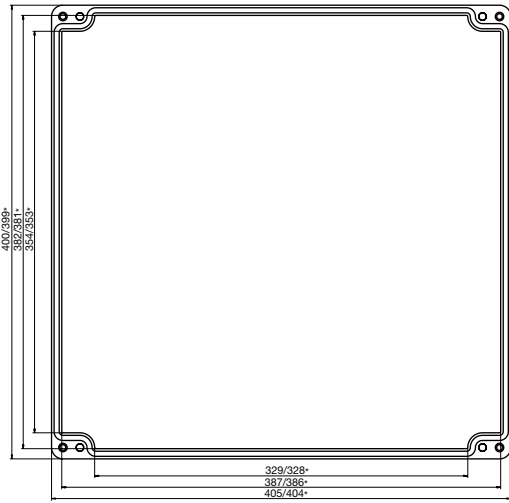
Technical Appendix – POK Range

Dimensions

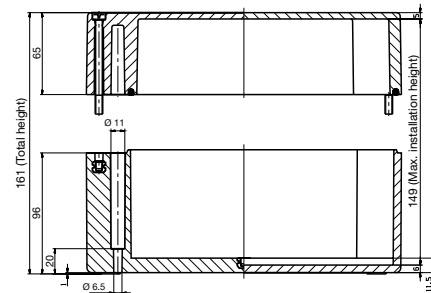
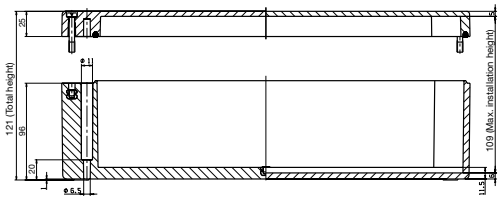
POK 10

POK 11

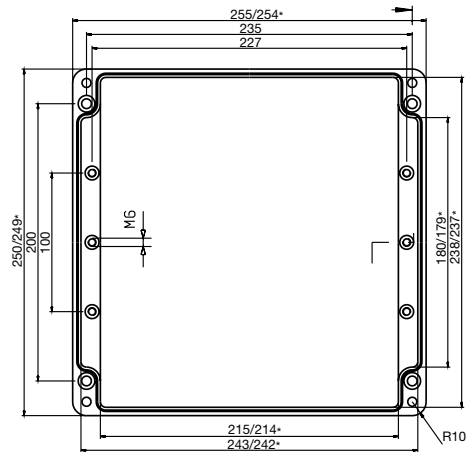
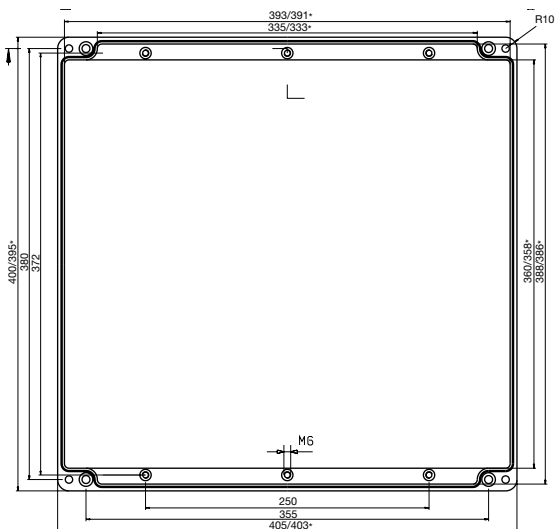
Lid



Side complete



Base

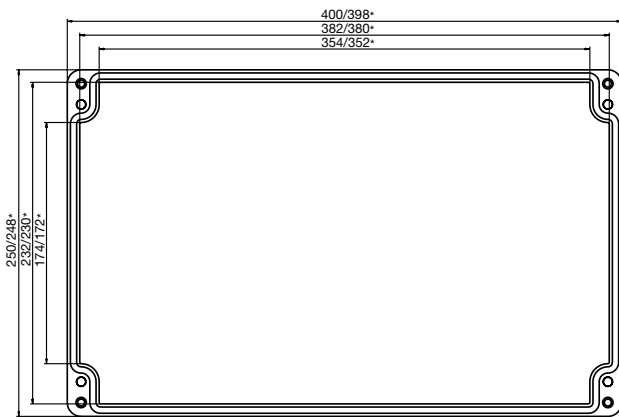


Technical Appendix – POK Range

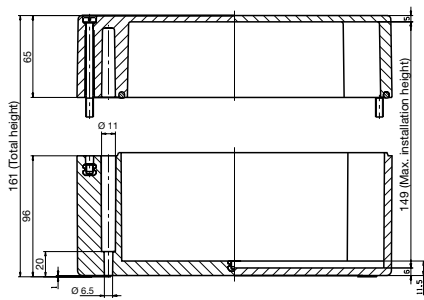
Dimensions

POK 12

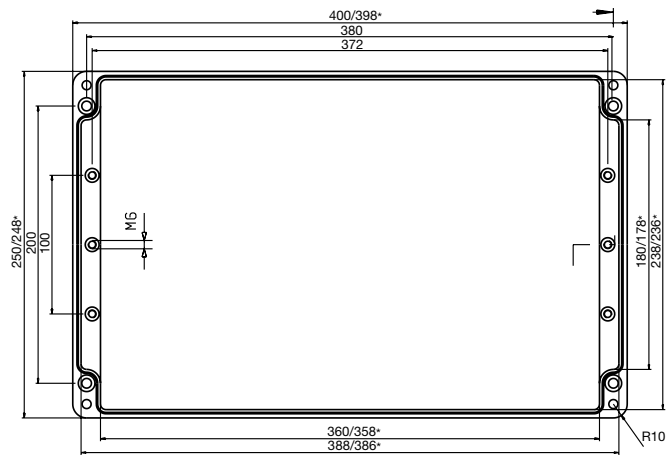
Lid



Side complete



Base



Technical Appendix – POK Range

Cable entries

Gland size		Enclosure type							
		POK 1		POK 2		POK 3		POK 31	
		Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D
Metric	M 12	5	2	8	2	13	2	16	2
	M 16	3	1	5	1	8	1	10	1
	M 20	2	1	3	1	5	1	6	1
	M 25	1	-	2	-	3	-	4	-
	M 32	-	-	-	-	-	-	-	-
	M 40	-	-	-	-	-	-	-	-
	M 50	-	-	-	-	-	-	-	-
	M 63	-	-	-	-	-	-	-	-
PG	PG 7	5	2	8	2	13	2	16	2
	PG 9	3	1	5	1	8	1	10	1
	PG 11	2	1	3	1	6	1	7	1
	PG 13,5	2	1	3	1	5	1	6	1
	PG 16	1	-	3	1	4	1	5	1
	PG 21	-	-	2	-	3	-	4	-
	PG 29	-	-	-	-	-	-	-	-
	PG 36	-	-	-	-	-	-	-	-
	PG 42	-	-	-	-	-	-	-	-
	PG 48	-	-	-	-	-	-	-	-

Gland size		Enclosure type							
		POK 32		POK 4		POK 5		POK 51	
		Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D
Metric	M 12	20	2	12	8	27	8	18	12
	M 16	12	1	8	6	20	6	15	8
	M 20	7	1	6	4	14	4	10	6
	M 25	5	-	2	2	5	2	4	2
	M 32	-	-	2	1	3	1	2	2
	M 40	-	-	1	1	3	1	2	1
	M 50	-	-	-	-	-	-	1	-
	M 63	-	-	-	-	-	-	-	-
PG	PG 7	20	2	12	8	27	8	18	12
	PG 9	12	1	8	6	20	6	15	8
	PG 11	8	1	8	4	16	4	10	8
	PG 13,5	7	1	6	4	14	4	10	6
	PG 16	6	1	6	3	12	3	8	6
	PG 21	5	-	2	2	5	2	4	2
	PG 29	-	-	2	1	3	1	2	2
	PG 36	-	-	1	1	3	1	2	1
	PG 42	-	-	-	-	-	-	1	-
	PG 48	-	-	-	-	-	-	-	-

Gland size		Enclosure type							
		POK 6		POK 7		POK 71		POK 8	
		Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D
Metric	M 12	36	12	51	12	84	12	48	40
	M 16	30	8	42	8	66	8	40	27
	M 20	18	6	26	6	40	6	24	21
	M 25	7	2	11	2	16	2	10	8
	M 32	4	2	6	2	10	2	7	5
	M 40	3	1	5	1	8	1	4	3
	M 50	3	-	4	-	6	-	3	2
	M 63	-	-	-	-	-	-	3	2
PG	PG 7	36	12	51	12	84	12	48	40
	PG 9	30	8	42	8	66	8	40	27
	PG 11	18	8	28	8	44	8	27	21
	PG 13,5	18	6	26	6	40	6	24	21
	PG 16	14	6	20	6	32	6	14	12
	PG 21	7	2	11	2	16	2	10	8
	PG 29	4	2	6	2	10	2	7	5
	PG 36	3	1	5	1	8	1	4	3
	PG 42	3	-	4	-	6	-	3	2
	PG 48	-	-	-	-	-	-	3	2

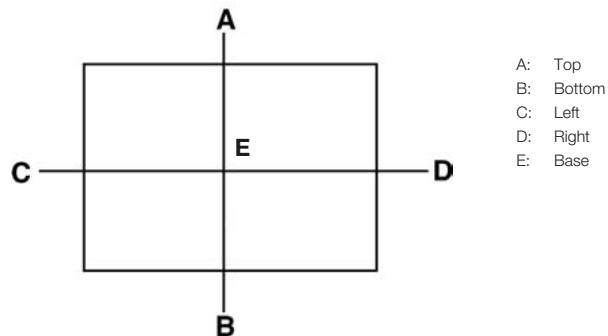
Technical Appendix – POK Range

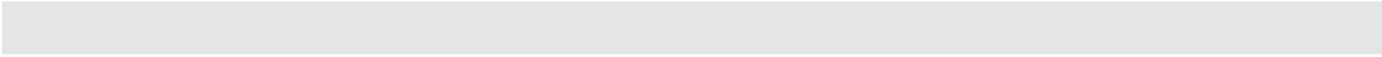
Cable entries

Gland size		Enclosure type							
		POK 9		POK 91		POK 10		POK 11	
		Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D
Metric	M 12	84	36	120	40	84	72	48	40
	M 16	64	27	96	27	64	51	40	27
	M 20	42	18	66	21	42	36	24	21
	M 25	18	8	28	8	18	16	10	8
	M 32	12	5	18	5	12	9	7	5
	M 40	6	3	10	3	6	6	4	3
	M 50	5	2	8	2	5	5	3	2
	M 63	5	2	6	2	5	4	3	2
PG	PG 7	84	36	120	40	84	72	48	40
	PG 9	64	27	96	27	64	51	40	27
	PG 11	48	21	72	21	48	42	27	21
	PG 13,5	42	18	66	21	42	36	24	21
	PG 16	26	12	36	12	26	24	14	12
	PG 21	18	8	28	8	18	16	10	8
	PG 29	12	5	18	5	12	9	7	5
	PG 36	6	3	10	3	6	6	4	3
	PG 42	5	2	8	2	5	5	3	2
	PG 48	5	2	6	2	5	4	3	2

Gland size		Enclosure type	
		POK 12	
		Side A/B	Side C/D
Metric	M 12	84	36
	M 16	64	27
	M 20	42	18
	M 25	18	8
	M 32	12	5
	M 40	6	3
	M 50	5	2
	M 63	5	2
PG	PG 7	84	36
	PG 9	64	27
	PG 11	48	21
	PG 13,5	42	18
	PG 16	26	12
	PG 21	18	8
	PG 29	12	5
	PG 36	6	3
	PG 42	5	2
	PG 48	5	2

Enclosure side identification

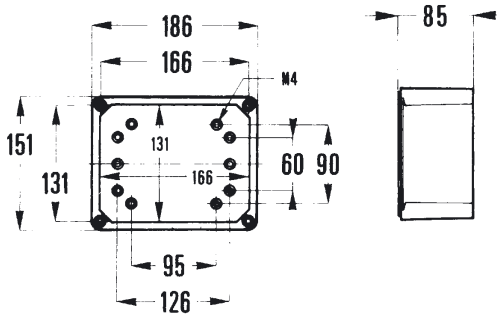




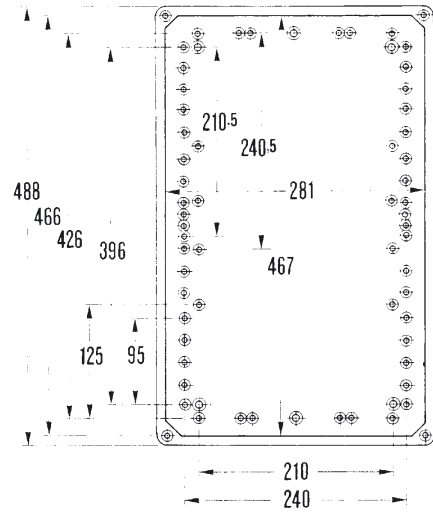
Technical Appendix – TBF Range

Drawings / Dimensions

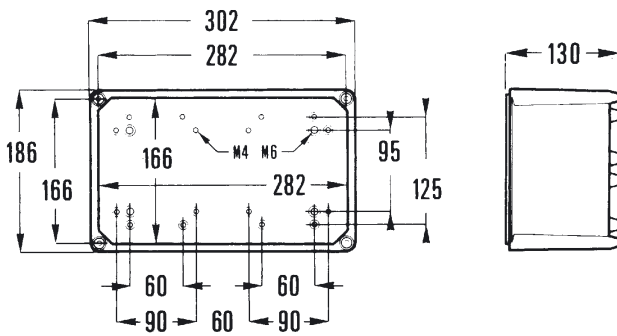
TBF 19/15



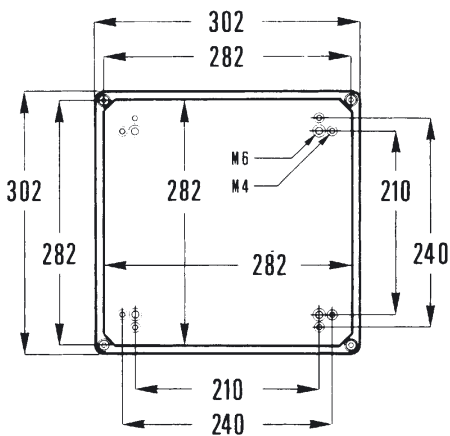
TBF 49/30



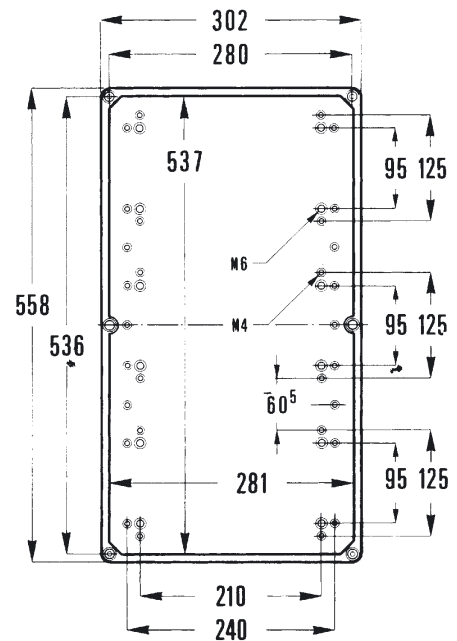
TBF 30/19



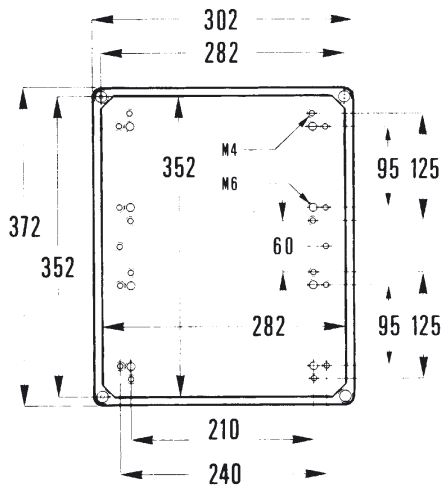
TBF 30/30



TBF 56/30



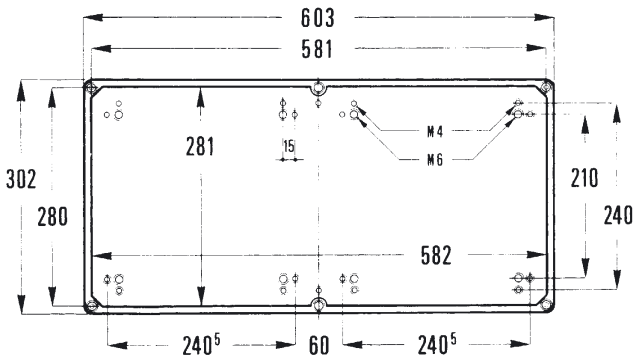
TBF 37/30



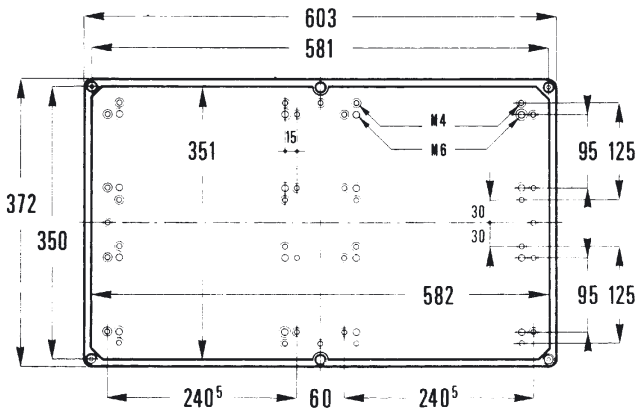
Technical Appendix – TBF Range

Drawings / Dimensions

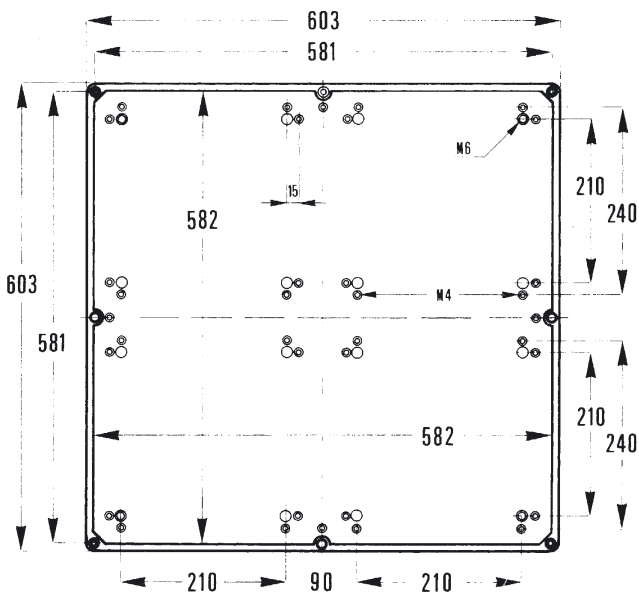
TBF 60/30



TBF 60/37



TBF 60/60



Technical Appendix – TBF Range

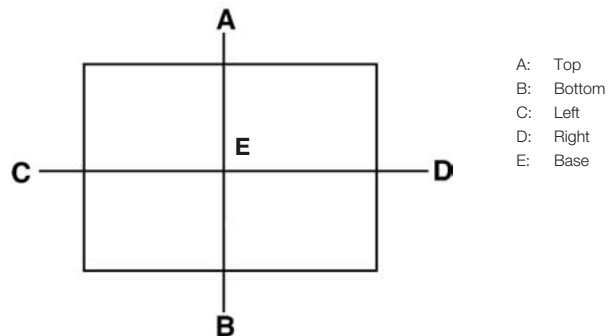
Cable entries

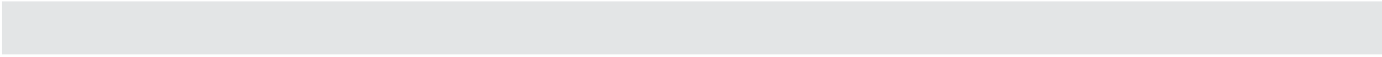
Gland size		Enclosure type							
		TBF 19/15/14		TBF30/19/18		TBF 30/30/18		TBF 37/30/18	
		Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D
Metric	M 16	11	14	20	40	40	40	40	48
	M 20	6	8	12	24	24	24	24	30
	M 25	4	6	7	15	15	15	15	18
	M 32	2	2	4	10	10	10	10	12
	M 40	1	2	2	5	5	5	5	6
	M 50	1	1	2	4	4	4	4	5
PG	Pg 13.5	6	8	12	24	24	24	24	30
	Pg 16	6	8	12	21	21	21	21	27
	Pg 21	4	6	7	15	15	15	15	18
	Pg 29	2	2	4	10	10	10	10	12
	Pg 36	1	2	2	5	5	5	5	6
	Pg 42	1	1	2	4	4	4	4	5
	Pg 48	-	-	1	3	3	3	3	4

Gland size		Enclosure type							
		TBF 49/30/18		TBF 56/30/18		TBF 60/30/18		TBF 60/37/18	
		Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D
Metric	M 16	40	68	40	72	40	80	48	80
	M 20	24	42	24	42	24	48	30	48
	M 25	15	25	15	28	15	30	18	30
	M 32	10	16	10	16	10	20	12	20
	M 40	5	9	5	8	5	10	6	10
	M 50	4	6	4	6	4	8	5	8
PG	Pg 13.5	24	42	24	42	24	48	30	48
	Pg 16	21	39	31	36	31	42	27	42
	Pg 21	15	25	15	28	15	30	18	30
	Pg 29	10	16	10	16	10	20	12	20
	Pg 36	5	9	5	8	5	10	6	10
	Pg 42	4	6	4	6	4	8	5	8
	Pg 48	3	6	3	6	3	6	4	6

Gland size		Enclosure type	
		TBF 60/60/18	
		Side A/B	Side C/D
Metric	M 16	80	80
	M 20	48	48
	M 25	30	30
	M 32	20	20
	M 40	10	10
	M 50	8	8
PG	Pg 13.5	48	48
	Pg 16	42	42
	Pg 21	30	30
	Pg 29	20	20
	Pg 36	10	10
	Pg 42	8	8
	Pg 48	6	6

Enclosure side identification

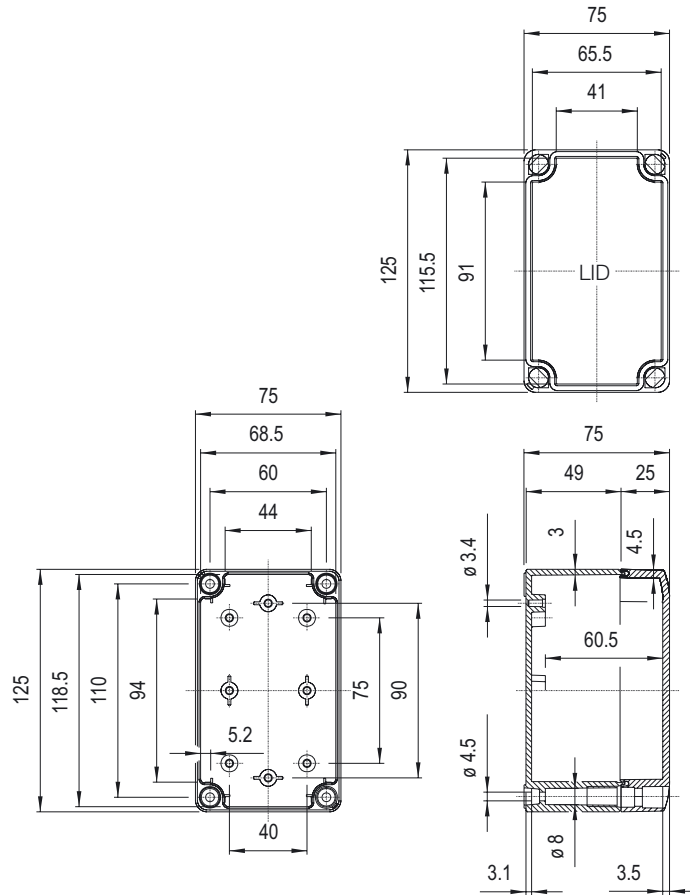




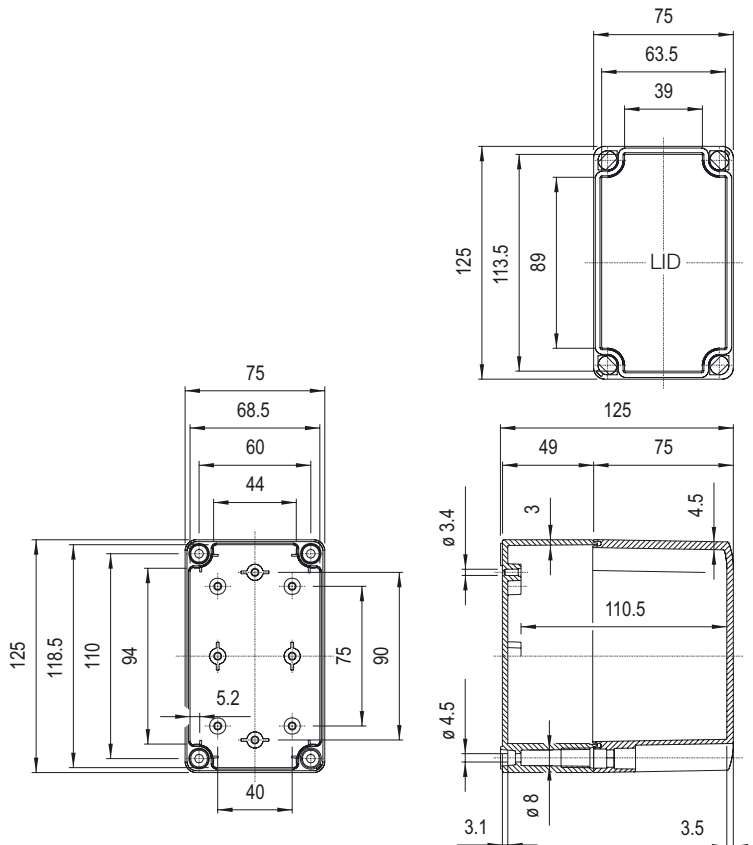
Technical Appendix – MPC Range

Drawings / Dimensions

MPC 07/12/07



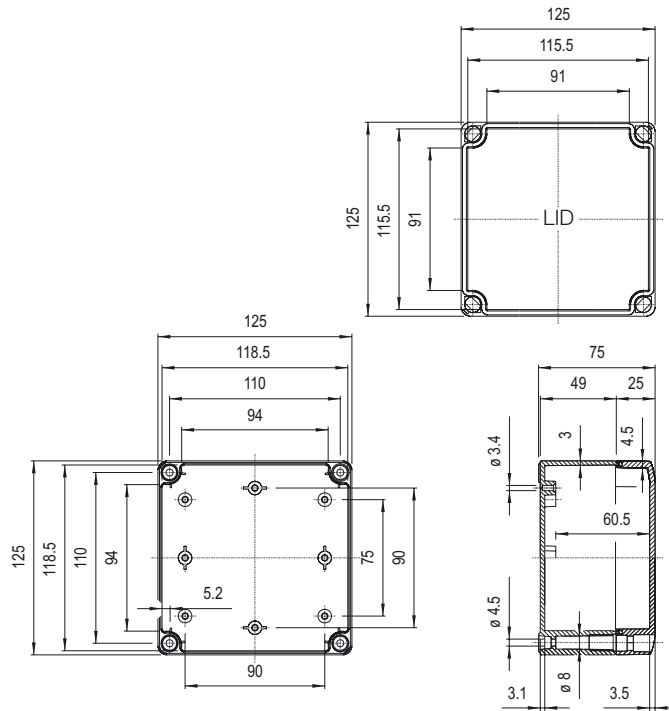
MPC 07/12/12



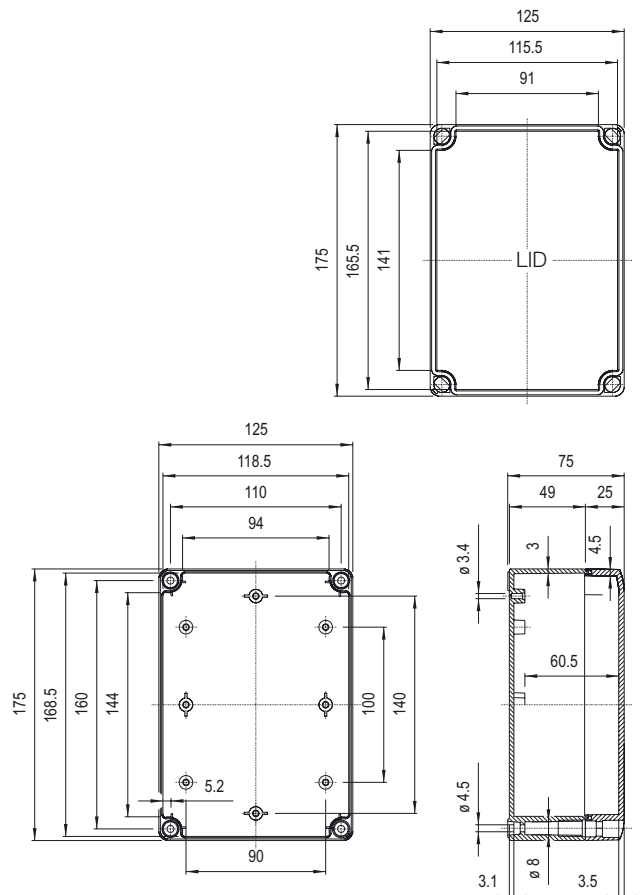
Technical Appendix – MPC Range

Drawings / Dimensions

MPC 12/12/07



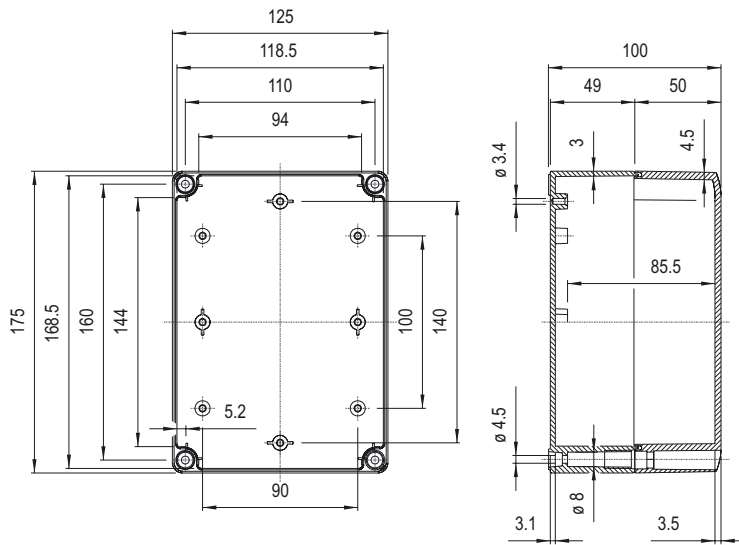
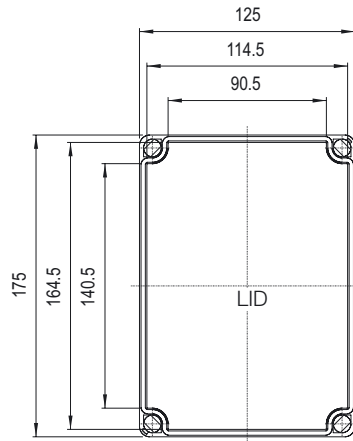
MPC 12/17/07



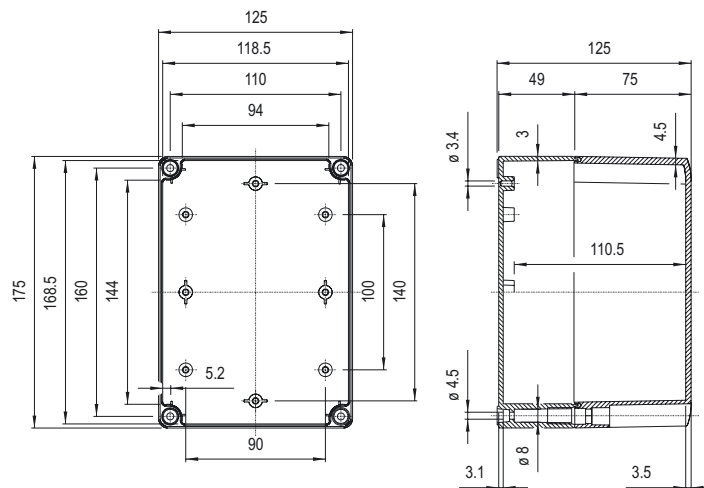
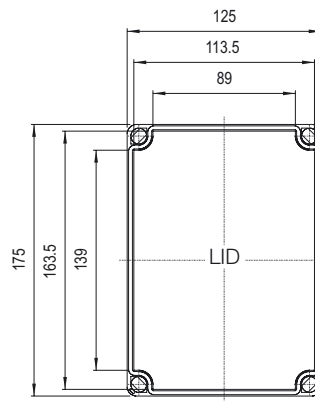
Technical Appendix – MPC Range

Drawings / Dimensions

MPC 12/17/10



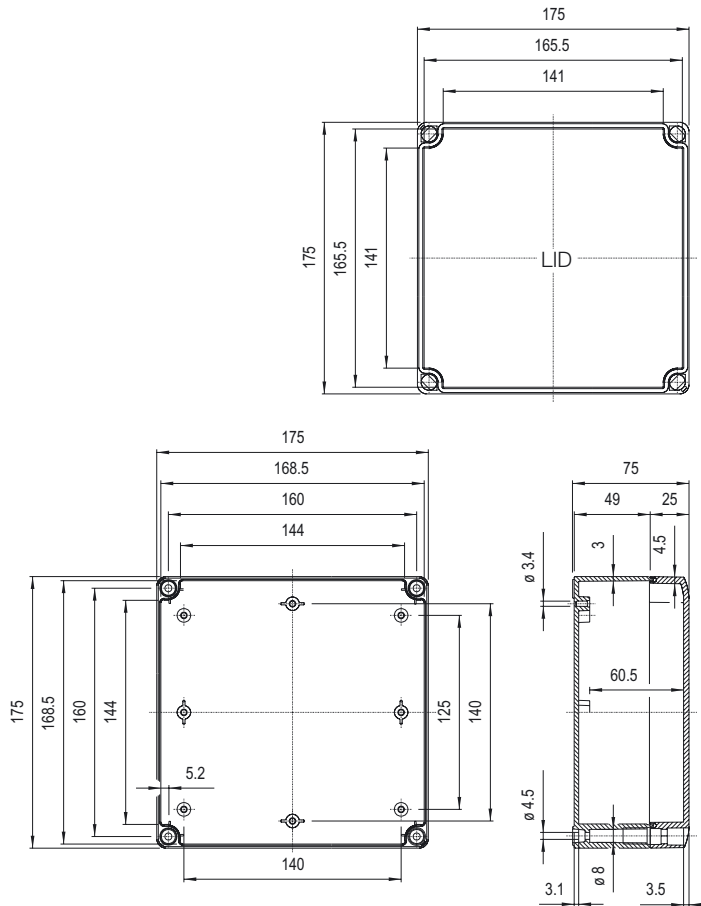
MPC 12/17/12



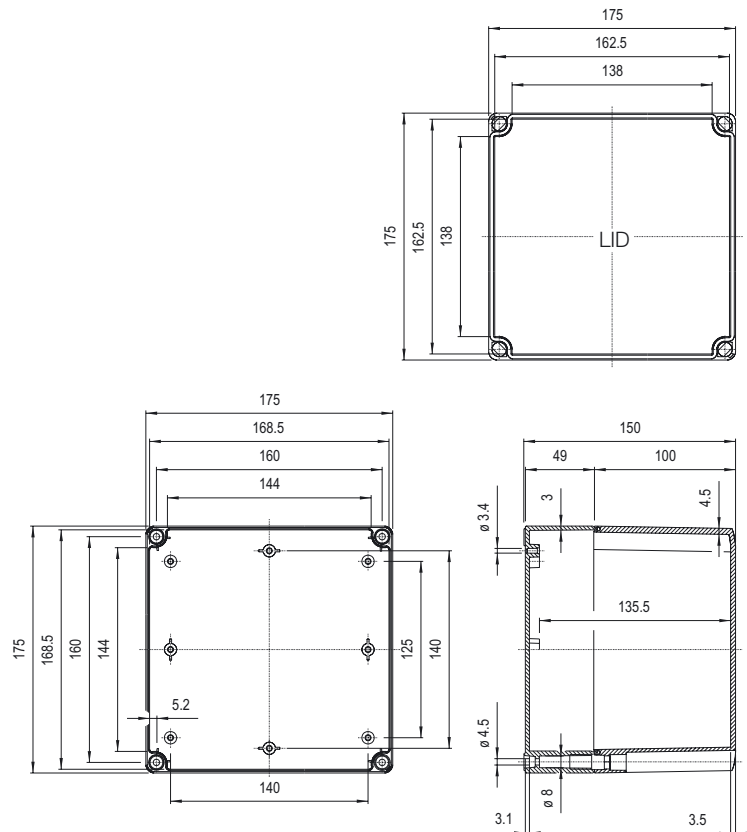
Technical Appendix – MPC Range

Drawings / Dimensions

MPC 17/17/07



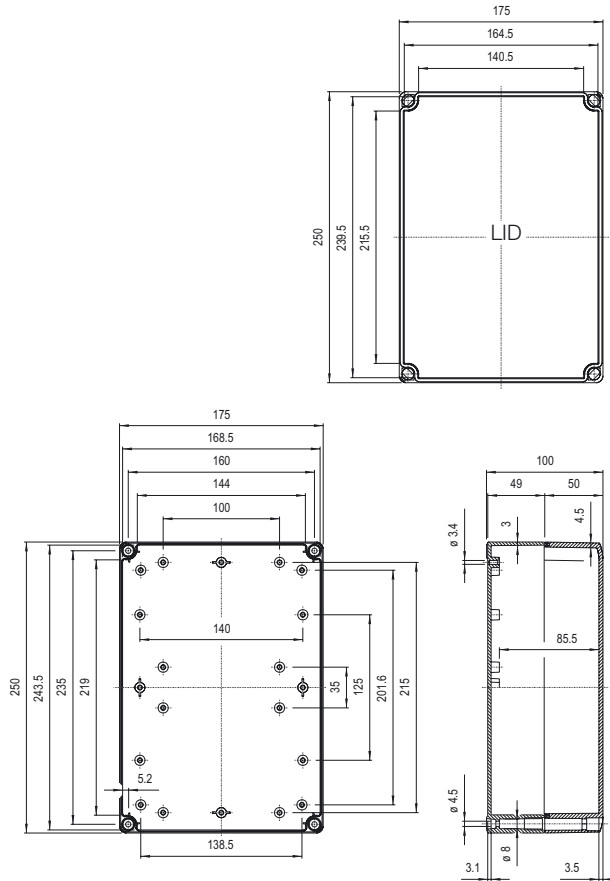
MPC 17/17/15



Technical Appendix – MPC Range

Drawings / Dimensions

MPC 17/25/10



Technical Appendix – MPC Range

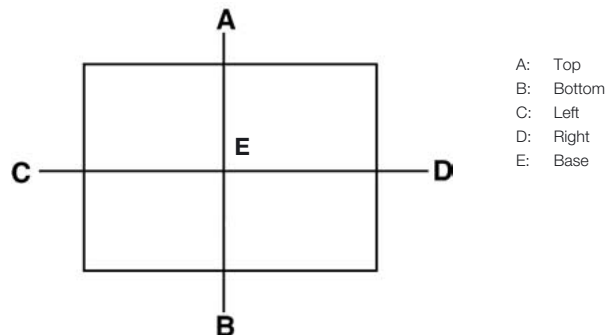
Cable entries

Gland size		Enclosure type							
		MPC 07/12/07		MPC 07/12/12		MPC 12/12/07		MPC 12/17/07	
		Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D
Metric	M 16	3	1	3	1	3	3	3	6
	M 20	2	1	2	1	2	2	2	4
	M 25	2	-	2	-	2	2	2	3
PG	PG 7	9	4	9	4	9	9	9	17
	PG 9	8	2	8	2	8	8	8	12
	PG 11	4	1	4	1	4	4	4	7
	PG 13,5	3	1	3	1	3	3	3	5
	PG 16	3	1	3	1	3	3	3	4
	PG 21	2	1	2	1	2	2	2	3

Gland size		Enclosure type							
		MPC 12/17/10		MPC 12/17/12		MPC 17/17/07		MPC 17/17/15	
		Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D
Metric	M 16	3	6	3	6	6	6	6	6
	M 20	2	4	2	4	4	4	4	4
	M 25	2	3	2	3	3	3	3	3
PG	PG 7	9	17	9	17	17	17	17	17
	PG 9	8	12	8	12	12	12	12	12
	PG 11	4	7	4	7	7	7	7	7
	PG 13,5	3	5	3	5	5	5	5	5
	PG 16	3	4	3	4	4	4	4	4
	PG 21	2	3	2	3	3	3	3	3

Gland size		Enclosure type	
		MPC 17/25/10	
		Side A/B	Side C/D
Metric	M 16	6	10
	M 20	4	6
	M 25	3	5
PG	PG 7	17	26
	PG 9	12	18
	PG 11	7	10
	PG 13,5	5	9
	PG 16	4	8
	PG 21	3	6

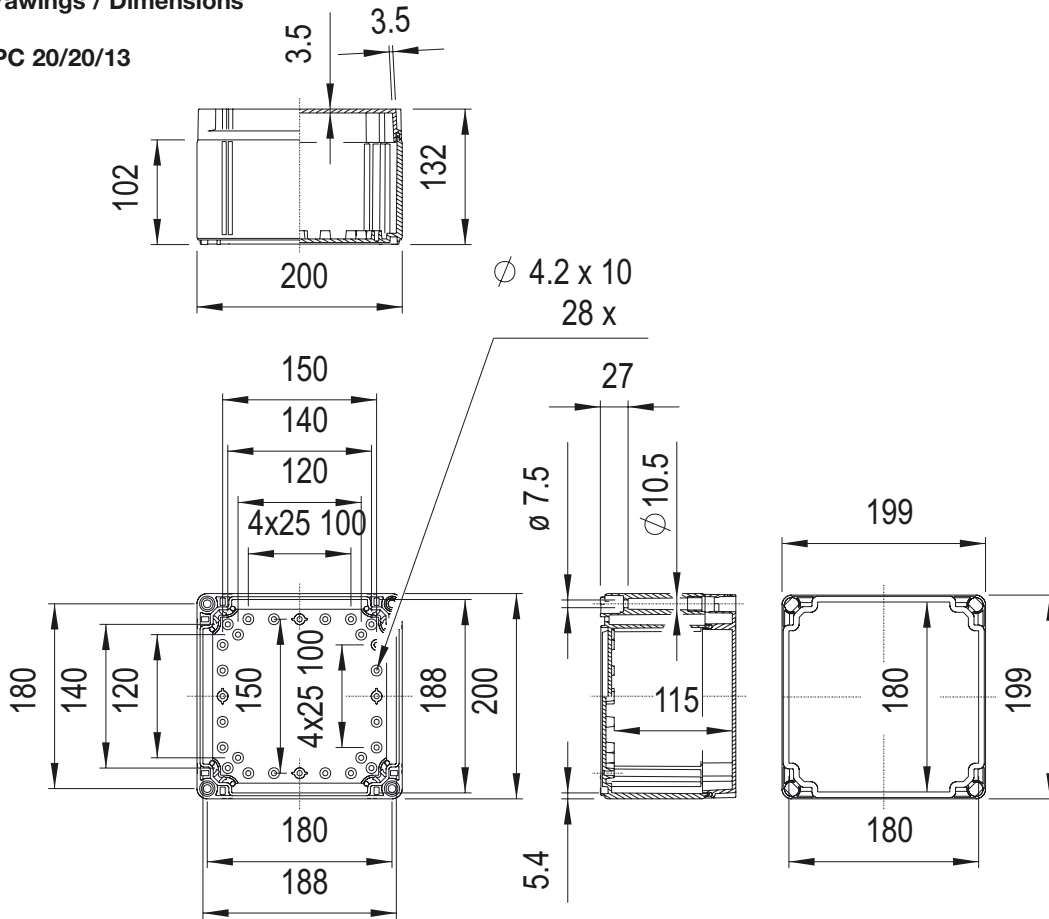
Enclosure side identification



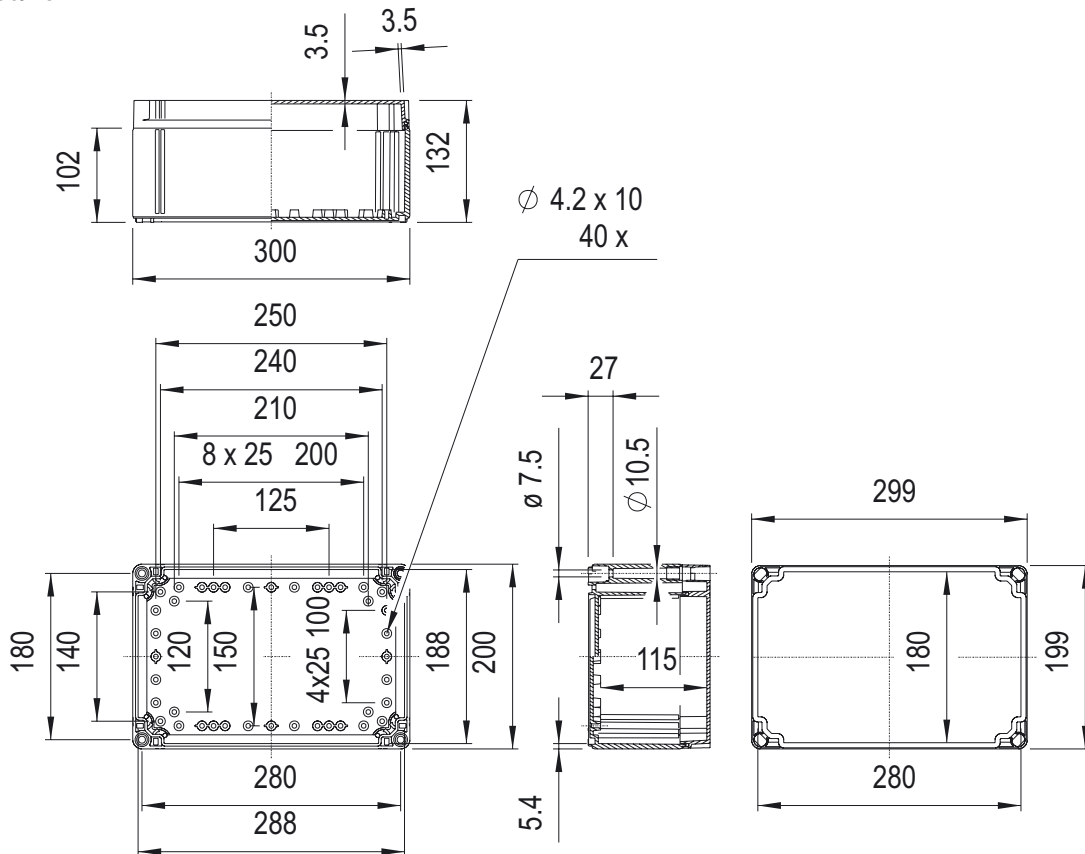
Technical Appendix – FPC Range

Drawings / Dimensions

FPC 20/20/13



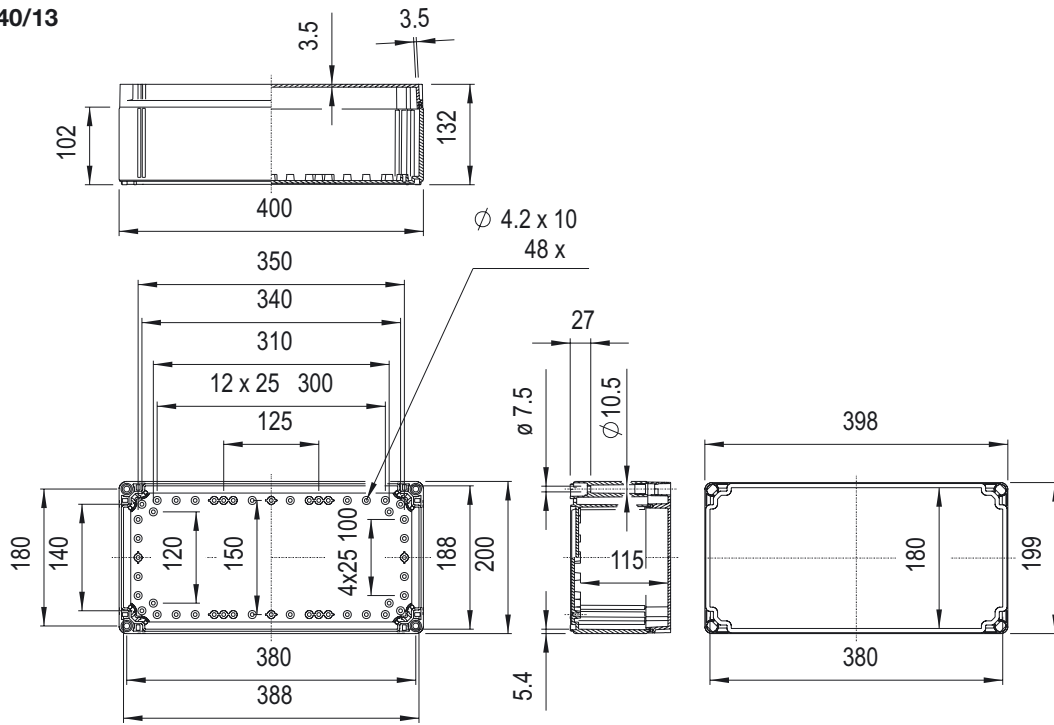
FPC 20/30/13



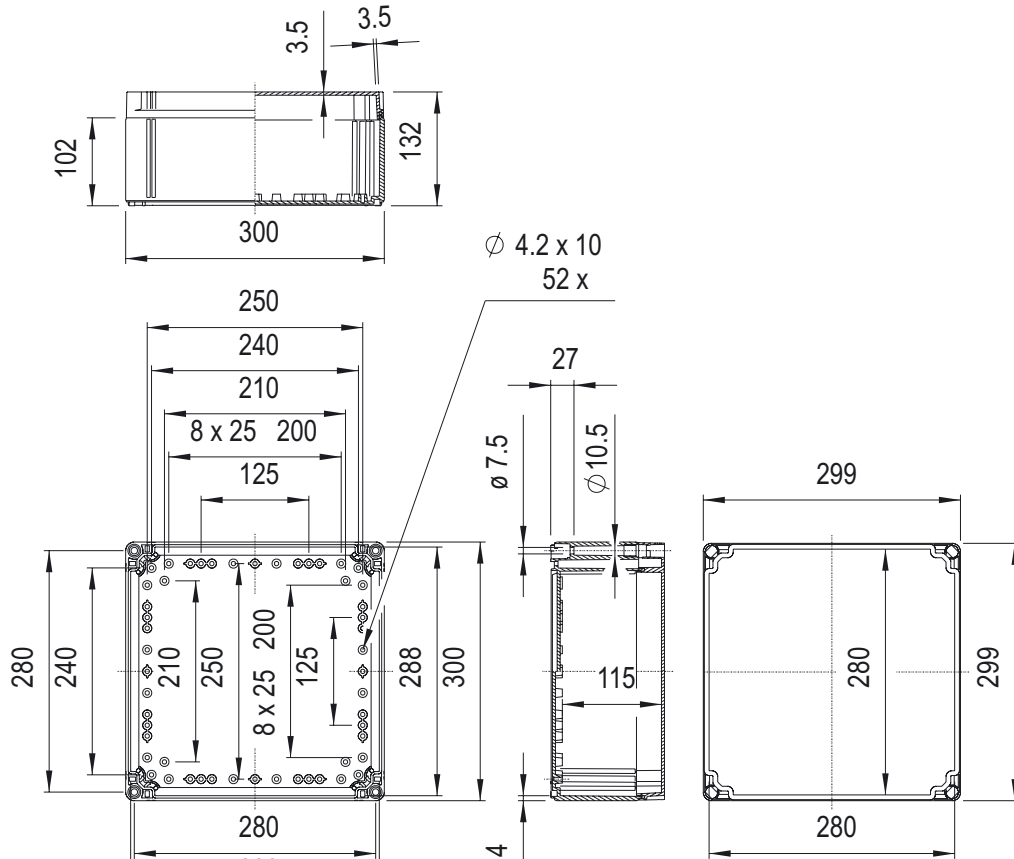
Technical Appendix – FPC Range

Drawings / Dimensions

FPC 20/40/13



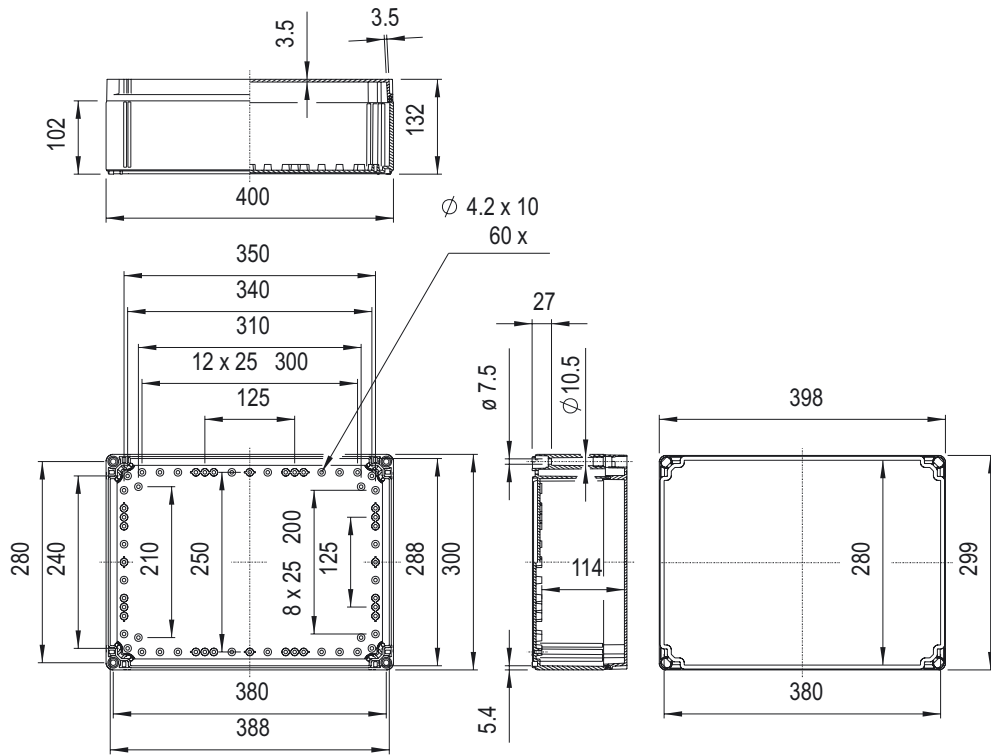
FPC 30/30/13



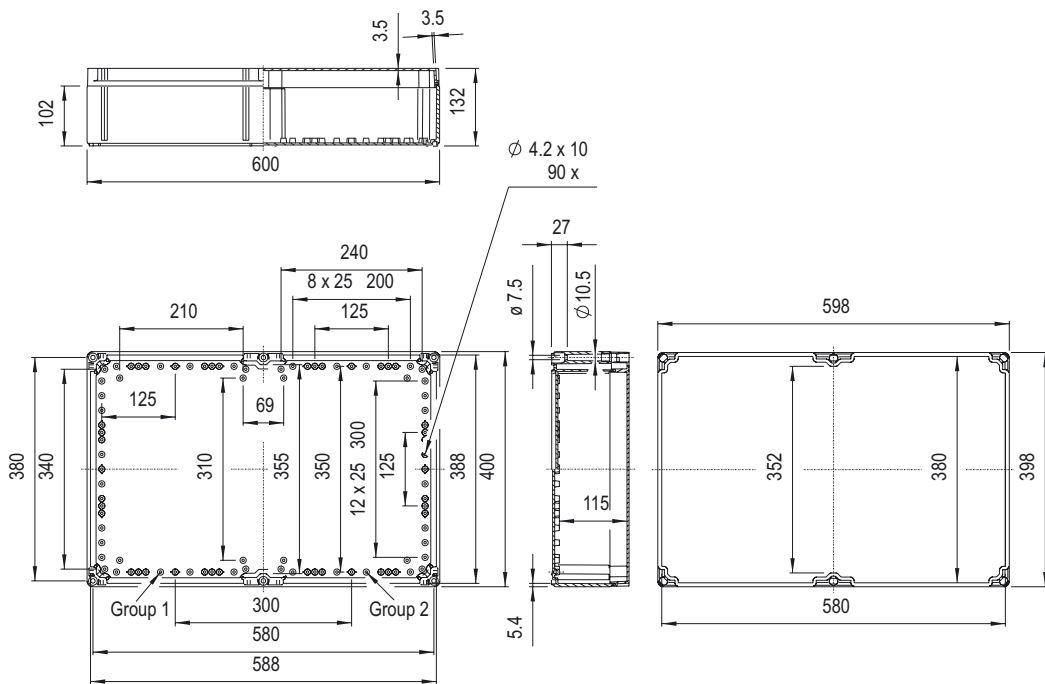
Technical Appendix – FPC Range

Drawings / Dimensions

FPC 30/40/13



FPC 40/60/13



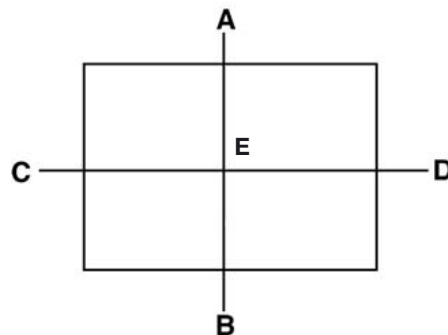
Technical Appendix – FPC Range

Cable entries

Gland size		Enclosure type							
		FPC 20/20/30		FPC 20/30/13		FPC 20/40/13		FPC 30/30/13	
		Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D	Side A/B	Side C/D
Metric	M 16	9	9	18	9	27	9	18	18
	M 20	6	6	10	6	16	6	10	10
	M 25	3	3	6	3	9	3	6	6
	M 32	2	2	4	2	6	2	4	4
	M 40	1	1	3	1	4	1	3	3
	M 50	1	1	2	1	4	1	2	2
PG	Pg 7	9	9	18	9	27	9	18	18
	Pg 9	9	9	18	9	27	9	18	18
	Pg 11	6	6	12	6	18	6	12	12
	Pg 13.5	6	6	10	6	16	6	10	10
	Pg 16	6	6	10	6	9	6	10	10
	Pg 21	3	3	6	3	6	3	6	6
	Pg 29	2	2	4	2	4	2	4	4
	Pg 36	1	1	3	1	1	1	3	3

Gland size		Enclosure type			
		FPC 30/40/13		FPC 40/60/13	
		Side A/B	Side C/D	Side A/B	Side C/D
Metric	M 16	27	18	36	27
	M 20	16	10	20	16
	M 25	9	6	12	9
	M 32	6	4	8	6
	M 40	4	3	6	4
	M 50	4	2	4	4
PG	Pg 7	27	18	36	27
	Pg 9	27	18	36	27
	Pg 11	18	12	24	18
	Pg 13.5	16	10	20	16
	Pg 16	16	10	20	16
	Pg 21	9	6	12	9
	Pg 29	6	4	8	6
	Pg 36	4	3	6	4

Enclosure side identification



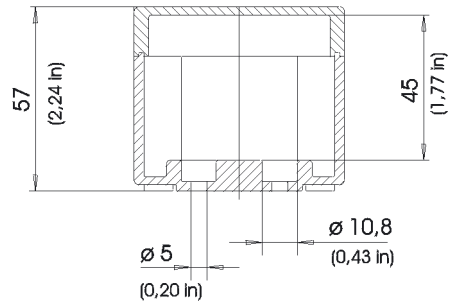
- A: Top
- B: Bottom
- C: Left
- D: Right
- E: Base

Technical Appendix – GPS Range

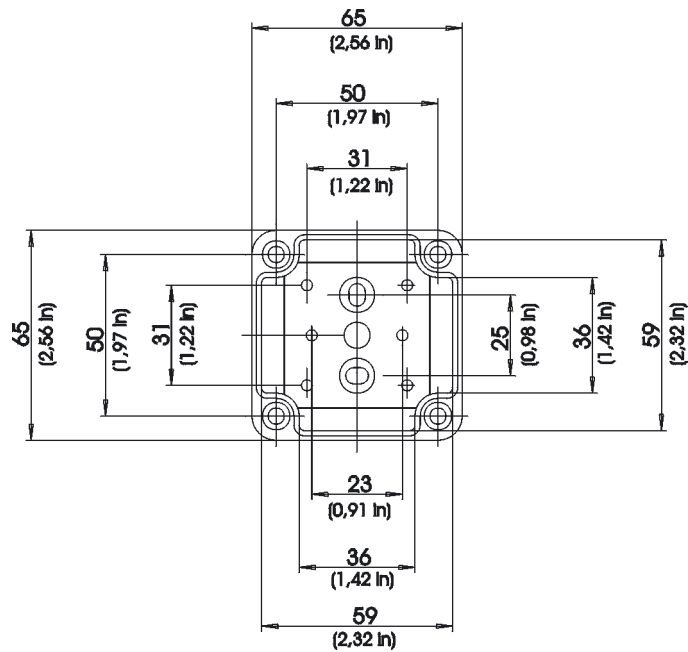
Drawings

GPS 65/65/57

Side
complete



Base

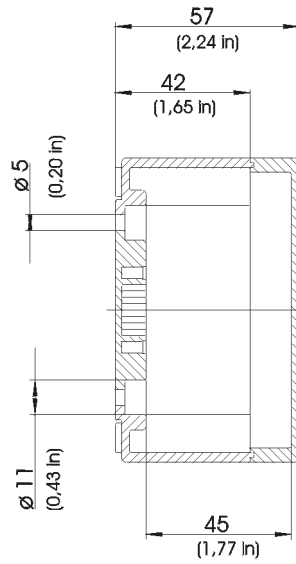


Technical Appendix – GPS Range

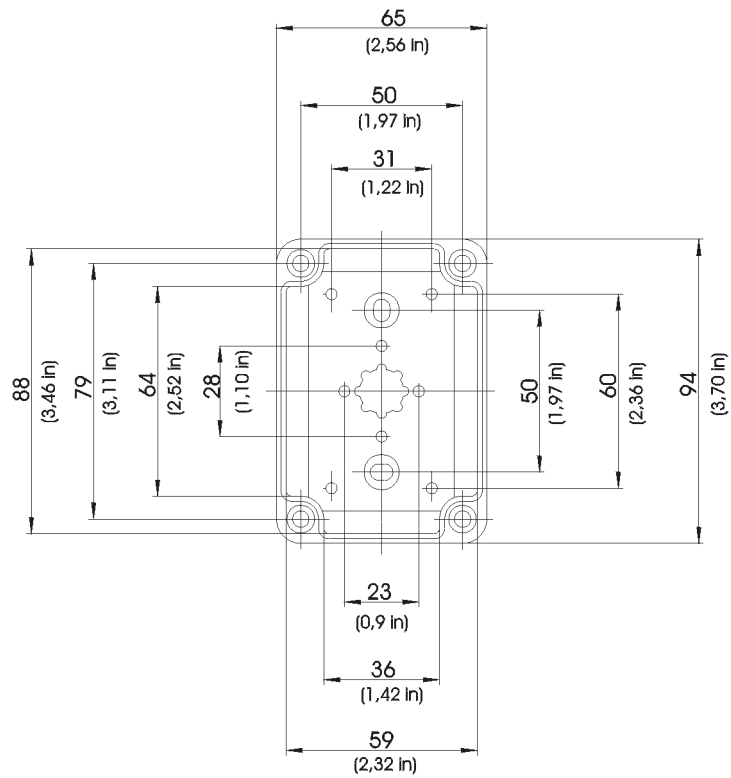
Drawings

GPS 94/65/57

Side
complete



Base

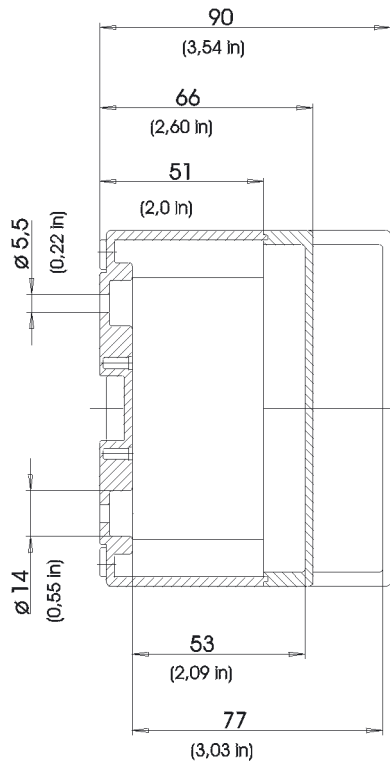


Technical Appendix – GPS Range

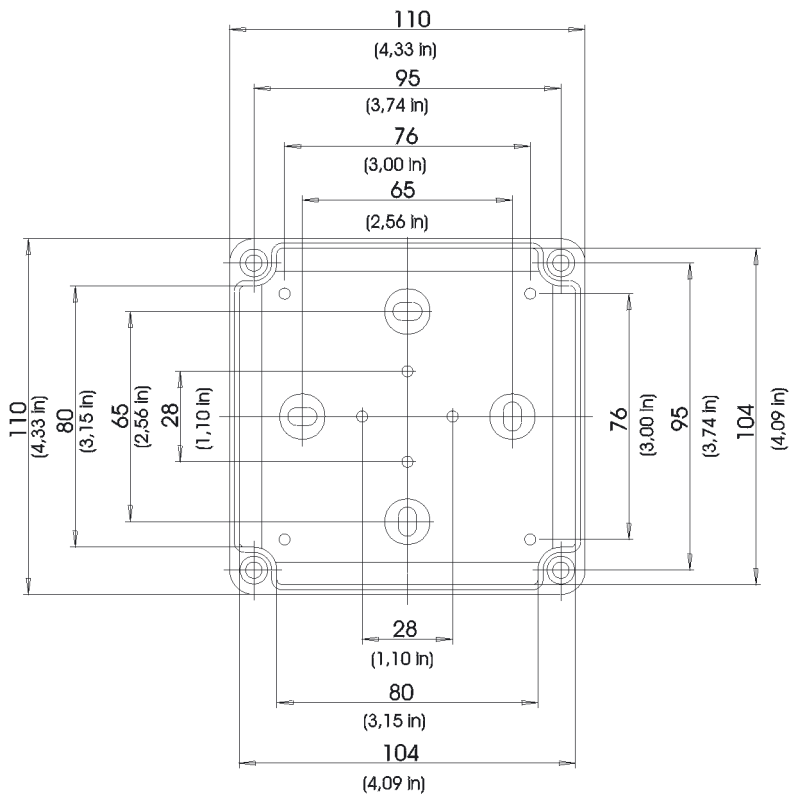
Drawings

GPS 110/110/66
GPS 110/110/90

Side
complete



Base

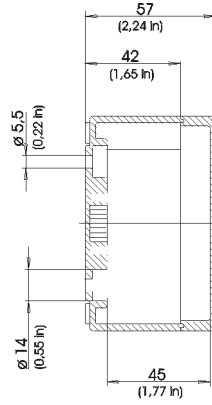


Technical Appendix – GPS Range

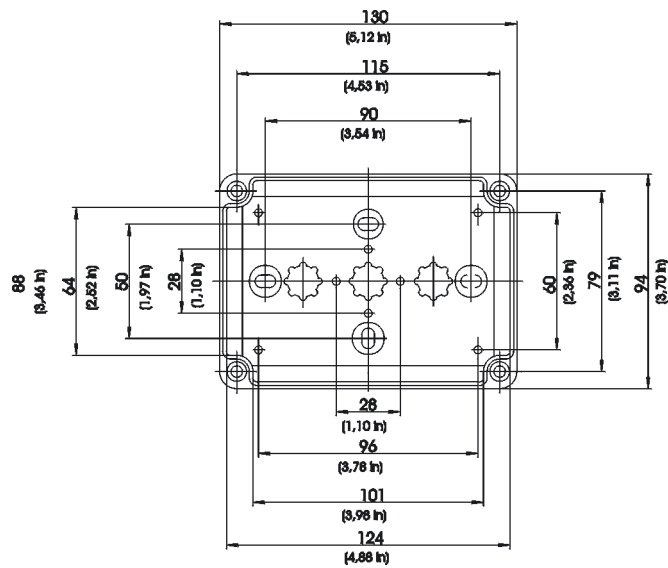
Drawings

GPS 130/94/57

Side
complete



Base

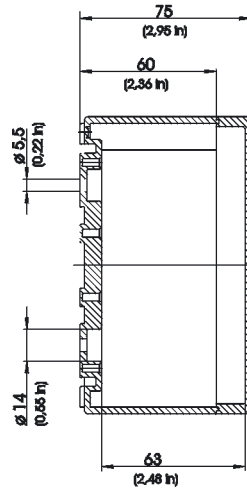


Technical Appendix – GPS Range

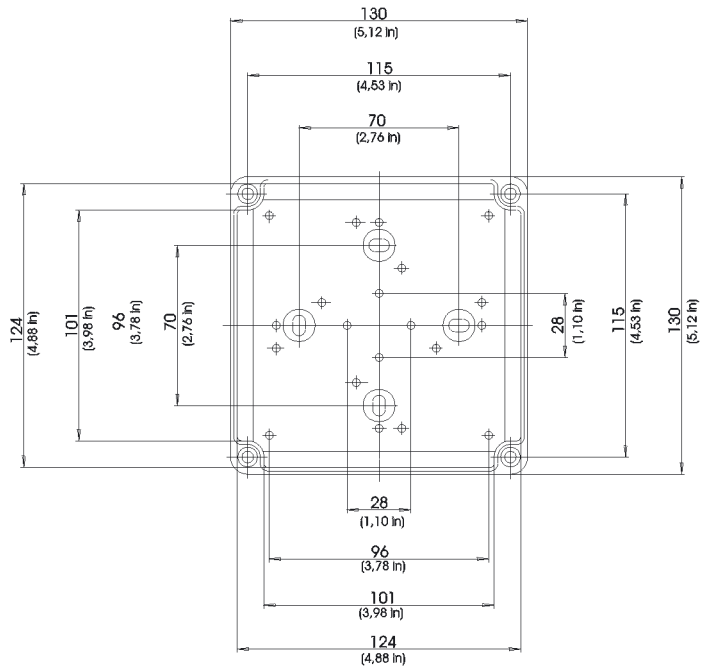
Drawings

GPS 130/130/75

Side
complete



Base

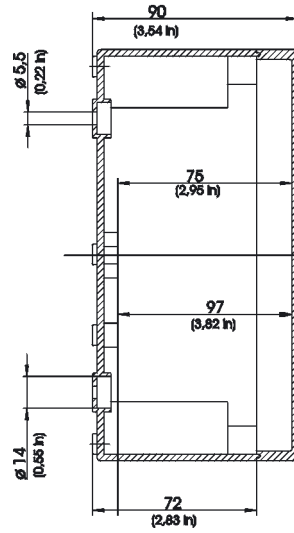


Technical Appendix – GPS Range

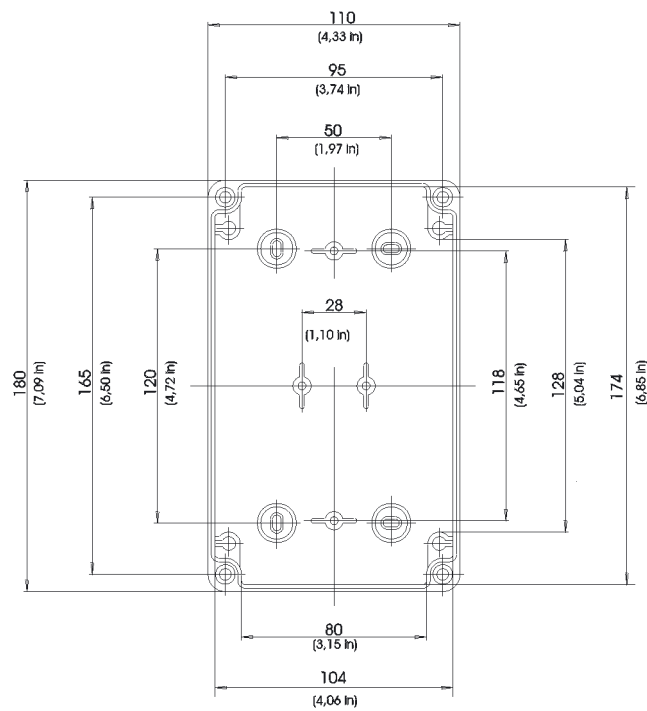
Drawings

GPS 180/110/90

Side
complete



Base

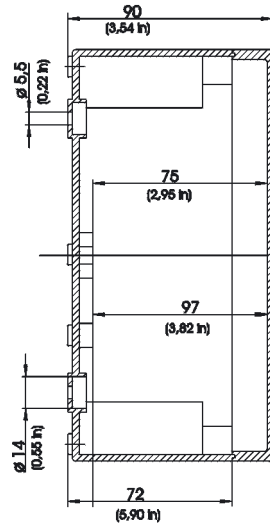


Technical Appendix – GPS Range

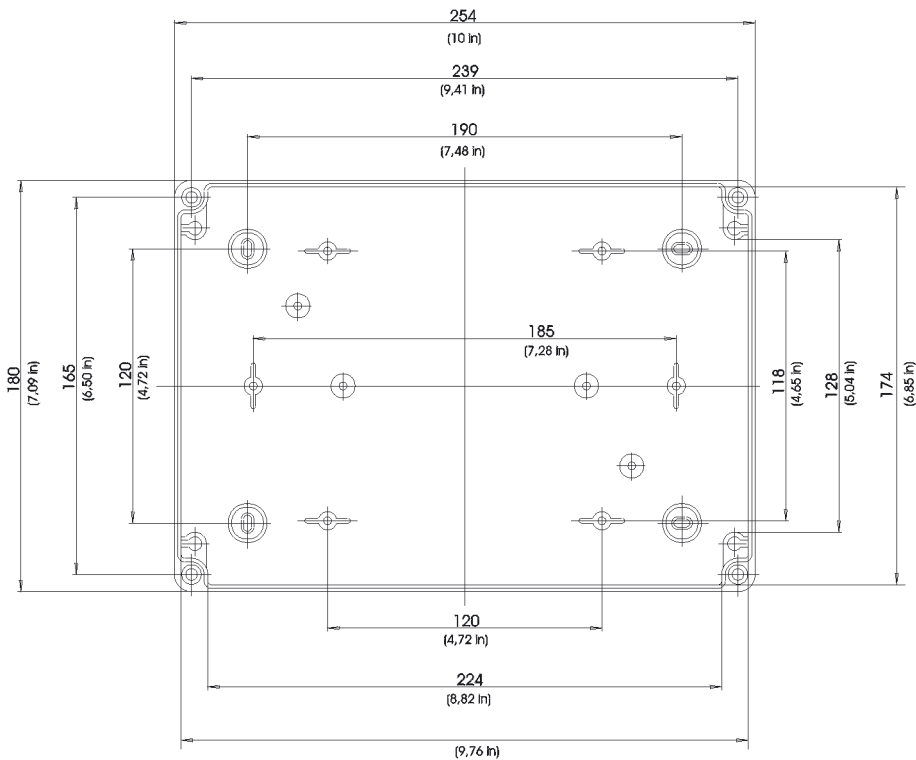
Drawings

GPS 254/180/90

Side
complete



Base

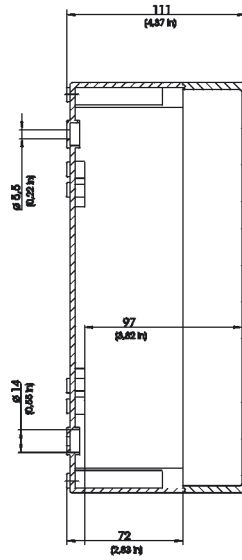


Technical Appendix – GPS Range

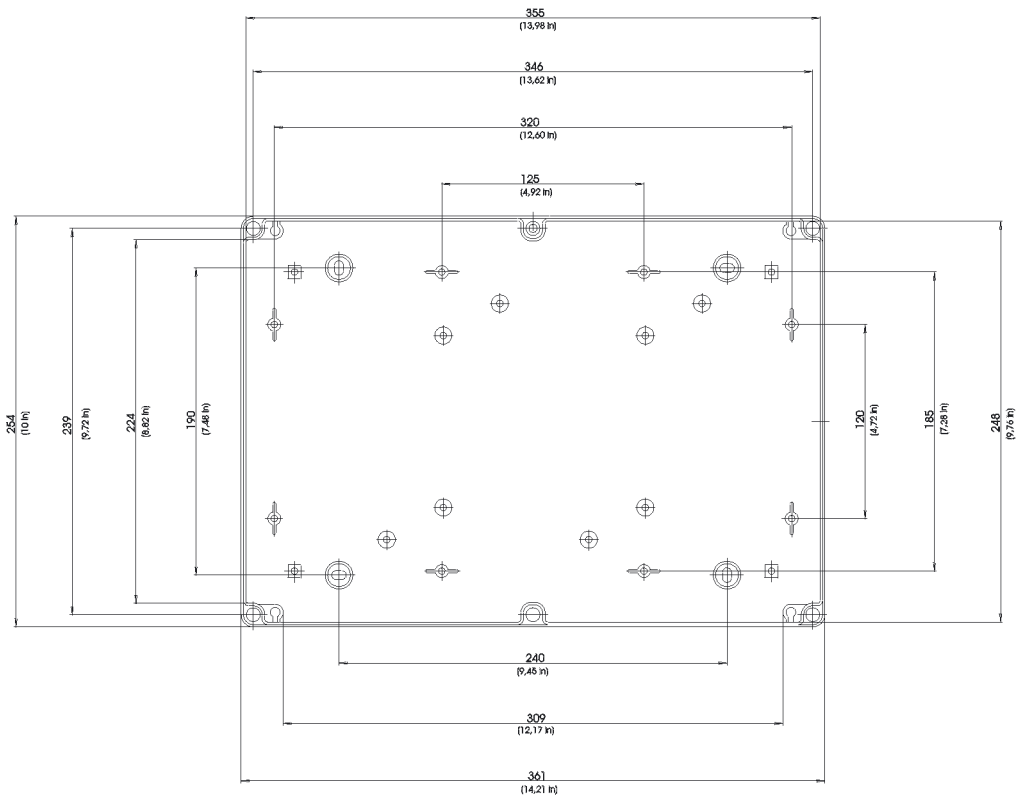
Drawings

GPS 360/254/111

Side
complete



Base



Technical Appendix – GPS Range

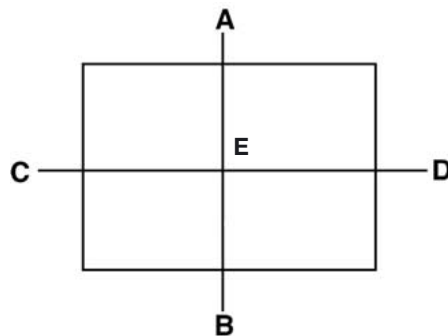
Cable entries

Gland size		Enclosure type															
		GPS 07/07/06				GPS 09/07/06				GPS 11/11/07				GPS 11/11/09			
With knockout	Side	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
		PG 11/16	1	1	1	1	1	1	2	2	-	-	-	-	-	-	-
	PG 16/21	-	-	-	-	-	-	-	-	2	1	2	2	2	1	2	2
	PG 16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PG 21/29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Smooth sides																	
Metric	M 12	2	2	2	2	2	2	3	3	8	8	8	8	8	8	8	8
	M 16	1	1	1	1	1	1	2	2	4	4	4	4	4	4	4	4
	M 20	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2
	M 25	-	-	-	-	-	-	-	-	2	2	2	2	2	2	2	2
	M 32	-	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1
	M 40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	M 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PG	PG 7	1	1	1	1	1	1	3	3	8	8	8	8	8	8	8	8
	PG 9	1	1	1	1	1	1	2	2	3	3	3	3	3	3	3	3
	PG 11	1	1	1	1	1	1	2	2	3	3	3	3	3	3	3	3
	PG 13,5	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2
	PG 16	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2
	PG 21	-	-	-	-	-	-	-	-	2	2	2	2	2	2	2	2
	PG 29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PG 36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

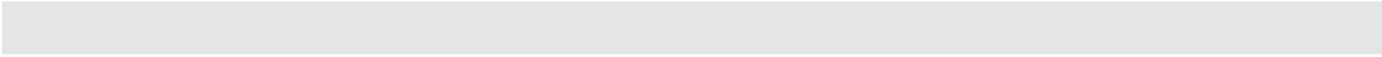
Gland size		Enclosure type															
		GPS 13/09/06				GPS 013/13/08				GPS 18/11/09				GPS 125/18/09			
With knockout	Side	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
		PG 11/16	2	2	3	3	-	-	-	-	-	-	-	-	-	-	-
	PG 16/21	-	-	-	-	2	1	2	2	1	1	-	-	-	-	2	2
	PG 16	-	-	-	-	-	-	-	-	4	4	4	4	4	4	8	8
	PG 21/29	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1
Smooth sides																	
Metric	M 12	3	3	5	5	13	13	13	13	12	12	18	18	18	18	33	33
	M 16	2	2	4	4	8	8	8	8	6	6	10	10	9	9	18	18
	M 20	2	2	3	3	3	3	3	3	5	5	8	8	7	7	15	15
	M 25	-	-	-	-	3	3	3	3	3	3	5	5	5	5	11	11
	M 32	-	-	-	-	2	2	2	2	2	2	3	3	3	3	5	5
	M 40	-	-	-	-	1	1	1	1	1	1	2	2	2	2	4	4
	M 50	-	-	-	-	-	-	-	-	1	1	1	1	1	1	3	3
PG	PG 7	3	3	5	5	10	10	10	10	12	12	18	18	18	18	33	33
	PG 9	2	2	4	4	8	8	8	8	6	6	10	10	10	10	20	20
	PG 11	2	2	4	4	8	8	8	8	6	6	10	10	10	10	18	18
	PG 13,5	2	2	3	3	3	3	3	3	6	6	8	8	8	8	16	16
	PG 16	2	2	3	3	3	3	3	3	4	4	8	8	8	8	14	14
	PG 21	-	-	-	-	2	2	2	2	2	2	3	3	3	3	6	6
	PG 29	-	-	-	-	2	2	2	2	1	1	2	2	2	2	4	4
	PG 36	-	-	-	-	-	-	-	-	1	1	2	2	2	2	3	3

Gland size		Enclosure type			
		GPS 36/25/11			
With knockout	Side	A	B	C	D
		PG 11/16	-	-	-
	PG 16/21	2	2	-	-
	PG 16	8	8	8	8
	PG 21/29	-	-	1	1
Smooth sides					
Metric	M 12	33	33	42	42
	M 16	18	18	24	24
	M 20	15	15	18	18
	M 25	11	11	14	14
	M 32	5	5	6	6
	M 40	4	4	4	4
	M 50	3	3	4	4
PG	PG 7	33	33	42	42
	PG 9	20	20	24	24
	PG 11	18	18	24	24
	PG 13,5	16	16	20	20
	PG 16	14	14	16	16
	PG 21	6	6	8	8
	PG 29	4	4	6	6
	PG 36	3	3	4	4

Enclosure side identification



A: Top
B: Bottom
C: Left
D: Right
E: Base



Technical Appendix

Terminal assembly plan

Overview of the maximum physical number of the listed terminals per enclosure.

(Sheet steel enclosures)

Enclosure type	Terminal Type (for TS 35 Rail)						
	WDU 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35	WDU 70
Q 30/20/12	1 x 42	1 x 35	1 x 26	1 x 21	1 x 17	1 x 13	-
Q 30/30/12	2 x 42	2 x 35	2 x 26	2 x 21	2 x 17	2 x 13	1 x 7
Q 30/40/12	3 x 42	3 x 35	3 x 26	3 x 21	3 x 17	3 x 13	2 x 7
Q 40/30/12	2 x 62	2 x 51	2 x 38	2 x 31	2 x 25	2 x 19	1 x 11
Q 40/40/12	3 x 62	3 x 51	3 x 38	3 x 31	3 x 25	3 x 19	2 x 11
Q 50/40/12	3 x 82	3 x 68	3 x 51	3 x 41	3 x 34	3 x 25	2 x 15
Q 60/40/12	3 x 102	3 x 85	3 x 63	3 x 51	3 x 42	3 x 31	2 x 18
Q 30/30/22	2 x 42	2 x 35	2 x 26	2 x 21	2 x 17	2 x 13	1 x 7
Q 30/40/22	3 x 42	3 x 35	3 x 26	3 x 21	3 x 17	3 x 13	2 x 7
Q 40/30/22	2 x 62	2 x 51	2 X 38	2 X 31	2 X 25	2 X 19	1 X 11
Q 40/40/22	3 x 62	3 x 51	3 x 38	3 x 31	3 x 25	3 x 19	2 x 11
Q 40/50/22	4 x 62	4 x 51	4 x 38	4 x 31	4 x 25	4 x 19	2 x 11
Q 50/30/22	2 x 82	2 x 68	2 x 51	2 x 41	2 x 34	2 x 25	1 x 15
Q 50/40/22	3 x 82	3 x 68	3 x 51	3 x 41	3 x 34	3 x 25	2 x 15
Q 50/50/22	4 x 82	4 x 68	4 x 51	4 x 41	4 x 34	4 x 25	2 x 15
Q 50/60/22	5 x 82	5 x 68	5 x 51	5 x 41	5 x 34	5 x 25	3 x 15
Q 60/30/22	2 x 102	2 x 85	2 x 63	2 x 51	2 x 42	2 x 31	1 x 18
Q 60/40/22	3 x 102	3 x 85	3 x 63	3 x 51	3 x 42	3 x 31	2 x 18
Q 60/50/22	4 x 102	4 x 85	4 x 63	4 x 51	4 x 42	4 x 31	2 x 18
Q 60/60/22	5 x 102	5 x 85	5 x 63	5 x 51	5 x 42	5 x 31	3 x 18
Q 70/30/22	5 x 122	2 x 101	2 x 76	2 x 61	2 x 50	2 x 38	1 x 22
Q 70/40/22	3 x 122	3 x 101	3 x 76	3 x 61	3 x 50	3 x 38	2 x 22
Q 70/50/22	4 x 122	4 x 101	4 x 76	4 x 61	4 x 50	4 x 38	2 x 22
Q 70/60/22	5 x 122	5 x 101	5 x 76	5 x 61	5 x 50	5 x 38	3 x 22
Q 80/30/22	2 x 142	2 x 118	2 x 88	2 x 71	2 x 59	2 x 44	1 x 26
Q 80/40/22	3 x 142	3 x 118	3 x 88	3 x 71	3 x 59	3 x 44	2 x 26
Q 80/50/22	4 x 142	4 x 118	4 x 88	4 x 71	4 x 59	4 x 44	2 x 26
Q 80/60/22	5 x 142	5 x 118	5 x 88	5 x 71	5 x 59	5 x 44	3 x 26

Enclosure type	WDU 2.5	WDU 4	WDU 6	WDU 10
NexT 26/26	2 x 24	2 x 20	2 x 15	2 x 12
NexT 38/26	2 x 48	2 x 40	2 x 30	2 x 24
NexT 50/35	3 x 72	3 x 60	2 x 45	2 x 36
NexT 62/45	4 x 96	4 x 80	3 x 60	3 x 48
NexT 74/55	5 x 120	5 x 100	4 x 75	4 x 60
NexT 86/64	6 x 144	6 x 120	5 x 90	5 x 72
NexT 98/74	7 x 168	7 x 140	6 x 105	6 x 84
NexT 22/15	1 x 6	1 x 5	1 x 4	1 x 3
NexT 30/30	2 x 37	2 x 31	2 x 23	2 x 19
NexT 45/38	3 x 52	3 x 44	3 x 33	3 x 26
NexT 48/48	3 x 73	3 x 60	3 x 45	3 x 36
NexT 76/50	5 x 78	5 x 65	5 x 49	5 x 39
NexT 91/61	7 x 98	7 x 82	7 x 61	7 x 49

Enclosure type	WDU 2.5	WDU 4	WDU 6	WDU 10
STB1	1 x 8	1 x 6	1 x 5	1 x 8
STB1.1	1 x 16	1 x 13	1 x 10	1 x 8
STB2	1 x 13	1 x 11	1 x 8	1 x 7
STB2.1	1 x 24	1 x 20	1 x 15	1 x 12
STB3	1 x 21	1 x 18	1 x 13	1 x 10
STB4	2 x 31	2 x 26	2 x 19	2 x 15
STB5	1 x 55	1 x 46	1 x 34	1 x 28
STB6	3 x 31	3 x 26	3 x 19	3 x 15

Technical Appendix

Terminal assembly plan

The assembly with other types of terminals is available on request.

The maximum number of terminals per enclosure type for use in Ex areas is available on request.

(Aluminium enclosures)

Terminal Block Types

Enclosure type	MK3/4	BK2	BK4	BK6	BK12	KS2	KS4	KS6	KS10
K0	1								
K1		1	1	1		1			
K2			1	1			1	1	
K3				1	1			1	1

Enclosure type	WDU 2.5	WDU 4	WDU 6	WDU 10
K4	1 x 6	1 x 5	1 x 6	1 x 5
K5	1 x 22	1 x 18	1 x 16	1 x 13
K6	1 x 27	1 x 22	1 x 19	1 x 15
K7	1 x 51	1 x 47	1 x 38	1 x 31
K61	1 x 40	1 x 33	1 x 27	1 x 22
K71	2 x 44	2 x 36	2 x 30	2 x 24
K8	1 x 102	1 x 86	1 x 63	1 x 49
K81	2 x 69	2 x 57	2 x 45	2 x 36

(Polyester enclosures)

Terminal Type (for TS 35 Rail)

Enclosure type	WDU 2.5	WDU 4	WDU 6	WDU 10
POK4	1 x 12	1 x 11		
POK5	1 x 31	1 x 26		
POK51	1 x 19	1 x 16	1 x 12	
POK6	1 x 39	1 x 32	1 x 24	
POK7	1 x 58	1 x 49	1 x 37	
POK71	1 x 98	1 x 82	1 x 62	
POK8	2 x 38	2 x 32	2 x 24	
POK9	2 x 67	1 x 56	1 x 42	
POK91	2 x 108	1 x 90	1 x 67	
POK10	3 x 67	2 x 56	2 x 42	
POK11	2 x 38	2 x 32	2 x 24	
POK12	2 x 67	1 x 56	1 x 42	
TBF 19/15	1 x 13	1 x 11	1 x 8	1 x 7
TBF 30/19	1 x 36	1 x 30	1 x 23	1 x 18
TBF 30/30	2 x 36	2 x 30	2 x 23	2 x 18
TBF 37/30	2 x 51	2 x 42	2 x 31	2 x 25
TBF 49/30	2 x 73	2 x 61	2 x 46	2 x 37
TBF 56/30	2 x 87	2 x 73	2 x 54	2 x 44
TBF 60/30	2 x 96	2 x 80	2 x 60	2 x 48
TBF 60/37	3 x 96	3 x 80	2 x 60	2 x 48
TBF 60/60	5 x 96	5 x 80	4 x 60	4 x 48

Terminal Type (for TS 35 Rail)

Enclosure type	WDU 2.5	WDU 4	WDU 6	WDU 10
MPC 07/12/07	-	-	-	-
MPC 07/12/12	-	-	-	-
MPC 12/12/07	-	--	-	-
MPC 12/17/07	-	-	-	-
MPC 12/17/10	1 x 24	1 x 20	1 x 15	1 x 12
MPC 12/17/12	1 x 24	1 x 20	1 x 15	1 x 12
MPC 17/17/07	1 x 24	1 x 20	1 x 15	1 x 12
MPC 17/17/15	1 x 24	1 x 20	1 x 15	1 x 12
MPC 17/25/10	1 x 39	1 x 33	1 x 24	1 x 19
FPC 20/20/13	1 x 26	1 x 22	1 x 16	1 x 13
FPC 20/30/13	2 x 26	2 x 22	2 x 16	2 x 13
FPC 20/40/13	3 x 26	3 x 22	3 x 16	3 x 13
FPC 30/30/13	2 x 46	2 x 38	2 x 29	2 x 23
FPC 30/40/13	3 x 46	3 x 38	3 x 29	3 x 23
FPC 40/60/13	5 x 67	5 x 56	5 x 42	5 x 33

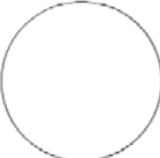
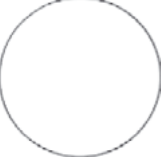




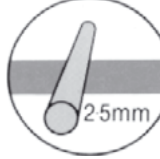

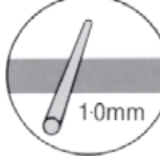
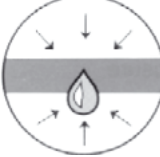
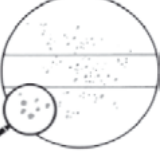

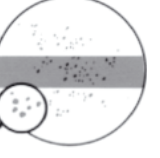
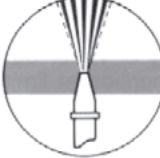
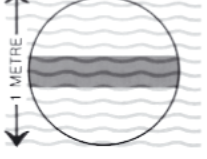
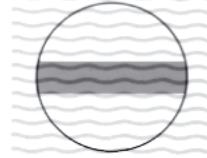
IP Protection classes

IP DEFINITION OF PROTECTION CLASSES

IP protection classes are indicated by an abbreviated code which comprises the same two letters, IP, followed by two digits that designate the protection level.

Please observe that the protection levels for protection against direct touch, foreign bodies and water do not make any inferences regarding the corrosion resistance of the enclosure.

Protection level according to EN 60529

FIRST DIGIT Protection level for direct touch and foreign bodies		SECOND DIGIT Protection level for water
0	 No protection	0  No protection
1	 Protection against large foreign bodies (i.e., objects larger than 50 mm, for example, hands)	1  Protection against dripping water falling vertically (for example, condensation)
2	 Protection against medium-sized foreign bodies (i.e. objects larger than 2.5 mm, for example, fingers)	2  Protection against water drops falling up to 15° from the vertical
3	 Protection against small foreign bodies (i.e., objects larger than 2.5 mm, for example, tools, cables)	3  Protection against spraying water (angle less than 60°)
4	 Protection against solid foreign bodies (i.e., objects larger than 1.0 mm, for example, wire)	4  Protection against water spraying against the equipment from all directions
5	 Protection against dust accumulation, which could impair proper functioning	5  Protection against hose water from all directions
6	 Protection against dust inflow	6  Protection against overflooding. Temporary overflooding should not cause any damage.
		7  Protection when immersed in depths from 150 mm to 1 m. No damaging amounts of water should penetrate.
		8  Protection when submerged. No damaging water should penetrate.

Technical Appendix

Definition of protection classes according to NEMA, UL and CSA

Type	NEMA	UL	CSA
Designation	National Electrical Manufacturers Association NEMA 250-1991	Underwriters Laboratories Inc. UL 50 and UL 508	Canadian Standards Association CSA-C22.2 No. 94-M91
Type 1	Enclosure predominately for indoor use. Protection against penetration by solid foreign bodies.	Enclosure predominately for indoor use. Protection against penetration by solid foreign bodies.	Enclosure for general use. Protection against unintentional direct touching of live components.
Type 2	Enclosure predominately for indoor use. Protection against penetration by solid foreign bodies and water.	Enclosure predominately for indoor use. Protection against penetration by solid foreign bodies and water.	Enclosure for indoor use. Protection against non-corrosive dripping/splashing liquids and solid foreign bodies.
Type 3	Enclosure predominately for indoor use. Protection against penetration by rainfall and dust as well as damage due to ice-formation.	Enclosure predominately for indoor use. Protection against penetration by rainfall and dust as well as damage due to ice-formation.	Enclosure for indoor and outdoor use. Protection against penetration by rain and snow as well as damage due to ice-formation.
Type 3R	Enclosure predominately for indoor use. Protection against rain and snow as well as damage due to ice-formation.	Enclosure predominately for indoor use. Protection against rain and snow as well as damage due to ice-formation.	Enclosure for indoor and outdoor use. Protection against penetration by rain and snow as well as damage due to ice-formation.
Type 3S	Enclosure predominately for indoor use. Protection against rain, snow and foreign bodies. External mechanisms can be operated despite ice accumulation.	Enclosure predominately for indoor use. Protection against rain, snow and foreign bodies. External mechanisms can be operated despite ice accumulation.	Enclosure for indoor and outdoor use. Protection against rain, snow and foreign bodies. External mechanisms can be operated despite ice accumulation.
Type 4	Enclosure for indoor or outdoor use. Protection against rain, foreign bodies, splashing water and hose water as well as damage due to ice-formation on the outside of the enclosure.	Enclosure for indoor or outdoor use. Protection against rain, foreign bodies, splashing water and hose water as well as damage due to ice-formation on the outside of the enclosure.	Enclosure for indoor or outdoor use. Protection against rain, snow, foreign bodies, splashing water and hose water as well as damage due to ice-formation on the outside of the enclosure.
Type 4X	Enclosure for indoor or outdoor use. Protection against corrosion, rain, foreign bodies, splashing water and hose water as well as damage due to ice-formation on the outside of the enclosure.	Enclosure for indoor or outdoor use. Protection against corrosion, rain, foreign bodies, splashing water and hose water as well as damage due to ice-formation on the outside of the enclosure.	Enclosure for indoor or outdoor use. Protection against rain, foreign bodies, splashing water and hose water as well as damage due to ice-formation on the outside of the enclosure; corrosion resistant.
Type 6	Enclosure for indoor or outdoor use. Protection against hose water as well as against penetration by water during immersion; protection damage due to ice-formation on the outside of the enclosure.	Enclosure for indoor or outdoor use. Protection against hose water as well as against penetration by water during immersion; protection against damage due to ice-formation on the outside of the enclosure.	Enclosure for indoor or outdoor use. Protection against penetration by water during immersion; protection damage due to ice-formation on the outside of the enclosure.
Type 12	Enclosure predominately for indoor use. Protection against dust accumulation, foreign bodies and non-corrosive drops of liquids.	Enclosure for indoor use. Protection against dust accumulation, foreign bodies and non-corrosive drops of liquids.	Enclosure for indoor and outdoor use. Protection against the accumulation of dust, fibres, and other foreign bodies as well as against non-corrosive drops of liquids; no previously stamped openings.
Type 13	Enclosure predominately for indoor use. Protection against splashing water, oil, and non-corrosive coolants.	Enclosure for indoor use. Protection against splashing water, oil, and non-corrosive coolants.	Enclosure for indoor and outdoor use. Protection against the accumulation of dust, fibres, and other foreign bodies as well as against non-corrosive splashing liquids, including oil and coolants.

Hazardous areas

Hazardous areas

are areas in which, based on local environmental and operational conditions, dangerous quantities of explosive atmospheres can form (risk of explosion)

Explosive atmosphere

is a mixture of air and burnable gases, vapours, fog or dusts under atmospheric conditions, which, after ignition is self-perpetuating.

Risk of explosion

is then given when igniting sparks or high surface temperatures of operating devices or equipment can induce an ignition of the ambient explosive atmosphere.

Source of danger

can arise in enclosures due to heat development of built-in equipment, which heat the surface of the enclosure to non-permissible temperatures.

Sparking due to defective electrical contacts within the enclosure as well as static discharges produced during the cleaning of plastic enclosures also represent a dangerous source of ignition.

Protection against explosion

This includes all measures that prevent the ignition of an ambient explosive atmosphere. Legislating authorities have, for this purpose, drawn up regulations for installation that regulate and sanction hazardous areas.

Labeling according to ATEX



The ATEX 100a regulates the requirements **for all** electrical and non-electrical **equipment and protection systems**, whose normal use is in hazardous areas.

Control, regulating and safety devices for operation outside hazardous areas are also subject to these guidelines when, in the context of risks of explosion, considered necessary for the safe operation of devices and protection systems.

Explanation:

L.C.I.E.: Laboratoire Centrale des Industries Electriques

Terminal range: minimum and maximum external diameter of the cable

L = Total length
L1 = Thread length
SW = Opening of spanner

Labeling requirements and amendments effective from 01.03.1996

From 01.03.1996 manufacturers are permitted to put explosion-protected electrical equipment onto the market in accordance with the European Union guideline, 94/9/EC.

From 01.07.2003 they must be produced according to guideline 94/9/EC.

The user should already be familiar with the new labels for equipment. Equipment be produced according to the aforementioned guidelines, must be accompanied with an instruction manual, which must contain all relevant details and translated into the official language of the country into which it is being exported (EU-wide).

Excerpt from 94/9/EC

Field of application:

Devices and protection systems, whose normal use is in hazardous areas, with the exception of: medical devices, devices for blasting materials, equipment on ships and mobile off-shore plants, means of transport for persons and goods (street, rail, waterways, air).

Not excluded are vehicles used in hazardous areas or devices for use in residential and non-commercial areas or personal protection equipment in accordance with 89/686/EEC guidelines.

Classification of device groups in conformity categories:

I	M1 M2
II	1G 2G 3G
III	1D 3D

Responsibility:

to place onto the market and commission
Requirements for use

Basic safety requirements:

Definition of binding quality requirements

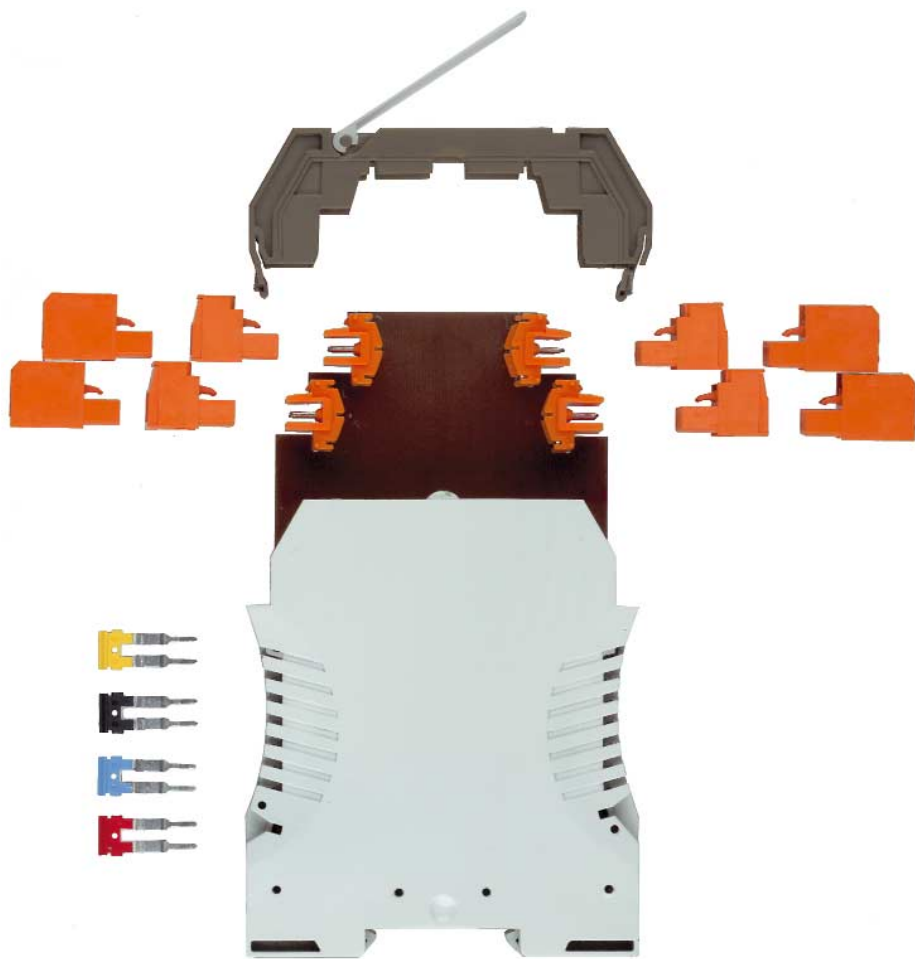
Open markets

Presumption of compliance with basic safety requirements through

- Conformity with harmonised standards
- Conformity with national standards as released through the Commission

Labeling

- CE mark
- Specific labelling EEx II 2G



Component housings

Weidmüller DK 4 and DKT 4 terminals

are suitable for the installation of electronic components with a maximum diameter width of 4.5 mm. Four independent clamping yoke screw connections are available for this purpose. A snap-on frame expands the installation space in the DK4 by 6 mm. Depending on type, these modular terminals are suitable for mounting on TS 32, TS 35 x 7.5 or TS 35 x 15 mounting rails according to European standards EN 50 035 and EN 50 022.

Weidmüller WDK 2.5 terminals

are suitable for the installation of electronic components with a maximum width of 4 mm. As many as four independent clamping yoke screw connections or 4 6.3 x 0.8 tab connections are available for this purpose. These terminals are suitable for mounting on TS 35 x 7.5 or TS 35 x 15 mounting rails.

Weidmüller EG 1 component housings

offer on a width of 18 mm 4 screw connections and, as accessories, up to 4 0.8 x 4.8 mm solder/tab connections. The screw clamp busbar ends with a solder ring inside the housing. Two end plates seal the module. Depending on type, the modules are mounted on TS 32, TS 35 x 7.5 or TS 35 x 15 mounting rails.

Weidmüller EG 2 component housings

are designed with the same external shape as type EG 1 housings. Four screw connections or up to 8 0.8 x 6.3 mm/0.8 x 2.8 mm tab connectors are connected together with a printed circuit board in the housing. They can be mounted on TS 32, TS 35 x 7.5 or TS 35 x 15 mounting rails.

Weidmüller EG 3 component housings

provide 6 screw connections or 12 0.8 x 6.3 mm/0.8 x 2.8 mm tab connections on a width of 22.5 mm. Weidmüller offers a shaped printed-circuit board with a 2.54 mm hole grid or fully copper-coated as an accessory. The snap-on combination foot allows the terminal to be mounted on TS 32, TS 35 x 7.5 or TS 35 x 15 mounting rails. The MPL mounting plate is used to mount the housing directly (without mounting rail). Due to the sliding foot construction, the EG 3 can be rotated 180° in all types of assembly (e.g. reversing input and output).

Weidmüller EG 4 component housings

offer the same width, 22.5 mm, as the type EG 3. The larger assembly depth of 75 mm and height of 109 mm enable more complex circuit options. The integrated circuit can be connected via 6 screw connections.

The snap-on combination foot allows assembly onto TS 32, TS 35 x 7.5 or TS 35 x 15 mounting rails. The sliding foot construction allows the EG 4 to be moved 6 mm fore or behind the socket rotated 180° and remounted (e.g., reversing input and output).

Weidmüller EG 5 component housings

are designed with the same external shape as type EG 4. The EG 5 has 12 screw connections, which can be wired inside the housing by means of soldering lugs. The snap-on combination foot allows the housings to be mounted on TS 32, TS 35 x 7.5 or TS 35 x 15 mounting rails. The sliding foot construction allows the EG 5 to be moved 6 mm fore or behind the socket, rotated 180° and remounted (e.g., reversing input and output).

Weidmüller EG 6 component housings

are designed with contact carriers with bus capability. The bus connection is created by mounting several housings together. 32 connections are available on both sides of the housing as female connector blocks. The housing can be fitted with a 100 x 120 mm PCB. The PCB adaptation is made via a VG 64 DIN strip. The front plate is screwed to the board, in the same manners as 19" technology. The snap-on socket enables easy mounting on TS 35 mounting rails.

Weidmüller SEG/U component housings

enable modules to be plugged onto 70 x 52 x 1 mm PCBs. The PCB is secured to the cover (accessory) by means of clip-on locks. The housing is designed with a 13-pole socket strip for connecting the module; 6 screw connections are available for connection purposes. The permissible power loss during continuous operation within the assembled housing is as much 1.5 W, depending on the surface temperature of the soldered components. The snap-on combination foot enables the assembly onto TS 32, TS 35 x 7.5, or TS 35 x 15 mounting rails.

Weidmüller Enclosures type WAVEBOX

It is essential to provide fit-for-use enclosures for modern electronic components. Settings and operational functions must be easily carried out, and technical requirements with respect to heat dissipation and EMC properties should be supported.

An ideal design saves space and wiring costs in the switchgear cabinet.

In addition, ergonomics and design are becoming increasingly important for high-quality electronic products.

These are the criteria that led to the development Wavebox. They ensure cost-saving for the customer through simplified product production (wave soldering, SMD). The Wavebox is characterised by:

- Optimum width for all applications (12.5mm, 17.5mm, 22.5mm)
- Large component assembly surface; SMDs can be mounted on the solder side
- UL94 Flammability class V2
- No tools required for assembly
- Plug-in printed circuit board
- Plug-in cross-connection via ZQV 2.5 N
- Hinged, transparent cover
- Choice of BLZ 5.08 tension clamp / plug-in connector
- Marking option with WS tags
- Snaps onto TS 35 mounting rail

Weidmüller RS 70 individual parts for rail mounting

snap together to form units up to 20 mm in width. Any required number of intermediate spacers or feet can be connected between two side pieces (fixing feet) at intervals of 5 mm. In this way, a carrier module is constructed for a printed circuit board onto which various components can be soldered. The module snaps onto TS 32, TS 35 x 7.5 or TS 35 x 15 mounting rails.

The Weidmüller RSX custom circuit module

is a largely prefabricated unit which can be fitted with up to 5 components via soldering terminals, such as resistors, diodes, varistors or capacitors. The components are connected on screw clamps or tab connections. This module is also suitable for mounting on TS 32, TS 35 x 7.5 or TS 35 x 15 mounting rails.

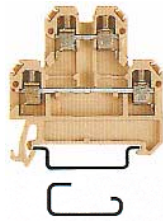
Weidmüller rail-mounted profiles

RS 45, RS 80 and RS 100 profiles are available in 2m long strips. The extruded profiles can be easily cut to any length with a saw. In this way, a carrier module is constructed for a printed circuit board onto which various components can be soldered. The fixing feet can be slid into these profiles for mounting onto TS 32, TS 35 x 7.5 or TS 35 x 15 mounting rails. The sliding foot construction enables the RS 80 fixing foot to rotate 180°.

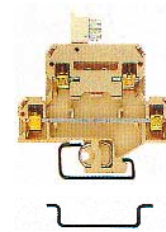
Housings

Terminals blocks

DK 4



DKT 4



Dimensions							
Terminal width (+0.2 assembly tolerance)		6 mm		6 mm			
Insulation stripping length		9 mm		9 mm			
Connection data							
Screw connection, solid		0.5...4 mm ²		0.5...4 mm ²			
Screw connection, flexible		0.5...4 mm ²		0.5...4 mm ²			
Conductor cross-section		AWG 22...12		AWG 22...17			
Torque range		0.5-1.0 Nm		0.5 - 1.0 Nm			
Torque with DMS 2 electric screwdriver		1		1			
Rated data according to VDE							
Nominal cross-section		4 mm ²		4 mm ²			
Nominal voltage		380 V~		380 V~			
Nominal current		10 A		10 A			
Power loss		0.5 W		0.5 W			
Wiring diagram							
Ordering data							
Terminal block							
for TS 32	Type	DK 4 PA	DK 4 PA	DKT 4 PA	DKT 4 PA		
	Cat. No.	1537960000	1115460000	1686940000	1115660000		
for TS 35	Type	DK 4/35 PA	DK 4/35 PA	DKT 4 /35PA	DKT 4/35 PA		
	Cat. No.	8203490000	1115560000	0687460000	1115760000		
Same contour frame							
for TS 32	Type	DK 4 RA	DK 4 RA				
	Cat. No.	0690960000	0690960000				
for TS 35	Type	DK 4 RA/35	DK 4 RA/35				
	Cat. No.	0691060000	0691060000				
Accessories		Type	Cat. No.	Qty.	Type	Cat. No.	Qty.
Mounting rail (2 m long)		TS 32	0122800000	2 m	TS 32	0122800000	2 m
		TS 35 x 7.5	0383400000	2 m	TS 35 x 7.5	0383400000	2 m
		TS 35 x 15	0498000000	2 m	TS 35 x 15	0498000000	2 m
End bracket for TS 32		EWK 1 (8.5)	0206160000	50	EWK 1 (8.5)	0206160000	50
(thickness mm) for TS 35		EW 35 (8.5)	0383560000	50	EW 35 (8.5)	0383560000	50
End plate (thickness mm)		AP PA (1.5)	0359260000	20	AP PA (1.5)	0687560000	20
Small partition		TSch 4	0363360000	100	TSch 4	0363360000	100
Socket for test plug		StB 8.5	0215700000	50			
Test plug (Pin diameter)		PS (ø 2.3)	0180400000	20			
Cross-connector 2-pole		Q 2	0336400000	50			
(pre-assembled) 3-pole		Q 3	0336500000	50			
4-pole		Q 4	0336600000	50			
10-pole		Q 10	0368600000	20			
Switchable cross-connection bracket		VL 2	0446700000	-			
Connection sleeve		VH 10	0446600000	100			
Fixing screw		BS M 2.5 x 14	0266800000	100			
Cover plate (4 terminals)		AD 4	0303400000	50			
Fixing screw (plastic)		BSK M 2.5 x 18	0303300000	100			
Cross-connection bracket		QB 2*	0482700000	100	QB 2*	0482700000	100
		QB 3*	0482800000	50	QB 3*	0482800000	50
		QB 4*	0482900000	50	QB 4*	0482900000	50
		QB 75 blank*	0526400000	10	QB 75 blank*	0526400000	10
		Insulation profile	0526700000	-	Insulation profile	0526700000	-

* Accessories: see sectional catalogue "Terminals"

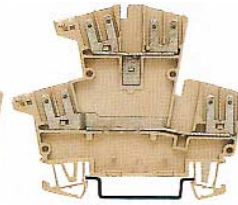
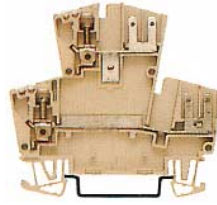
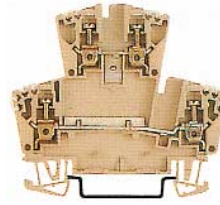
Housings

Terminals blocks

WDK 2.5

WDK 2.5 F

WDK 2.5 FF

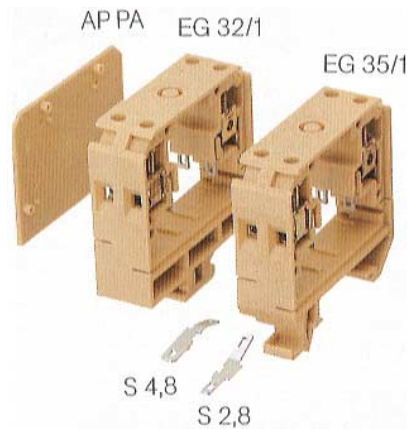


Dimensions	WDK 2.5		WDK 2.5 F		WDK 2.5 FF			
Terminal width (+0.2 assembly tolerance)	5 mm	5 mm	5 mm		5 mm			
Insulation stripping length	10 mm	10 mm	10 mm		-			
Connection data								
Screw connection, solid	0.5...4 mm ²		0.5...4 mm ²		0.5...4 mm ²			
Screw connection, flexible	0.5...2.5 mm ²		0.5...2.5 mm ²		0.5...2.5 mm ²			
Conductor cross-section	AWG 26...4		AWG 26...4		AWG 26...4			
Torque range	0.4 - 0.7 Nm		0.4 - 0.7 Nm		0.4 - 0.7 Nm			
Torque with DMS 2 electric screwdriver	1		1					
Rated data according to VDE								
Nominal cross-section	2.5 mm ²		2.5 mm ²		1 mm ²			
Nominal voltage	380 V~		380 V~		380 V~			
Nominal current	26 A		12 A (2 x 6 A)		12 A (2 x 6 A)			
Power loss	0.5 W		0.5 W		0.5 W			
Wiring diagram								
Ordering data								
Terminal block for TS 32	Type							
	Cat. No.							
for TS 35	Type	WDK 2.5	WDK 2.5	WDK 2.5 F	WDK 2.5 FF			
	Cat. No.	1023200000	1023100000	1021600000	1021700000			
Same contour frame for TS 32	Type							
	Cat. No.							
for TS 35	Type	WZR WDK 2.5		WZR WDK 2.5		WZR WDK 2.5		
	Cat. No.	1074000000		1074000000		1074000000		
Accessories								
Mounting rail (2 m long)	Type	Cat. No.	Qty.	Type	Cat. No.	Qty.		
	TS 35 x 7.5 punched	0383400000	2 m	TS 35 x 7.5 punched	0383400000	2 m		
	TS 35 x 15	0514500000	2 m	TS 35 x 15	0514500000	2 m		
End bracket (thickness mm) for TS 35	EW 35 (8.5)		0383560000	50	EW 35 (8.5)		0383560000	50
	WAP		1059100000	100	WAP		1059100000	100
Cross-connector (pre-assembled)	2-pole	WQV 2.5	1053660000	50	WQV 2.5	1053660000	50	
	3-pole	WQV 2.5	1053760000	50	WQV 2.5	1053760000	50	
	4-pole	WQV 2.5	1053860000	50	WQV 2.5	1053860000	50	
	10-pole	WQV 2.5	1054460000	50	WQV 2.5	1054460000	50	

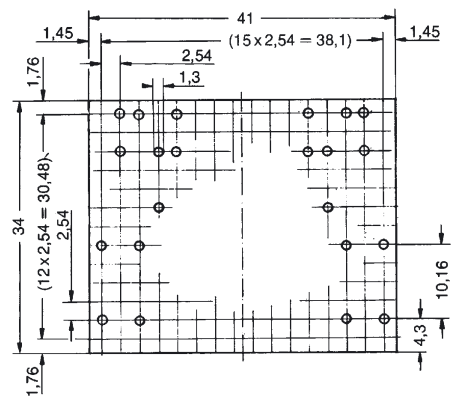
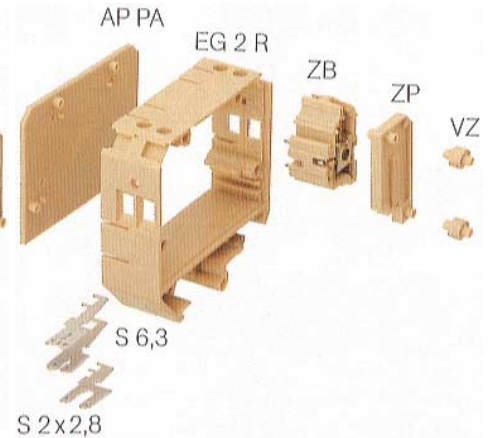
Housings

Component housings

EG 1



EG 2



Rated data	
Reference voltage i.a.w.. VDE 0110 1/89	300 V
Degree of pollution	2
Overtoltage category	II
Current	10 A
Power loss (when mounted in row)	1 W
Protection category	IP 20
Flammability i.a.w.. UL Level	V-2
Upper temperature limit	100 °C
Connection data	
Screw connection, solid	0.5...4 mm ²
Screw connection, flexible	0.5...2.5 mm ²
Torque range	0.5 - 1.0 Nm
Torque with DMS 2 electric screwdriver	2

Ordering data			
Housing frame	EG 32/1 for TS 32	0453560000	20
	EG 35/1 for TS 35	0453860000	20
End plate	AP PA	0453660000	20
Combi-foot, latchable			
Mounting plate			
Clamping yoke unit, right			
Clamping yoke unit, left			
Intermediate plate	ZP	0453760000	20
Connection spigot	VZ	0510260000	50
Connection tab 0.8 x 6.3 mm			
Connection tab 2 x 0.8 x 2.8 mm			
Tab / solder lug 0.8 x 2.8 mm	S 2.8	0475800000	20
Tab / solder lug 0.8 x 4.8 mm	S 4.8	0475700000	20
Printed circuit board, copper-coated			
Printed circuit board, pitch 5.08			

Dimensions	
See Page	152, graphic I

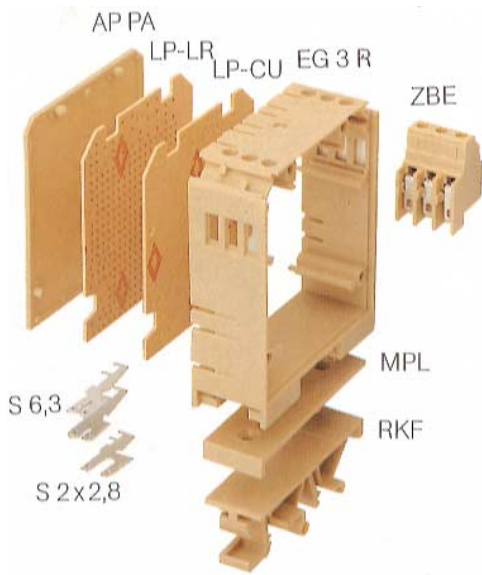
Reference voltage i.a.w.. VDE 0110 1/89	300 V
Degree of pollution	2
Overtoltage category	II
Current	10 A
Power loss (when mounted in row)	1 W
Protection category	IP 20
Flammability i.a.w.. UL Level	V-2
Upper temperature limit	100 °C
Connection data	
Screw connection, solid	0.5...4 mm ²
Screw connection, flexible	0.5...2.5 mm ²
Torque range	0.5 - 1.0 Nm
Torque with DMS 2 electric screwdriver	2

Ordering data			
Housing frame	EG 2 R	0508860000	20
End plate	AP PA	0453660000	20
Combi-foot, latchable			
Mounting plate			
Clamping yoke unit, right	ZB-R	0495960000	20
Clamping yoke unit, left	ZB-L	0495860000	20
Intermediate plate	ZP	0453760000	20
Connection spigot	VZ	0510260000	50
Connection tab 0.8 x 6.3 mm			
Connection tab 2 x 0.8 x 2.8 mm			
Tab / solder lug 0.8 x 2.8 mm	S 6.3	0496100000	100
Tab / solder lug 0.8 x 4.8 mm	S 2 x 2.8	0163500000	50
Printed circuit board, copper-coated			
Printed circuit board, pitch 5.08			

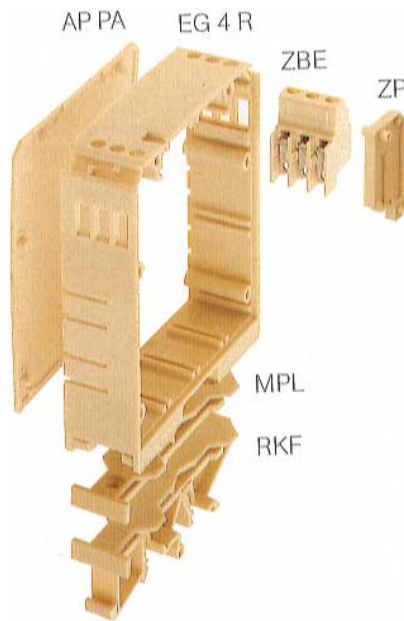
Dimensions	
See Page	152, graphic II

Housings

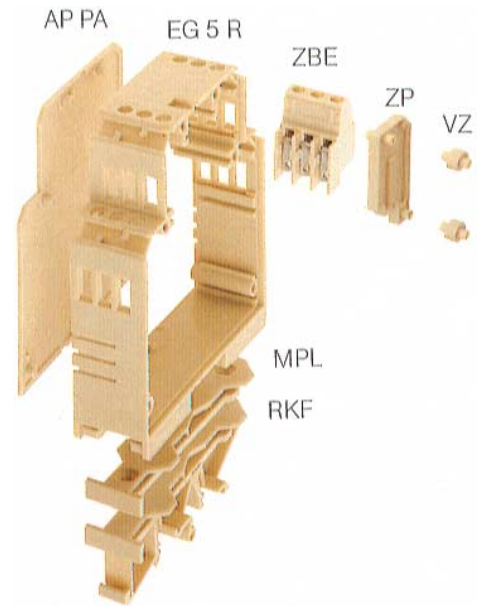
EG 3



EG 4



EG 5



300 V
2
II
10 A
1.5 W
IP 20
V - 2
100 °C
0.5...4 mm ²
0.5...2.5 mm ²
0.4 - 0.8 Nm
1

Type	Cat. No.	Qty.
EG 3 R	0163960000	15
AP PA	0133760000	20
RKF	0163860000	20
MPL	0158560000	50
ZBE	0138360000	50
ZBE	0138360000	50
VZ	0510260000	50
S 6.3	0496100000	100
S 2 x 2.8	0163500000	50
LP-CU	0167300000	-
LP-LR	0167400000	-

153, graphic V

300 V
2
III
10 A
1.6 W
IP 20
V - 2
100 °C
0.5...4 mm ²
0.5...2.5 mm ²
0.4 - 0.8 Nm
1

Type	Cat. No.	Qty.
EG 4 R	1116560000	-
AP PA	1116060000	20
RKF	1116260000	20
MPL	1116360000	50
ZBE	0138360000	50
ZBE	0138360000	50
VZ	0510260000	50
ZP	0453760000	-

153, graphic VI

300 V
2
III
1 A
1.6 W
IP 20
V - 2
100 °C
0.5...4 mm ²
0.5...2.5 mm ²
0.5 - 0.8 Nm
1

Type	Cat. No.	Qty.
EG 5 R	1116860000	-
AP PA	1116160000	20
RKF	1116260000	20
MPL	1116360000	50
ZBE	0138360000	50
ZBE	0138360000	50
VZ	0510260000	50
ZP	0453760000	-

153, graphic VII

Housings

Component housings with pluggable PCB

Design of electronic housings	Polyamide PA 6.6
Flammability	V2 (UL 94)
Colour	Grey

Notes:

BLZ terminals must be de-energized before being worked on.
Empirical values are available on request if smaller loads need to be switched.

WAVEBOX S 22.5



WAVEBOX L 22.5



Description	Type	Cat. No.	Qty.
Housing base completely assembled with locking foot, not cross-connectable	WAVEBOX S 22.5	8426440000	10
Completely assembled with locking foot, cross-connectable	WAVEBOX S 22.5 QV	8426450000	10
Top part with transparent cover/Top Unit	Top part	8426460000	10
Pin header 5.08/3-pole orange; right	Pin header	8426620000	10
Pin header 5.08/3-pole orange; left	Pin header	8426630000	10
Socket strip 2-pole for BLZ 5.08/2 screw terminal			
- orange			
- black			
Other colours are available on request			
Socket strip 3-pole for BLZ 5.08/3 screw terminal			
- orange	Socket strip	1526560000	100
- black	Socket strip	1526510000	100
Other colours are available on request			
Socket strip 2-pole for BLZ 5.08/2 tension clamp terminal			
- orange			
- black			
Socket strip 3-pole for BLZ 5.08/3 tension clamp terminal			
- orange	Socket strip	1707470000	100
- black	Socket strip	1707700000	100

Accessories	Type	Cat. No.	Qty.
Cross-connection ZQV 2.5N/2 black	ZQV 2.5N/2 black	1718080000	60
Cross-connection ZQV 2.5N/2 red	ZQV 2.5N/2 red	1717900000	60
Cross-connection ZQV 2.5N/2 blue	ZQV 2.5N/2 blue	1717990000	60
Cross-connection ZQV 2.5N/2 yellow	ZQV 2.5N/2 yellow	1693800000	60
Coding elements for BLZ BLZ KO black	Coding element	1545710000	100
Coding elements for BLZ BLZ KO orange	Coding element	1573010000	100

WS connector marker	Type	Cat. No.	Qty.
WS15/5 Multicard*			
WS10/5 Multicard *			
WS10/5 Neutral*			
Screw cap			
Power dissipation, arranged side by side, type		2.2 W/40 °C	

Ordering example WAVEBOX S 22.5	Type	Cat. No.	Qty.
Housing base completely assembled with locking foot, not cross-connectable		8426440000	1x
Top part with transparent cover/Top Unit		8426460000	1x
Pin header 5.08/3-pole orange; right		8426620000	1x
Pin header 5.08/3-pole orange; left		8426630000	1x
Socket strip 3-pole for BLZ 5.08/3 screw terminal orange		1526560000	2x

Caution!
These WAVEBOX housings are approved for operation in closed switchgear cabinets only!

See dimensioned drawing on page 154

Type	Cat. No.	Qty.
WAVEBOX S 22.5	8426440000	10
WAVEBOX S 22.5 QV	8426450000	10
Top part	8426460000	10
Pin header	8426620000	10
Pin header	8426630000	10
Socket strip	1526560000	100
Socket strip	1526510000	100
Socket strip	1707470000	100
Socket strip	1707700000	100

Type	Cat. No.	Qty.
WAVEBOX L 22.5	8426470000	10
WAVEBOX L 22.5 QV	8426480000	10
Top part	8426490000	10
Pin header	8426620000	10
Pin header	8426630000	10
Socket strip	1526560000	100
Socket strip	1526510000	100
Socket strip	1707470000	100
Socket strip	1707700000	100

Type	Cat. No.	Qty.
ZQV 2.5N/2 black	1718080000	60
ZQV 2.5N/2 red	1717900000	60
ZQV 2.5N/2 blue	1717990000	60
ZQV 2.5N/2 yellow	1693800000	60
Coding element	1545710000	100
Coding element	1573010000	100

Type	Cat. No.	Qty.
CAP	8428120000	-
3 W/20 °C	2.2 W/40 °C	

Type	Cat. No.	Qty.

Housings

Component housings with pluggable PCB

Design of electronic housings	Polyamide PA 6.6
Flammability	V2 (UL 94)
Colour	Grey

Notes:

BLZ terminals must be de-energized before being worked on.
Empirical values are available on request if smaller loads need to be switched.

WAVEBOX 12,5 mm



WAVEBOX 17,5 mm



Description	Type	Cat. No.	Qty.
Housing base completely assembled with locking foot, not cross-connectable	WAVEBOX 12,5 mm	8426530000	12
Completely assembled with locking foot, cross-connectable	WAVEBOX 12,5 mm	8426540000	12
Top part with transparent cover/Top Unit		8426550000	12
Pin header 5.08/2/3-pole; right	orange	8427390000	100
Pin header 5.08/2/3-pole; left	orange	8427400000	100
Socket strip 2-pole for BLZ 5.08/2 screw terminal			
- orange		1526460000	100
- black		1526410000	100
Other colours are available on request			
Socket strip 3-pole for BLZ 5.08/3 screw terminal			
- orange			
- black			
Other colours are available on request			
Socket strip 2-pole for BLZ 5.08/2 tension clamp terminal			
- orange		1707460000	100
- black		1707690000	100
Socket strip 3-pole for BLZ 5.08/3 tension clamp terminal			
- orange			
- black			

Accessories	Type	Cat. No.	Qty.
Cross-connection ZQV 2.5N/2 black		1718080000	60
Cross-connection ZQV 2.5N/2 red		1717900000	60
Cross-connection ZQV 2.5N/2 blue		1717990000	60
Cross-connection ZQV 2.5N/2 yellow		1693800000	60
Coding elements for BLZ BLZ KO black		1678530000	1
Coding elements for BLZ BLZ KO orange			

WS connector marker	Type	Cat. No.	Qty.
WS15/5 Multicard*		1609890000	96
WS10/5 Multicard *		1635010000	144
WS10/5 Neutral*		1060860000	200

Screw cap	Type	Cat. No.	Qty.
Power dissipation, arranged side by side, type	CAP	8428130000	100
	3 W/20 °C	2 W/40 °C	

Description	Type	Cat. No.	Qty.
Housing base completely assembled with locking foot, not cross-connectable	WAVEBOX 17.5 mm	8426560000	8
Completely assembled with locking foot, cross-connectable	WAVEBOX 17.5 mm	8426570000	8
Top part with transparent cover/Top Unit		8426580000	8
Pin header 5.08/2/3-pole; right	beige	8449220000	100
Pin header 5.08/2/3-pole; left	beige	8449230000	100
Socket strip 2-pole for BLZ 5.08/2 screw terminal			
- orange			
- black			
Other colours are available on request			
Socket strip 3-pole for BLZ 5.08/3 screw terminal			
- orange			
- black			
Other colours are available on request			
Socket strip 2-pole for BLZ 5.08/2 tension clamp terminal			
- orange		1526560000	100
- black		1526510000	100
Socket strip 3-pole for BLZ 5.08/3 tension clamp terminal			
- orange			
- black			

Accessories	Type	Cat. No.	Qty.
Cross-connection ZQV 2.5N/2 black		1718080000	60
Cross-connection ZQV 2.5N/2 red		1717900000	60
Cross-connection ZQV 2.5N/2 blue		1717990000	60
Cross-connection ZQV 2.5N/2 yellow		1693800000	60
Coding elements for BLZ BLZ KO black		1678530000	1
Coding elements for BLZ BLZ KO orange			

WS connector marker	Type	Cat. No.	Qty.
WS15/5 Multicard*		1609890000	96
WS10/5 Multicard *		-	-
WS10/5 Neutral*		-	-

Screw cap	Type	Cat. No.	Qty.
Power dissipation, arranged side by side, type	CAP	8428120000	100
	3 W/20 °C	2 W/40 °C	

Caution!
These WAVEBOX housings are approved for operation in closed switchgear cabinets only.

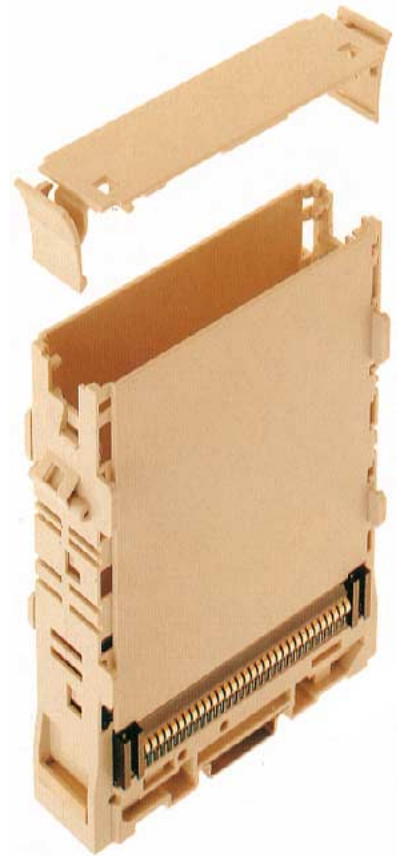
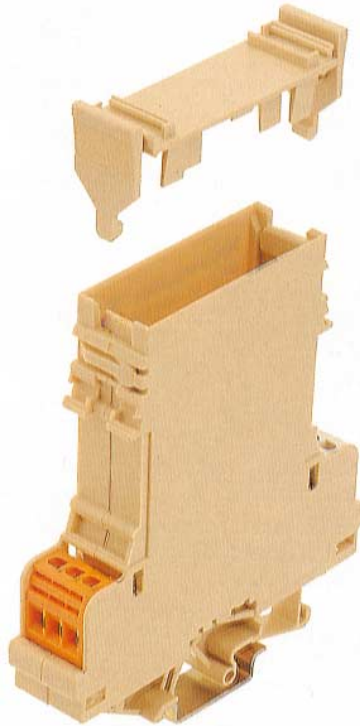
See dimensioned drawing on page 154

Housings

Component housings

SEG-U/LPU

EG 6



Rated data				
Reference voltage i.a.w.. VDE 0110 1/89	50 V			32 V to VDE 0110/1.89
Degree of pollution	2			2
Overtoltage category	III			III
Current	1 A			
Current-carrying capacity of bus contacts				1 A/δ _U 50 °C
Volume resistance of bus contacts				12 mΩ
Printed circuit board dimensions				100 x 120 x 1.8 mm
Power loss (when mounted in row)	1.5 W			
Protection category	IP 20			IP 00
Flammability i.a.w.. UL Level	V -2			V - 2
Upper temperature limit	100 °C			100 °C
Connection data				
Screw connection, solid	0.5...4 mm ²			
Screw connection, flexible	0.5...2.5 mm ²			
Torque range	0.5 Nm			
Torque with DMS 2 electric screwdriver	1			
Ordering data	Type	Cat. No.	Qty.	Type
Housing frame	Enclosure SEG-U	8007870000	-	EG 6 (incl. front plate)
	Cover plate	8066100000	-	8095840000
End plate				
Combi-foot, latchable				
Mounting plate				
Clamping yoke unit, right				
Clamping yoke unit, left				
Intermediate plate				
Connection spigot				
Connection tab 0.8 x 6.3 mm				
Connection tab 2 x 0.8 x 2.8 mm				
Tab / solder lug 0.8 x 2.8 mm				
Tab / solder lug 0.8 x 4.8 mm				
Printed circuit board, copper-coated				
Printed circuit board, pitch 2.54				
Dimensions				
See Page	153			153

Housings

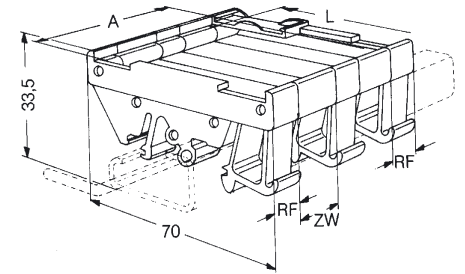
Rail-mounted profiles

RS 45

Extruded profile

RS 70

Rail-mounted profiles, parts

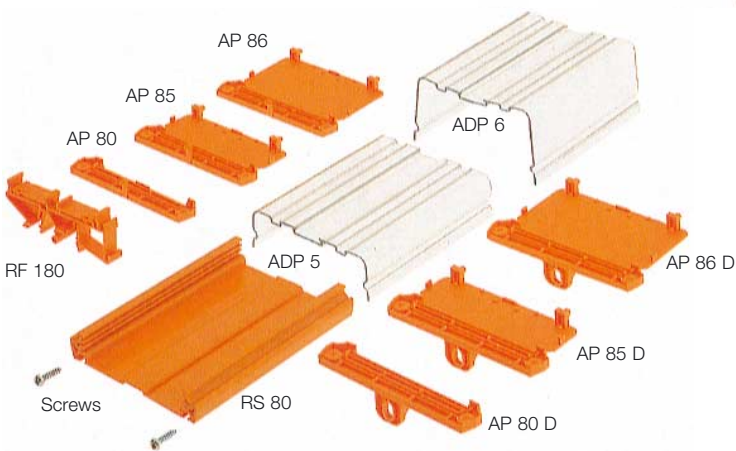


Dimensions ¹⁾					
Fixing foot	Total width:	45 mm		Width: 10 mm	Dimension RF
Stand-off pillar	Length:	1000 mm/2000 mm		Width: 5 mm/15 mm/25 mm/30 mm/45 mm	Dimension ZW
Printed circuit board	For horizontal insertion of PCB			Width: RS-Br-2 mm (Example.: RS=45 mm, LP=43 mm)	Dimension A
	Width:	42 (+0.5) mm		Length: 67.8 (-0.2) mm	Dimension L
	Thickness:	1.8 (+0.15) mm (DIN 40802 T. 2)		Thickness: 1.6 (±0.2) mm (DIN 40802 Part 2)	
	Length:	selectable/60...2000 mm			
	Dimension RS section: length of PCB - 4.5 mm				
	Dimension ADP section: length of PCB - 1 mm				
	Example: length of PCB - 160 mm, RS = 155.5 mm, ADP = 159 mm				
Rated data					
Flammability according to UL level	V-0 / V-2 Extruded profile / Accessories			V-2	
Upper temperature limit	70 °C			100 °C	
Ordering data		Type	Cat. No.	Qty.	
Extruded profile	RS 45 (up to 2000 mm)		4027750000	1	
	RS 45 (up to 1000 mm)		8140880000	1	
Fixing foot right, with marking facility					RFB
Fixing foot right, without marking facility					0119560000
Fixing foot left, without marking facility					RFO
Fixing foot, middle (intermediate foot)					0126260000
Fixing foot (RS 80/RS 100) for TS 32/TS 35					RF
Stand-off pillar 5 mm					0119660000
Stand-off pillar 15 mm					RFM
Stand-off pillar 25 mm					0213760000
Stand-off pillar 30 mm					
Stand-off pillar 45 mm					ZW 5
End plate without cover for mounting on rails	AP 45/LI	AP 45/RE	8143910000	8143900000	20
End plate without cover for direct mounting	AP 45/LI Di	AP 45/RE Di	8140870000	8140860000	20
End plate with low cover for mounting on rails					ZW 15
End plate with low cover for direct mounting					0119860000
End plate with high cover for mounting on rails					ZW 25
End plate with high cover for direct mounting					0126160000
Shrouding profile, low					ZW 30
Shrouding profile, high					0119960000
Screws	30 x 14		4011200000	-	ZW 45
					0120060000
Accessories					
Insert tag (unprinted)					ESO 7
Protective strip, transparent					0515200000
					SST 7
					0515300000
					100

Housings

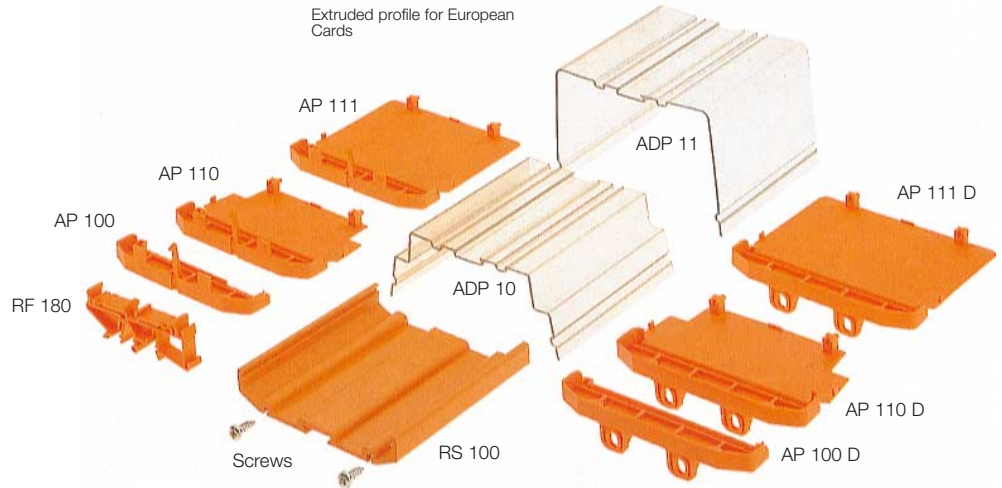
RS 80

Extruded profile



RS 100

Extruded profile for European Cards



AP RF80 RE/LT

Total width:	84 mm
Length:	2000 mm

For horizontal insertion of PCB	
Width:	67.8 (+0.2) mm
Thickness:	1.8 (+0.15) mm (DIN 40802 P. 2)
Dimension RS section: Length of PCB -4.5 mm	
Dimension ADP section: Length of PCB -2 mm	
Example: Length of PCB 160 mm, RS = 155.5 mm, ADP = 158 mm	

V-0 / V-2 Extruded profile / Accessories
70 °C

Type	Orange (RAL 2000)	Grey (RAL 7032)	Qty.
RS 80 (2000 mm) grey		4183130000	1
RS 80 (2000 mm) orange	4157440000		1
RF 180	1324460000	1773400000	20
AP 80	1324260000	8320300000	20
AP 80 D	1324360000		20
AP RF 80 RE		8156200000	-
AP RF 80 LT		8156210000	-
AP 85	1410860000		20
AP 85 D	1411060000		20
AP 86	1410960000		20
AP 86 D	1411160000		20
ADP 5 (1000 mm)	4167150000		-
ADP 6 (1000 mm)	4167160000		-
30 x 14	4011200000		-

Total width:	104 mm
Length:	2000 mm/160 mm

For horizontal insertion of PCB	
Width:	100 (+0.5) mm
Thickness:	1.8 (+0.5) mm (DIN 40802 Part 2)
Dimension RS section: Length of PCB -4.5 mm	
Dimension ADP section: Length of PCB -1 mm	
Example: Length of PCB 160 mm, RS = 155.5 mm, ADP = 159 mm	

V-0 / V-2 Extruded profile / Accessories
70 °C

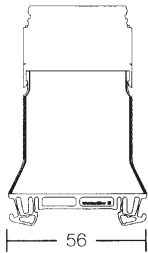
Type	Orange (RAL 2000)	Grey (RAL 7032)	Qty.
RS 100 (2000 mm) grey		4010870000	1
RS 100 (2000 mm) orange	4144870000		1
RS 100 (155 mm)	4148400000		1
RF 180	1324460000	1773400000	20
AP 100	1185060000	1773410000	20
AP 100 D	1185160000		20
AP 110	1185260000		20
AP 110 D	1185360000		20
AP 111	1185460000		20
AP 111 D	1185560000		20
ADP 10 (2000 mm)	4169320000		(2 m)
ADP 11 (2000 mm)	4169330000		(2 m)
40 x 14	4019420000		-

Housings

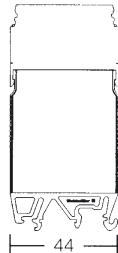
Component housings EG.../RST OST

Dimensions
 Connection data
 Accessories

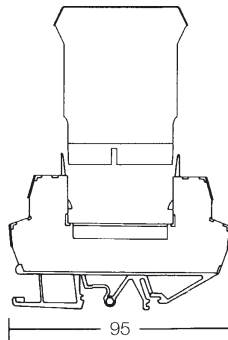
EGR/EG 7



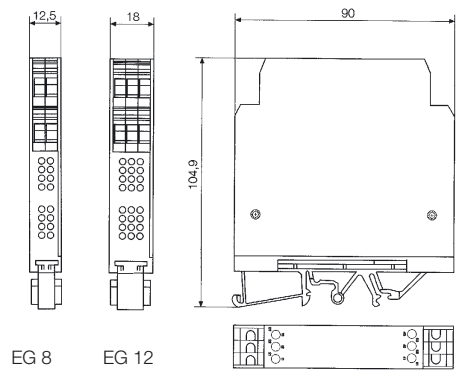
EGR/EGO



RST/EG 7



EG 8 / EG 12



	EG 7/35 for TS 35	EG 7/Combination
foot		
Width (mm)	10	10
Depth (mm)		
with TS 35 x 7.5	92	96
with TS 35 x 15	100	103
with TS 32		100

RST/OST EG 7	
Width (mm)	10
Height, plugged (mm)	
823472 for TS 32	
with TS 35 x 7.5	91
with TS 35 x 15	99
819383 with combination foot	
with TS 35 x 7.5	93
with TS 35 x 15	101
with TS 32	97

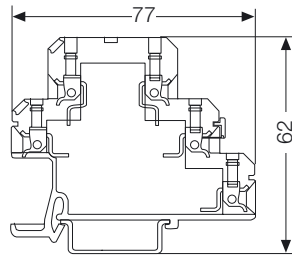
Dimensions	
EG 8	
Width (mm)	12,5
Depth (mm)	104,9
EG 12	
Width (mm)	18
Depth (mm)	104,9

Housings

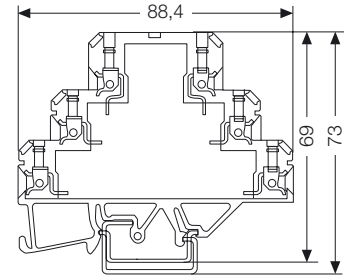
Component housings

Dimensions
Connection data
Accessories

DK 5



DK 6



Dimensions	
Terminal width (+ assembly tolerance 0.2 mm)	6 mm
Insulation stripping length	9 mm
Connection data	
Screw connection, solid	0.5...4 mm ²
Screw connection, flexible	0.5...4 mm ²
Connection cross-section	AWG 20...12
Accessories	
Mounting rail (2 m long)	
End bracket	for TS 32
	for TS 35
End plate	
Labeling material*	

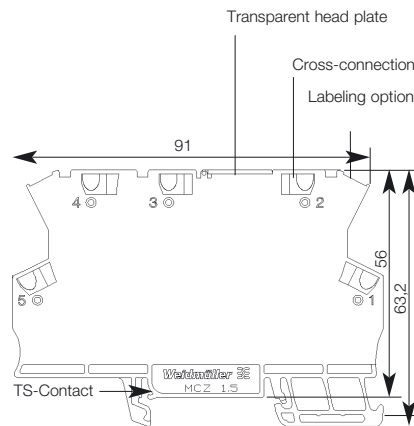
DK 5	
Type	Cat. No.
TS 32	0122800000
TS 35 x 7,5	0383400000
TS 35 x 15	0498000000
EWK 2	0199360000
EW 35	0383560000
AP	8268870000
dekafix 5	

DK 6	
Type	Cat. No.
TS 32	
TS 35 x 7,5	0383400000
TS 35 x 15	0498000000
EWK 2	0199360000
EW 35	0383560000
AP	8324560000
dekafix 5	

* See sectional catalogue 5 /Installations Products

Component housings Miniconditioner MCZ

Dimensions
Connection data
Accessories



Dimensions	
Width (mm) + assembly tolerance 0.2	6
Insulation stripping length (mm)	6
Connection data	
Z tension clamp connection, solid	0.5...1.5 mm ²
Z tension clamp connection, flexible	0.5...1.5 mm ²
Connection cross-section	AWG 26...16
Accessories	
Mounting rail (2 m long)	
Mounting rail (2 m long)	
End plate	
End bracket for TS 35	
Cross-connection (pluggable)	

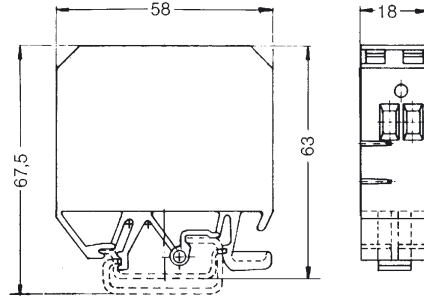
MCZ 1.5	
Type	Cat. No.
TS 35 x 7.5	0383400000
TS 35 x 15	0498000000
APMCZ 1.5	8389030000
EW 35	0383560000
EW 35	0383560000
ZQV 4 2-pole	1608950000
ZQV 4 3-pole	1608960000
ZQV 4 4-pole	1608970000
ZQV 4 5-pole	1608980000
ZQV 4 6-pole	1608990000
ZQV 4 7-pole	1609000000
ZQV 4 8-pole	1609010000
ZQV 4 9-pole	1609020000
ZQV 4 10-pole	1609030000

Housings

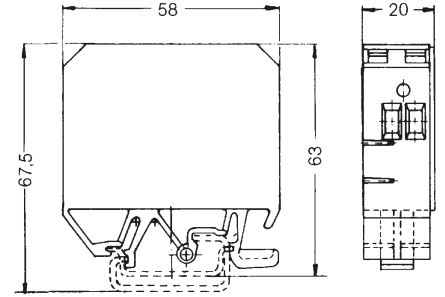
Component housings EG.../EG-U/LPU

Dimensions
Connection data
Accessories

EG 1 - graphic I



EG 2 - graphic II

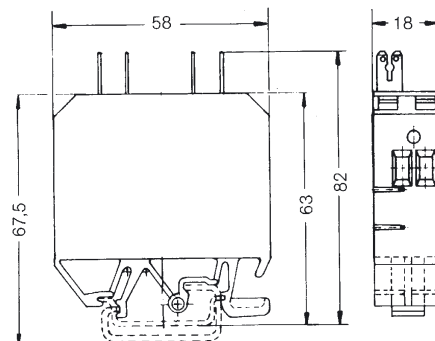


Dimensions	
Terminal width (+ assembly tolerance 0.2 mm)	18 mm
Insulation stripping length	12 mm
Connection data	
Screw connection, solid	0.5...6 mm ²
Screw connection, flexible	0.5...4 mm ²
Connection cross-section	AWG 20...12
Accessories	
Mounting rail (2 m long)	
End bracket	for TS 32 for TS 35
Cross-connection conductor 80 mm, 50-pole/1mm ²	
Labeling material*	

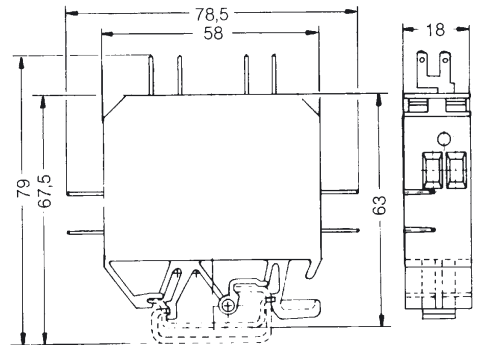
Type	Cat. No.
TS 32	0122800000
TS 35 x 7.5	0383400000
TS 35 x 15	0498000000
EKW 2	0199360000
EW 35	0383560000
QD 50/grey	0238700000
dekafix 5	

Type	Cat. No.
TS 32	0122800000
TS 35 x 7.5	0383400000
TS 35 x 15	0498000000
EKW 2	0199360000
EW 35	0383560000
QD 50/grey	0238700000
dekafix 5	

EG 2 - graphic III



EG 2 - graphic IV



Dimensions	
Terminal width (+ assembly tolerance 0.2 mm)	18 mm
Insulation stripping length	
Connection data	
Screw connection, solid	
Screw connection, flexible	
Push-on connection (DIN 46247)	2x 0.8 x 2.8 mm or 1x 0.8 x 6.3 mm
Connection cross-section	
Accessories	
Mounting rail (2 m long)	
End bracket	for TS 32 for TS 35
Cross-connection conductor 80 mm , 50-pole/1mm ²	
Labeling material*	

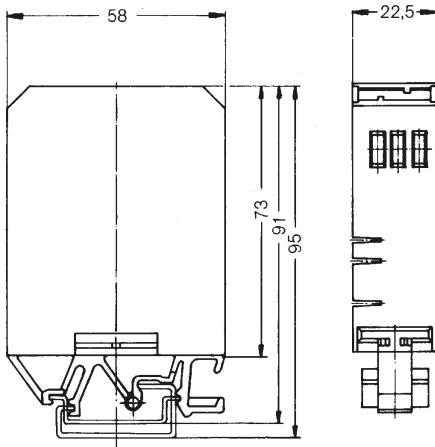
Type	Cat. No.
TS 32	0122800000
TS 35 x 7.5	0383400000
TS 35 x 15	0498000000
EKW 2	0199360000
EW 35	0383560000
QD 50/grey	0238700000
dekafix 5	

Type	Cat. No.
TS 32	0122800000
TS 35 x 7.5	0383400000
TS 35 x 15	0498000000
EKW 2	0199360000
EW 35	0383560000
QD 50/grey	0238700000
dekafix 5	

* See sectional catalogue 7

Housings

EG 3 - graphic V



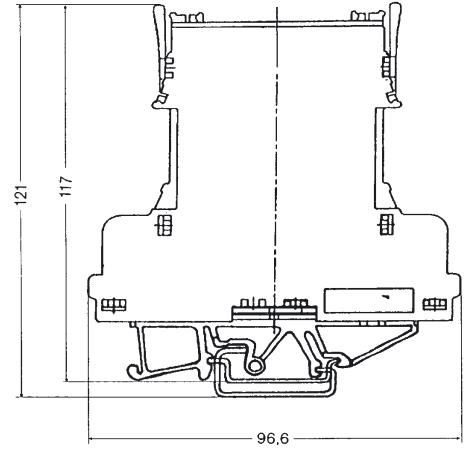
with mounting plate MPL

22.5 mm
17 mm

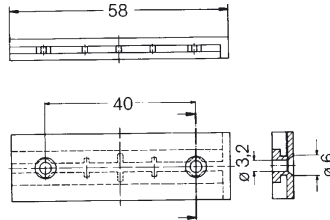
0.5...4 mm²
0.5...2.5 mm²

Type	Cat. No.
TS 32	0122800000
TS 35 x 7.5	0383400000
TS 35 x 15	0498000000
EKW 2	0199360000
EW 35	0383560000
QD 50/grey	0238700000
dekafix 6.5	

SEG-U/LPU



with mounting plate MPL

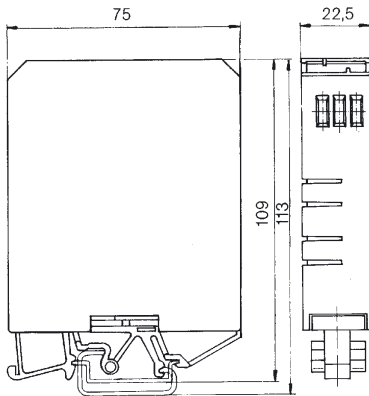


20 mm
17 mm

0.5...4 mm²
0.5...2.5 mm²
AWG 26...14

Type	Cat. No.
TS 32	0122800000
TS 35 x 7.5	0383400000
TS 35 x 15	0498000000
EKW 2	0199360000
EW 35	0383560000
QD 50/grey	0238700000
dekafix 5	

EG 4 - graphic VI

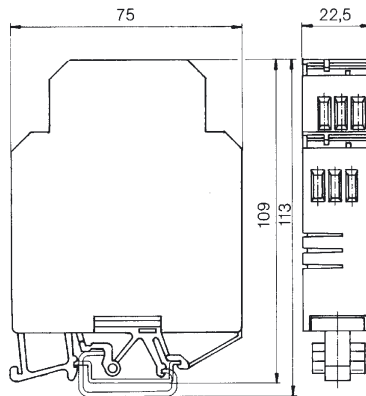


22.5 mm
17 mm

0.5...4 mm²
0.5...2.5 mm²
AWG 22...12

Type	Cat. No.
TS 32	0122800000
TS 35 x 7.5	0383400000
TS 35 x 15	0498000000
EKW 2	0199360000
EW 35	0383560000
QD 50/grey	0238700000
dekafix 6.5	

EG 5 - graphic VII

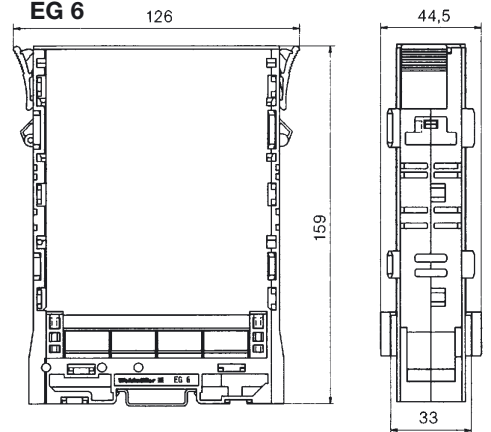


22.5 mm
17 mm

0.5...4 mm²
0.5...2.5 mm²
AWG 22...12

Type	Cat. No.
TS 32	0122800000
TS 35 x 7.5	0383400000
TS 35 x 15	0498000000
EKW 2	0199360000
EW 35	0383560000
QD 50/grey	0238700000
dekafix 6.5	

EG 6

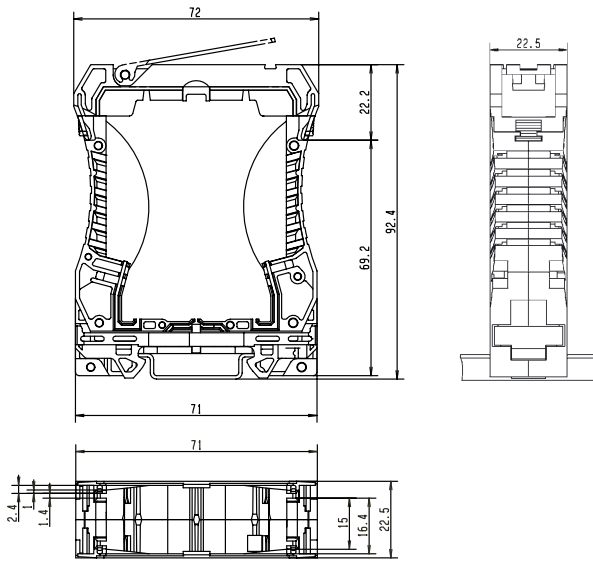


Assembly dimension

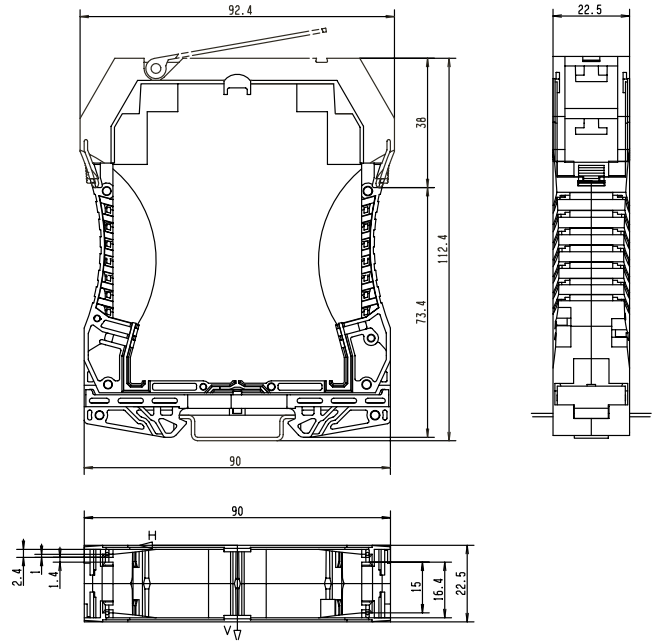
Type	Cat. No.
TS 35 x 7.5	0383400000
TS 35 x 15	0498000000
EW 35	0383560000
dekafix 6.5	

Housings

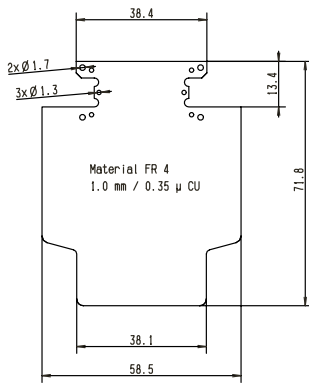
WAVEBOX S 22.5



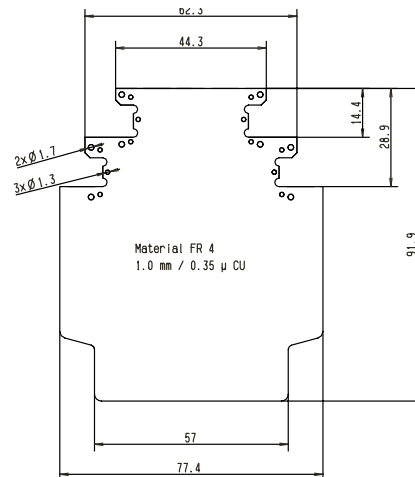
WAVEBOX L 22.5



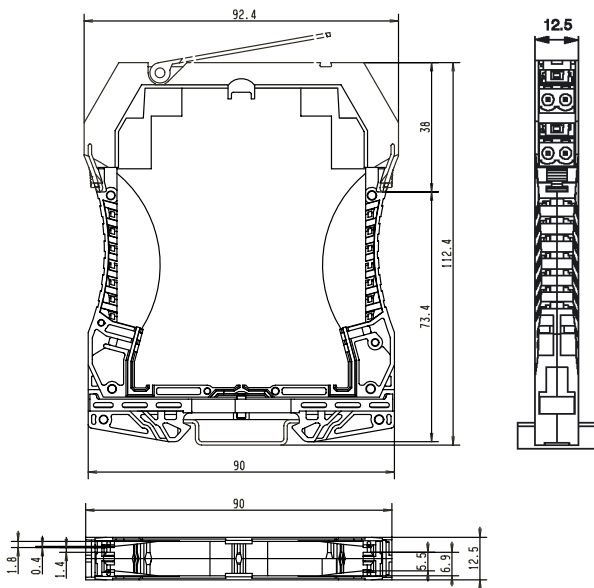
Printed circuit board S 22.5



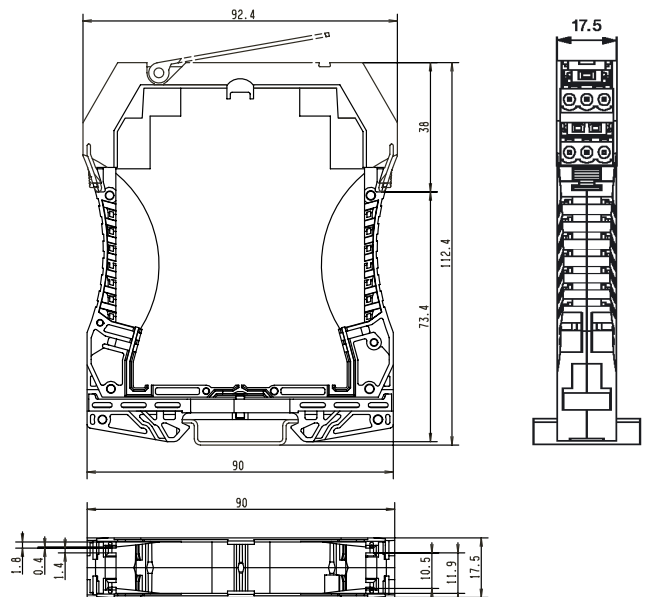
Printed circuit board L 22.5



WAVEBOX 12.5



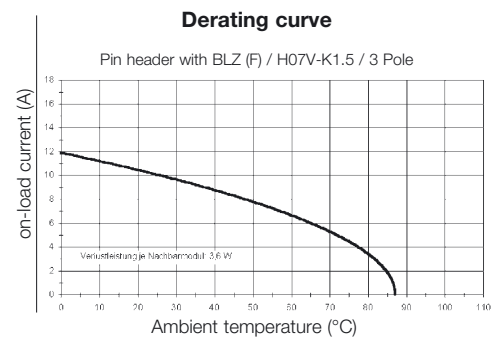
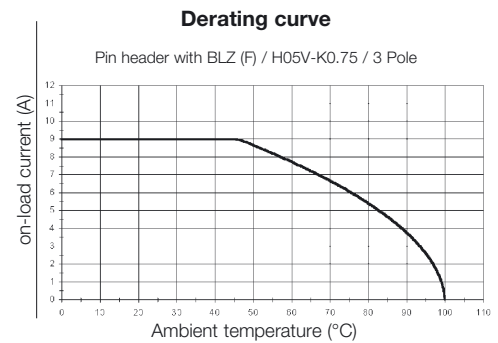
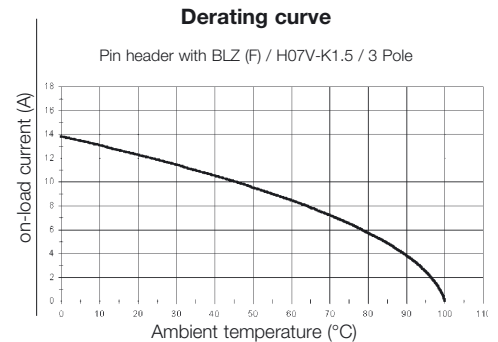
WAVEBOX 17.5



Housings

Socket blocks BLZ 5.08 / BLZF 5.08

Materials	BLZ 5.08/SL 5.08	BLZF 5.08
Insulation material	PBT	PBT
Colour	orange	orange
Temperature range	-20.. +100 °C	-20.. +100 °C
Flammability class	UL 94 (VO)	UL 94 (VO)
Contact base material	CuSn	CuSn
Contact plating	tin-plated	tin-plated
System characteristic values		
Pitch	5.08 mm	5.08 mm
Clearance	≥ 2.5 mm	≥ 3 mm
Creepage	≥ 4.0 mm	≥ 4.0 mm
Connection method	screw connection/solder connect.	tension clamp connection
Solder pin length	3.2/4.5 mm	
Component assembly hole	∅ 1.3 + 0.1 mm	
Insulation stripping length	7 mm	7 mm
Clamping screw	M 2.5	
Insulation resistance	≥ 10 MΩ	≥ 10 ⁵ MΩ
Through resistance	≤ 5 mΩ	≤ 5 mΩ
Conductor size		
Clamping range	0.08...2.5 mm ²	1.5 mm ²
"e" solid H05(07)V-U	0.5...2.5 mm ²	0.13...1.5 mm ²
"f" flexible H05(07)V-K	0.5...2.5 mm ²	0.13...2.5 mm ²
"f" with ferrules		
In accordance with DIN 46228/1	0.5...2.5 mm ²	0.05...2.5 mm ²
With plastic collar		
In accordance with DIN 46228/4	0.5...1.5 mm ²	1.5 mm ²
AWG conductor	28...14	26...14
Plug gauge i.a.w. EN 60947-1/10.91	A3	
VDE rated data		VDE 0110 2.79
Nominal cross-section	2.5mm ²	2.5mm ²
Nominal current	12A ¹⁾	12A ¹⁾
Power rating	see derating curves ²⁾	see derating curves ²⁾
Test voltage	2.0 kV~	2.0 kV~
Rated load torque	0.5 Nm	
VDE0110 1.89 rated data		VDE 0110 1.89
Rated cross-section		1.5mm ²
Rated current (Tu=20°C)		12A ³⁾
Rated voltage		250 V
Rated surge		4 kV
Degree of pollution		3
UL rated data	Rated data i.a.w. UL	
AWG conductor	22...12	26...14
Nominal current	10 A	10 A
Nominal voltage, industrial	300 V~	300 V~
Tool		
SD/SDI 5 screwdriver		
Approvals	List on request	Applied for



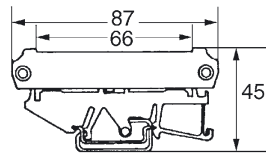
¹⁾ Nominal cross-section and max. number of poles determined from derating curve at 20 °C ambient temperature

²⁾ Further derating curve on request

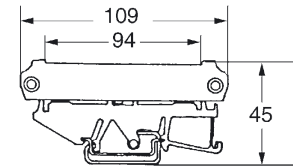
Housings

Rail-mounted profiles RS

RS 80

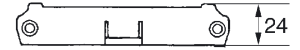


RS 100

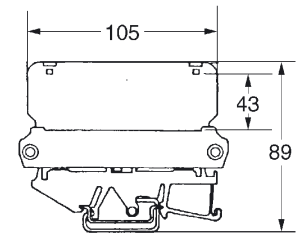
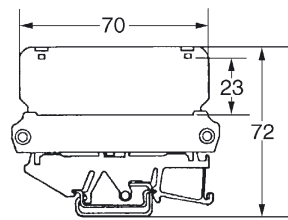


For mounting rails, without cover

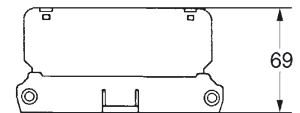
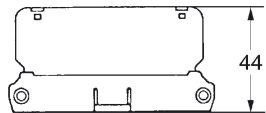
Direct mounting, without cover



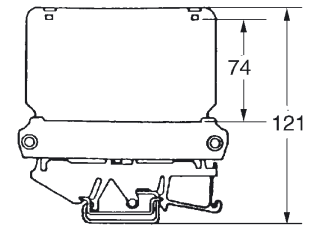
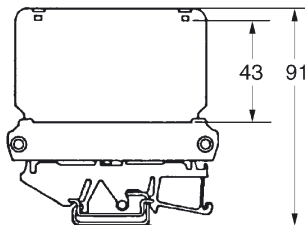
For mounting rails, with low cover



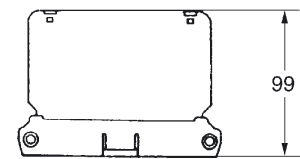
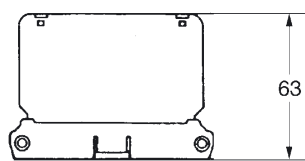
Direct mounting, with low cover



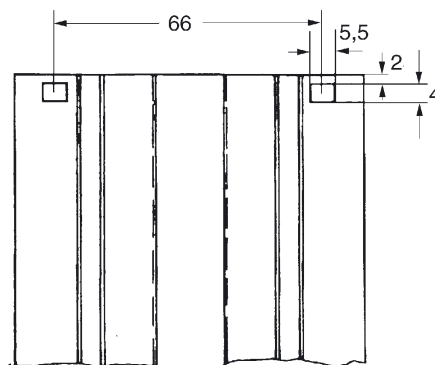
For mounting rails, with high cover



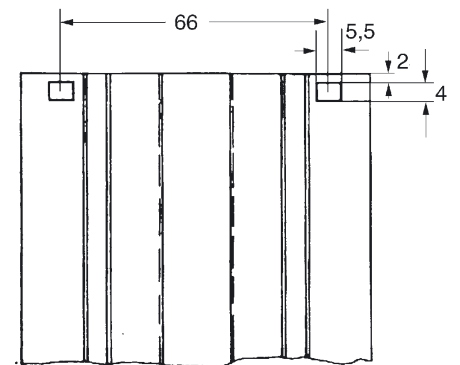
Direct mounting, with high cover



Fixing holes



ADP 5 / ADP 6



ADP 10 / ADP 11

Housings

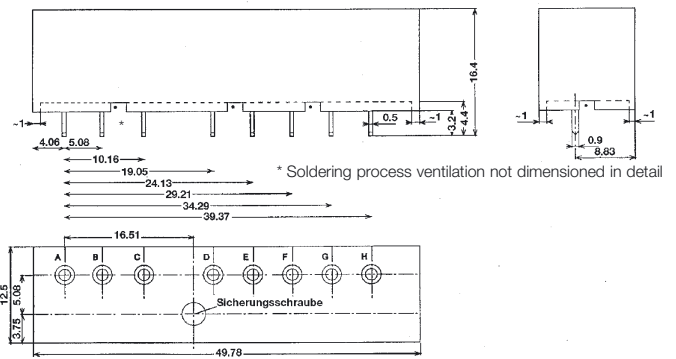
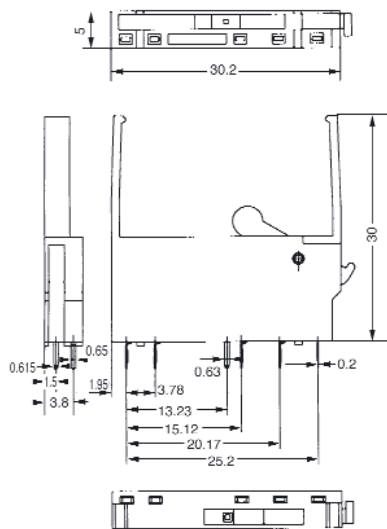
Pluggable relay socket RSS 5MM

- Suitable for PCB mounting
- For miniature all-or-nothing relays types Tyco SNR, NAIS APE ...
- Mechanical interlock with eject lever



Semi-conductor relay socket OS 2 and OS 2/5

- Suitable for PCB mounting
- For solid state relays, type Opto 22, Crouzet ...
- Secured in socket by integrated fixings screws



Ordering data

Type	Cat. No.
RSS 5 MM	4056360000

Technical Data

Input voltage	250 V
Output voltage	250 V
Max. inrush current	6 A
Nominal current	5 A
Flammability class according to UL 94	V-2

Insulation coordination according to EN 50178

Rated voltage	250 V
Rated impulse voltage	
Input circuit	4 kV (1.2/50 µs)
Output circuit	4 kV (1.2/50 µs)
Input < Output	< 8 kV (1.2/50 µs)
Overvoltage category	III
Degree of pollution	2

Ambient conditions

Ambient temperature	- 25°C ... + 50°C
Storage temperature	- 40°C ... + 85°C

Dimensions

Length / Width / Depth	30,2 / 5 / 30 mm
Soldering pin	3,5 mm

Ordering data

Type	Cat. No.
OS2	9455210000 ¹⁾
OS2/5	9457640000 ²⁾

Technical Data

Input voltage	250 V
Output voltage	250 V
Nominal current	5 A
Flammability class according to UL 94	V-2

Coordination of insulation i.a.w. EN 50178

Rated voltage	250 V
Rated impulse voltage	
Input circuit	4 kV (1.2/50 µs)
Output circuit	4 kV (1.2/50 µs)
Input < Output	< 8 kV (1.2/50 µs)
Overvoltage category	III
Degree of pollution	2

Ambient conditions

Ambient temperature	- 25°C ... + 50°C
Storage temperature	- 40°C ... + 85°C

Dimensions

Length / Width / Depth	49,78 / 12,5 / 13,2 mm
Soldering pin	3,2 mm

¹⁾ Equipped with contact sockets B, C, F, H

²⁾ Equipped with contact sockets A, B, C, F, H

SLA/BLA – one-of-a-kind

Only at Weidmüller: the unique connector with the secure protection against misfitment. In the SLA/BLA family of products, the pin headers and socket blocks are always paired up. That means pin headers and socket blocks with an equal number of pins.

Not only this makes the Weidmüller classic unique: we assemble the product range out of glass fibre-reinforced PBT based on 5.08 mm metric pitch. Due to their amazing material properties, the pin headers and socket blocks can withstand long-term use not only at 120 °C, but also at increased environmental temperatures. Even the most demanding customers can find a solution with this classic, whereas other connectors would give up.

Three connection technologies are available: clamping yoke, TOP, and crimp connectors. All pin headers and socket blocks in the SLA/BLA range can be freely combined. For example, for the self wiring of initiators and actuators, interface elements and power supplies or for use in motor regulation.

Overview of features

- Double protection against improper fitting (only connectable in pairs, only in one direction)
- Protection against wiring mistakes
- Extended use at high temperatures
- Voltages up to 250 V, currents up to 14 A, conductor cross-section up to 2.5 mm
- Glass fibre-reinforced thermoplastic polyester (PBT) as insulation material: flame resistant according to UL 94 V-0
- Large selection of accessories

