



PRODUCT OVERVIEW



A Phoenix Mecano Company

ROSE Systemtechnik GmbH

The company was founded in 1969 and specializes in the development and production of high quality industrial enclosures, which are used in a variety of environmental conditions.

Phoenix Mecano AG / Switzerland is a global company.

The basis of our business success are systems from a wide range of high quality products, innovative design and first class customer service.

For more information please visit our homepage

www.rose-pw.de

www.rose-ex-enclosures.com



A Phoenix Mecano Company

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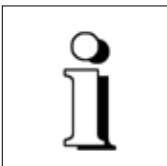
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Contents

	Page	
Industrial enclosures Enclosures for individual fitting Aluminium, Polyester, Polycarbonate, ABS, Polystyrene, Polyamide	4 - 18	
Electronic enclosures Aluminium enclosure for electronic components EMC version	19 - 33	
Ex equipment Empty and terminal enclosures Polyester, Aluminium, Stainless steel Flameproof enclosures Ex-d Ex Control equipment	34 - 59	
E30 enclosures Polyester enclosures for fire protection	60	
Handheld enclosures Individual enclosure systems for data acquisition, measurement and automation engineering applications	61 - 69	
Operating and display enclosures Aluminium control enclosure for compact and display fittings Suspension systems and mobile trolleys	70 - 105	
Stainless steel enclosure systems Enclosures for hygienic applications and rough atmospheres Standard enclosures, Ex-terminal and empty enclosures Commander systems and suspension systems, keypads Cable glands	106 - 117	
Keypads, Electromechanical components Layout: Prototyping, Series production	118 - 123	
Cable glands PG and metric versions Standard, EMC, Ex Brass, plastic	124 - 133	
General technical information Enclosure selection criteria Chemical resistance Special versions	134 - 141	

Technical modifications reserve!

Industrial enclosures

The universal design of ROSE industrial enclosures made from aluminium, stainless steel, Polycarbonate, Polyester and ABS is the basis of their versatility.

They are designed to accommodate mechanical parts as well as electrical and electronic components. Apart from standard versions flange enclosures are also available in aluminium, Polyester and Polycarbonate as well as standard versions of stainless steel and sheet steel enclosures.



Aluminium enclosures Aluform

- 17 enclosure variants in sizes from 80 x 80 x 81 mm to 280 x 280 x 111 mm
- application area: its elegant design makes it ideal for use in areas where the visual impression is important.

Aluminium standard enclosures

- 44 enclosure variants in sizes from 45 x 50 x 30 mm to 600 x 600 x 202 mm
- application area: standard industrial enclosures

Polyester standard enclosures

- 27 enclosure variants in sizes from 55 x 55 x 37 mm to 406 x 401 x 201 mm
- application area: standard industrial enclosures

Polyester CombiBox

- Polyester enclosure system for industrial applications with electrical/mechanical components

Polyester flange enclosures

- 6 enclosure variants in sizes from 170 x 270 x 136 mm to 270 x 541 x 150 mm with 2 to 6 flange openings
- application area: fieldbus and installation enclosures

Polycarbonate/ABS standard enclosures

- 46 enclosure variants in sizes from 50 x 52 x 35 mm to 230 x 300 x 110 mm
- application area: standard industrial enclosures

Polycarbonate flange enclosures

- 11 enclosure variants in sizes from 134 x 170 x 130 mm to 269 x 540 x 130 mm with 2 to 6 flange openings
- application area: standard installation enclosures

ECO/PCI compact enclosures

- 61 enclosure variants in sizes from 65 x 65 x 57 mm to 254 x 361 x 165 mm

Polyglas/Polycase

- 8 enclosure variants in sizes from 300 x 400 x 200 mm to 400 x 600 x 250 mm
- application area: universal enclosures with hinged lid

Mini-Polyglas

- 12 enclosure variants in sizes from 120 x 200 x 100 mm to 200 x 300 x 170 mm
- application area: universal enclosures with hinged lid

Polyester/ABS cabinets

- 8 enclosure variants in sizes from 200 x 250 x 150 mm to 250 x 300 x 170 mm
- application area: universal enclosures with hinged lid

CS Box

- Polyamide control enclosures and junction boxes

For detailed information see our catalogue "Industrial enclosures"

Stainless steel enclosures see chapter stainless steel-enclosure system page 102ff.

- Aluminium diecast enclosure for MCR and automation technology
- Prepared for acceptance for front membranes and keypads
- Rectangular dome sequence in lid and base

Included in delivery:

Aluminium diecast enclosure consisting of lid, seal, incl. captive +/- stainless steel screws, base with 4 earthing screws



Technical data

Material	DIN EN 1706 EN AC-AISI 12 (Fe)
Ingress protection	IP 66 to EN 60529 higher protection on request
Impact resistance	7 Joule to EN 60079-0
Painting	powder coating
Colour	RAL 7038, agate grey; special colour on request
Temperature range	PU (polyurethane) seal (standard): -40°C to +90°C CR (chloroprene) seal: -40°C to +100°C VMQ (silicone) seal (optional): -60°C to +130°C

Product range

Order No.	Dimensions (mm)	DIN rails for terminals		Mounting plate ¹⁾	External mounting brackets pair	External aluminium hinges pair ^{3), 4)}	EMC version	SWB/SBG/ SBGL Corrosion protection	Allen lid screws ²⁾	Silicone lid seal up to +130° C	Sealable lid screws in steel	Lid safe- ty strip
	W x L x H	TS 15	TS 35									
04.08 08 08	80 x 80 x 81			•	•	•	•	•	•	•	•	•
04.08 12 05	80 x 120 x 51			•	•	•	•	•	•	•	•	•
04.08 12 08	80 x 120 x 81	•		•	•	•	•	•	•	•	•	•
04.10 10 06	100 x 100 x 61	•	•	•	•	•	•	•	•	•	•	•
04.10 16 06	100 x 160 x 61	•	•	•	•	•	•	•	•	•	•	•
04.10 20 06	100 x 200 x 61	•	•	•	•	•	•	•	•	•	•	•
04.12 12 08	120 x 120 x 81	•	•	•	•	•	•	•	•	•	•	•
04.12 16 08	120 x 160 x 81	•	•	•	•	•	•	•	•	•	•	•
04.14 14 07	140 x 140 x 71	•	•	•	•	•	•	•	•	•	•	•
04.14 18 07	140 x 180 x 71	•	•	•	•	•	•	•	•	•	•	•
04.14 22 07	140 x 220 x 72	•	•	•	•	•	•	•	•	•	•	•
04.15 18 08	150 x 180 x 81	•	•	•	•	•	•	•	•	•	•	•
04.16 16 08	160 x 160 x 81	•	•	•	•	•	•	•	•	•	•	•
04.16 24 08	160 x 240 x 81	•	•	•	•	•	•	•	•	•	•	•
04.20 20 07	200 x 200 x 72	•	•	•	•	•	•	•	•	•	•	•
04.20 28 07	200 x 280 x 72	•	•	•	•	•	•	•	•	•	•	•
04.28 28 11	280 x 280 x 111	•	•	•	•	•	•	•	•	•	•	•

¹⁾ Laminated paper

²⁾ Stainless steel

³⁾ Diecast aluminium

⁴⁾ Please state mounting side A - D when ordering.

Accessories

External brackets, pair for type 04.08	04.00 00 80
External brackets, pair for type 04.10	04.00 01 00
External brackets, pair for type 04.12	04.00 01 20
External brackets, pair for type 04.14	04.00 01 40
External brackets, pair for type 04.16	04.00 01 60
External brackets, pair for type 04.20	04.00 02 00
Console holder for wall or table mounting 98 mm wide, for type 04.10	04.30 00 09
Console holder for wall or table mounting 138 mm wide, for type 04.14	04.30 00 14
External hinges, pair	04.00 00 10
Lid safety strip	04.00 00 20

Aluminium standard

Product group
01

- Robust aluminium enclosure for mechanical engineering and automation technology
- Fixing options for DIN rails and mounting plates
- Usable in wide temperature area

Included in delivery:

Aluminium enclosure consisting of lid, seal, incl. captive +/-stainless steel screws, base with 2 or 4 earthing screws



Technical data

Material	DIN EN 1706 EN AC-AlSi 12 (Fe)
Ingress protection	IP 66 to EN 60529 higher ingress protection on request
Impact resistance	7 Joule to EN 60079-0
Painting	powder coating
Colour	RAL 7001, silver grey, special colour on request
Temperature range	PU (polyurethane) seal (standard): -40°C to +90°C CR (chloroprene) seal: -40°C to +100°C VMQ (silicone) seal (optional): -60°C to +130°C

Product range

Order No.	Dimensions (mm) W x L x H	Order No.	Dimensions (mm) W x L x H	Order No.	Dimensions (mm) W x L x H
Standard enclosures					
01.05 05 03	45 x 50 x 30	01.12 22 08	120 x 220 x 81	01.23 20 18	232 x 202 x 181
01.06 06 03	64 x 58 x 34	01.12 22 09	120 x 220 x 91	01.23 28 11	230 x 280 x 111
01.06 10 03	64 x 98 x 34	01.12 22 12	120 x 220 x 118	01.23 33 11	230 x 330 x 111
01.06 15 03	64 x 150 x 34	01.12 36 08	120 x 360 x 81	01.23 33 18	230 x 330 x 181
01.06 19 03	64 x 185 x 34	01.14 14 09	140 x 140 x 91	01.23 40 11	230 x 400 x 111
01.08 08 06	80 x 75 x 57	01.14 20 09	140 x 200 x 91	01.23 40 23	230 x 400 x 225
01.08 13 06	80 x 125 x 57	01.16 16 09	160 x 160 x 91	01.23 60 11	230 x 600 x 111
01.08 18 06	80 x 175 x 57	01.16 26 09	160 x 260 x 91	01.31 40 11	313 x 404 x 111
01.08 25 05	80 x 250 x 52	01.16 36 09	160 x 360 x 91	01.31 40 14	312 x 403 x 141
01.10 10 08	100 x 100 x 81	01.16 56 09	160 x 560 x 91	01.31 40 18	313 x 404 x 181
01.10 16 08	100 x 160 x 81	01.18 18 10	180 x 180 x 101	01.31 40 23	313 x 404 x 227
01.10 20 08	100 x 200 x 81	01.18 28 10	180 x 280 x 101	01.31 60 11	310 x 600 x 111
01.12 12 08	120 x 122 x 81	01.23 10 11	230 x 100 x 111	01.31 60 18	310 x 600 x 181
01.12 12 09	120 x 122 x 91	01.23 20 11	232 x 202 x 111	01.60 60 20	600 x 600 x 202
Field enclosure with external fixing					
01.06 12 00	64 x 115 x 34				
01.06 19 00	64 x 185 x 34				

Aluminium standard

Accessories

Order No.	DIN rails for terminals		Earth rail clamp	Mounting plate thickness in mm ¹⁾	External mounting brackets pair ²⁾	External hinge pair ^{3), 4)}	EMC version	Internal hinges pair ^{2), 4)}	SWB/SBG/ SBG Corrosion protection	Allen lid screws ²⁾	Silicone lid seal up to +130°C	Sealable lid screws in steel	Turn bolt fastener ⁴⁾
	TS 15	TS 35*											
Standard enclosures													
01.05 05 03							•		•	•	•	•	
01.06 06 03							•		•	•	•	•	
01.06 10 03	•						•		•	•	•	•	
01.06 15 03	•						•		•	•	•	•	
01.06 19 03	•						•		•	•	•	•	
01.08 08 06	•			1,5	•		•		•	•	•	•	
01.08 13 06	•			1,5	•		•		•	•	•	•	
01.08 18 06	•			1,5	•		•		•	•	•	•	
01.08 25 05	•				•		•		•	•	•	•	
01.10 10 08	•			1,5	•	•	•		•	•	•	•	
01.10 16 08	•			1,5	•	•	•		•	•	•	•	
01.10 20 08	•			1,5	•	•	•		•	•	•	•	
01.12 12 08		•	6	1,5	•	•	•		•	•	•	•	
01.12 12 09		•	6	1,5	•	•	•		•	•	•	•	
01.12 22 08		•	13	1,5	•	•	•		•	•	•	•	
01.12 22 09		•	13	1,5	•	•	•		•	•	•	•	
01.12 22 12		•	13	1,5	•	•	•		•	•	•	•	
01.12 36 08	•		23	1,5	•	•	•		•	•	•	•	
01.14 14 09	•		6	1,5	•	•	•		•	•	•	•	
01.14 20 09	•		11	1,5	•	•	•		•	•	•	•	•
01.16 16 09	•		8	1,5	•	•	•	•	•	•	•	•	•
01.16 26 09	•		16	1,5	•	•	•	•	•	•	•	•	•
01.16 36 09	•		23	1,5	•	•	•	•	•	•	•	•	•
01.16 56 09	•		36	2,0	•	•	•	•	•	•	•	•	•
01.18 18 10	•		8	1,5	•	•	•	•	•	•	•	•	•
01.18 28 10	•		17	1,5	•	•	•	•	•	•	•	•	•
01.23 10 11	•		13	1,5	•	•	•	•	•	•	•	•	•
01.23 20 11	•		10	1,5	•	•	•	•	•	•	•	•	•
01.23 20 18	•		10	1,5	•	•	•	•	•	•	•	•	•
01.23 28 11	•		16	1,5	•	•	•	•	•	•	•	•	•
01.23 33 11	•		21	1,5	•	•	•	•	•	•	•	•	•
01.23 33 18	•		21	1,5	•	•	•	•	•	•	•	•	•
01.23 40 11	•		25	2,0	•	•	•	•	•	•	•	•	•
01.23 40 23	•		25	2,0	•	•	•	•	•	•	•	•	•
01.23 60 11	•		40	2,0	•	•	•	•	•	•	•	•	•
01.31 40 11	•		25	2,0	•	•	•	•	•	•	•	•	•
01.31 40 14	•		25	2,0	•	•	•	•	•	•	•	•	•
01.31 40 18	•		25	2,0	•	•	•	•	•	•	•	•	•
01.31 40 23	•		25	2,0	•	•	•	•	•	•	•	•	•
01.31 60 11	•		40	2,0	•	•	•	•	•	•	•	•	•
01.31 60 18	•		40	2,0	•	•	•	•	•	•	•	•	•
01.60 60 20	•			2,5					•		•		
Field enclosure with external fixing													
01.06 12 00							•		•	•	•	•	
01.06 19 00							•		•	•	•	•	
¹⁾ galvanized sheet steel ²⁾ stainless steel ³⁾ diecast aluminium ⁴⁾ State mounting side A - D when ordering * TS 32 on request													

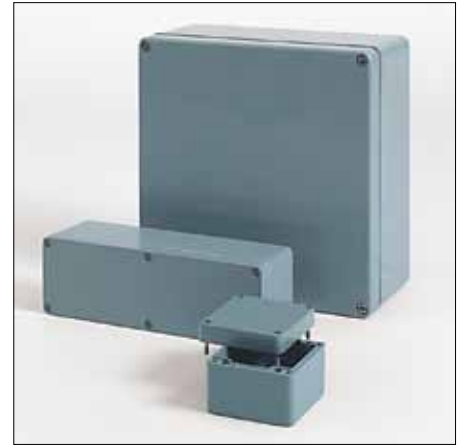
Polyester standard

Product group
02

- Robust plastic enclosure for automation technology and mechanical engineering
- Fixing options for DIN rails and mounting plates
- Universal configuration

Included in delivery:

Plastic enclosure in glass fibre reinforced polyester consisting of lid, seal, incl. captive +/-stainless steel screws, base with 2 or 4 earthing screws



Technical data

Material	glass fibre reinforced, duroplastic polyester
Ingress protection	IP 66 to EN 60529
Impact resistance	7 Joule to EN 60079-0
Flammability	self-extinguishing, UL 94 V-0
Insulation	fully insulated to VDE 0100
Disruptive strength	18 KV/mm to IEC 60243-1
Toxicity	halogen-free
Surface resistance	>10 ¹² Ohm to IEC 60093
Colour	RAL 7000, squirrel grey, special colour on request
Temperature range	PU (polyurethane) seal (standard): -40°C to +90°C CR (chloroprene) seal: -40°C to +100°C VMQ (silicone) seal (optional): -60°C to +130°C



Product range / Accessories

Order No.	Dimensions (mm) W x L x H	DIN rails for terminals		Mounting plate thickness in mm	External mounting brackets thickness in mm set	Aluminium external hinges thickness in mm pair	Allen lid screws 2)	Silicone lid seal up to +130°	Sealable lid screws 2)	EMC version (aluminized)
		TS 15	TS 35*							
02.06 06 03	55 x 55 x 37									
02.06 06 06	55 x 55 x 59									
02.08 08 06	75 x 80 x 56	•		2 ⁴⁾	•		•	•	•	•
02.08 08 08	75 x 80 x 75	•		2 ⁴⁾	•		•	•	•	•
02.08 11 06	75 x 110 x 56	•		2 ⁴⁾	•		•	•	•	•
02.08 11 08	75 x 110 x 75	•		2 ⁴⁾	•		•	•	•	•
02.08 16 06	75 x 160 x 56	•		2 ⁴⁾	•		•	•	•	•
02.08 16 08	75 x 160 x 75	•		2 ⁴⁾	•		•	•	•	•
02.08 19 06	75 x 190 x 56	•		2 ⁴⁾	•		•	•	•	•
02.08 19 08	75 x 190 x 75	•		2 ⁴⁾	•		•	•	•	•
02.08 23 06	75 x 230 x 56	•			•		•	•	•	•
02.08 23 08	75 x 230 x 75	•			•		•	•	•	•
02.10 32 08	100 x 320 x 81	•		1,5 ¹⁾	•	•	•	•	•	•
02.12 12 09	120 x 122 x 91		•	1,5 ¹⁾	•	•	•	•	•	•
02.12 22 09	120 x 220 x 91		•	1,5 ¹⁾	•	•	•	•	•	•
02.16 16 09	160 x 160 x 91		•	1,5 ¹⁾	•	•	•	•	•	•
02.16 26 09	160 x 260 x 91		•	1,5 ¹⁾	•	•	•	•	•	•
02.16 36 09	160 x 360 x 91		•	1,5 ¹⁾	•	•	•	•	•	•
02.16 56 09	160 x 560 x 91		•	2 ¹⁾	•	•	•	•	•	•
02.25 26 12	250 x 255 x 121		•	2 ¹⁾	•	•	•	•	•	•
02.25 26 16	250 x 255 x 161		•	2 ¹⁾	•	•	•	•		•
02.25 40 12	250 x 400 x 121		•	2 ¹⁾	•	•	•	•	•	•
02.25 40 16	250 x 400 x 161		•	2 ¹⁾	•	•	•	•		•
02.25 60 12	250 x 600 x 121		•	2 ¹⁾	•	•	•	•	•	•
02.36 36 09	360 x 360 x 91		•	2 ¹⁾	•	•	•	•	•	•
02.41 40 12	405 x 400 x 121		•	2 ¹⁾	•	•	•	•	•	•
02.41 40 20	406 x 401 x 201		•	2 ¹⁾	•	•	•	•	•	•

¹⁾ galvanized sheet steel ²⁾ stainless steel ³⁾ please state mounting side A - D when ordering

⁴⁾ laminated paper

* TS 32 on request

- Polyester GRP enclosure systems of polyester resin for industrial application
- Two level fitting possibility
- Combination of several enclosures by connecting flange

Including in delivery:

Enclosure consisting of lid and base with screws, individual height adjustment of mounting frame and mounting plate by 4 system and fixing elements



Technical data

Material	glass fibre reinforced duroplastic Polyester
Colour	RAL 7000, squirrel grey, special colour on request
Ingress protection	IP 66, EN 60529
Impact resistance	7 Joule, EN 60079-0
Flammability	self-extinguishing, UL 94 V-0
Surface resistance	>10 ¹² Ohm, IEC 60093
Insulation	fully insulated to VDE 0100
Disruptive strength	18 KV/mm, IEC 60243-1
Toxicity	halogen free
Temperature range	PU (polyurethane) seal: -40°C to +90°C CR (chloroprene) seal: -40°C to +100°C VMQ (silicone) seal (optional): -60°C to +130°C

Product range

Order No.	Order No. EMC version	Type	Dimensions (mm)
02.01 22 15	02.02 22 15	CombiBox 1	177 x 177 x 145
02.01 24 15	02.02 24 15	CombiBox 2	360 x 177 x 145
02.01 44 15	02.02 44 15	CombiBox 3	360 x 360 x 145

Accessories

02.01 99 01	Flange
02.01 99 02	Mounting frame 177 x 177 mm CombiBox 1
02.01 99 03	Mounting frame 177 x 360 mm CombiBox 2
02.01 99 04	Mounting frame 360 x 360 mm CombiBox 3
02.01 99 05	Mounting frame fastening set
02.01 99 06	Lid safety strip
02.01 99 07	Well nut set
02.01 99 10	Mounting plate CombiBox 1
02.01 99 11	Mounting plate CombiBox 2
02.01 99 12	Mounting plate CombiBox 3
10.06 14 85	DIN rail TS 35/7.5 160 mm
10.06 14 86	DIN rail TS 35/7.5 110 mm
10.06 14 87	DIN rail TS 35/7.5 145 mm
10.06 14 88	DIN rail TS 35/7.5 293 mm
10.06 14 94	Bearer plate CombiBox 110
10.06 14 95	Bearer plate CombiBox 360
10.06 14 96	Bearer plate CombiBox 360 long

Polyester flange

Product group
14

- Plastic enclosure with flange openings for automation technology
- Combination options with other polyester flange enclosures
- Snap lock technology

Included in delivery:

Plastic enclosure in glass fibre reinforced polyester consisting of lid, seal, plastic quick-release fastener screws, base with flange openings (please order flange plate separately), threaded insert set (4 pcs)



Technical data

	standard version	with polycarbonate transparent lid
Material	glass fibre reinforced, duroplastic polyester	polycarbonate
Ingress protection	IP 65 to EN 60529	IP 65 to EN 60529
Impact resistance	7 Joule to EN 60079-0	7 Joule to EN 60079-0
Flammability	self-extinguishing, UL 94 V-0	UL 94 V-2
Disruptive strength	24 KV/mm to IEC 60243-1	>30 KV/mm to IEC 60243-1
Toxicity	halogen-free	halogen-free
Surface resistance	>10 ¹¹ Ohm to IEC 60093	>10 ¹⁵ Ohm to IEC 60093
Insulation	fully insulated to VDE 0100	fully insulated to VDE 0100
Colour	RAL 7032, pebble grey	transparent
Temperature range	PU (polyurethane) seal: -40°C to +90°C CR (chloroprene) seal: -40°C to +100°C VMQ (silicone) seal: -60°C to +130°C	-40°C to +100°C

Product range

Order No.	Dimensions (mm) W x L x H	Flange opening	Mounting plate	Front plate on stud bolts	DIN rail TS 35	Earth rail	Silicone lid seal
14.01 00 00	170 x 270 x 136	2	14.00 00 11	14.00 00 27	10.06 17 21	10.06 21 01	10.05 15 01
14.02 00 00	270 x 270 x 136	4	14.00 00 12	14.00 00 28	10.06 17 22	10.06 21 01	10.05 15 02
14.03 00 00	270 x 541 x 136	6	14.00 00 13	14.00 00 29	10.06 17 23	10.06 21 02	10.05 15 03
Version with polycarbonate transparent lid							
14.01 00 01	170 x 270 x 150	2	14.00 00 11	14.00 00 27	10.06 17 21	10.06 21 01	10.05 15 01
14.02 00 01	270 x 270 x 150	4	14.00 00 12	14.00 00 28	10.06 17 22	10.06 21 01	10.05 15 02
14.03 00 01	270 x 540 x 150	6	14.00 00 13	14.00 00 29	10.06 17 23	10.06 21 02	10.05 15 03

* TS 32 on request

Note: Standard delivery is without flanges, please order separately!

Flanges and accessories (for all types)

Blind flange (for customizing)	14.00 00 20
Threaded flange (17 x PG 11)	14.00 00 30
Threaded flange (14 x PG 13.5)	14.00 00 22
Threaded flange (11 x PG 16)	14.00 00 21
Threaded flange (4 x PG 16, 2 x PG 21.1 x PG 29)	14.00 00 23
Connecting flange	14.00 00 25
Lid hinges (2 pcs) for all types, fitted subsequently	14.00 00 26
External brackets (4 pcs)	10.03 11 02
Threaded insert, additional (10 pcs)	10.03 50 02
Silicone seal for flanges	10.05 14 02
Silicone seal for connecting flange	10.05 14 03

- Light plastic enclosure for industrial applications
- Polycarbonate enclosure with standard or transparent lid
- ABS enclosure with standard lid
- Optional EMC version coated

Included in delivery:

Plastic enclosure consisting of lid, seal, incl. captive +/-stainless steel screws, base with 2 self-shaping fastening screws for internal mounting



ABS: no UL certificate

Technical data

Material	polycarbonate	ABS
Ingress protection	IP 66 to EN 60529 (03.08 23 09: IP 65)	IP 66 to EN 60529 (09.08 23 09: IP 65)
Impact resistance	7 Joule to EN 60079-0	7 Joule to EN 60079-0
Surface resistance	>10 ¹⁵ Ohm to IEC 60093	4x10 ¹⁴ Ohm to IEC 60093
Disruptive strength	>30 KV/mm to IEC 60243-1	24 KV/mm to IEC 60243-1
Insulation	fully insulated to VDE 0100	fully insulated to VDE 0100
Flammability	UL 94 V-2	UL 94 HB
Toxicity	halogen-free	halogen-free
Colour	RAL 7035, light grey special colour on request	RAL 7035, light grey special colour on request
Temperature range	CR (chloroprene) seal: -40°C to +100°C	CR (chloroprene) seal: -40°C to +80°C

Product range

Order No.	Polycarbonate enclosure	Polycarbonate enclosure with transparent lid	ABS enclosure	Dimensions (mm) W x L x H	External mounting brackets	Mounting plate Pertinax thickness in mm	Silicone lid seal up to +130°C	Table feet, rubber	PC external hinge, appr. 150° ¹⁾	Sealable lid screws ²⁾	EMC version aluminized
03.05 05 04	33.05 05 04	09.05 05 04		50 x 52 x 35		1,5					•
03.05 07 04	33.05 07 04	09.05 07 04		50 x 65 x 35		1,5	•				•
03.08 08 06	33.08 08 06	09.08 08 06		80 x 82 x 55	•	1,5	•	•		•	•
03.08 08 09	33.08 08 09	09.08 08 09		80 x 82 x 85	•	1,5	•	•		•	•
03.08 12 06	33.08 12 06	09.08 12 06		80 x 120 x 55	•	1,5	•	•	•	•	•
03.08 12 09	33.08 12 09	09.08 12 09		80 x 120 x 85	•	1,5	•	•	•	•	•
03.08 16 06	33.08 16 06	09.08 16 06		80 x 160 x 55	•	1,5	•	•	•	•	•
03.08 16 09	33.08 16 09	09.08 16 09		80 x 160 x 85	•	1,5	•	•	•	•	•
03.08 23 09	-	09.08 23 09		80 x 230 x 85	•	1,5	•	•	•	•	•
03.12 12 06	33.12 12 06	09.12 12 06		120 x 122 x 55	•	2	•	•	•	•	•
03.12 12 09	33.12 12 09	09.12 12 09		120 x 122 x 85	•	2	•	•	•	•	•
03.12 12 11	33.12 12 11	09.12 12 11		120 x 122 x 105	•	2	•	•	•		•
03.12 16 09	33.12 16 09	09.12 16 09		120 x 160 x 90	•	2	•	•	•		•
03.12 16 14	33.12 16 14	09.12 16 14		120 x 160 x 140	•	2	•	•	•		•
03.12 20 08	33.12 20 08	09.12 20 08		120 x 200 x 75	•	2	•	•	•	•	•
03.12 20 09	33.12 20 09	09.12 20 09		120 x 200 x 90	•	2	•	•	•		•
03.12 24 10	33.12 24 10	09.12 24 10		120 x 240 x 100	•	2	•	•	•		•
03.15 20 08	33.15 20 08	09.15 20 08		150 x 200 x 75	•	2	•	•	•	•	•
03.16 24 09	33.16 24 09	09.16 24 09		160 x 240 x 90	•	2,5 ³⁾	•	•	•	•	•
03.16 24 12	33.16 24 12	09.16 24 12		160 x 240 x 120	•	2,5 ³⁾	•	•	•		•
03.16 36 10	-	09.16 36 10		160 x 360 x 100	•	2,5	•	•	•		•
03.20 36 15	33.20 36 15	09.20 36 15		200 x 360 x 149		2,5	•	•	•		•
03.23 30 09	33.23 30 09	09.23 30 09		230 x 300 x 85	•	2	•	•	•		•
03.23 30 11	33.23 30 11	09.23 30 11		230 x 300 x 110	•	2	•	•	•		•
-	-	09.40 36 15		400 x 360 x 150		2,5 ³⁾	•	•			•

¹⁾ State mounting side A - D when ordering.

²⁾ stainless steel

³⁾ galvanized sheet steel

transparent lid not available for ABS

Polycarbonate flange

Product group
17

- Light plastic enclosure for industrial applications with flange pre-embossing
- Combination options with other polycarbonate flange enclosures
- Snap lock technology and flange quick-fixing system
- Standard and transparent lid options

Included in delivery:

Complete closed enclosure body with flange break-out points, lid with plastic quick-release fastener; 4 threaded inserts for internal fixing



Technical data

	enclosure base, flanges, enclosure lids (coloured)	transparent lids
Material	polycarbonate	
Impact resistance	7 Joule to EN 60079-0 (flange pre-embossing excepted)	7 Joule to EN 60079-0
Flammability	self-extinguishing, UL 94 V-0	UL 94 V-2
Disruptive strength	> 18 KV/mm to IEC 60243-1	>30 KV/mm to IEC 60243-1
Surface resistance	> 10 ¹⁵ Ohm to IEC 60093	>10 ¹⁵ Ohm to IEC 60093
Ingress protection	IP 65 to EN 60529	IP 65 to EN 60529
Sealing	CR round seal	CR round seal
Toxicity	low-halogen	low-halogen
Insulation	fully insulated to VDE 0100	fully insulated to VDE 0100
Colour	RAL 7032, pebble grey	transparent
Temperature range	-40°C to +100°C (incl. seals)	-40°C to +100°C (incl. seals)

Product range

Type	Dimensions (mm) W x L x H	Flange opening	Order No. Enclosure with lid 20 mm	Order No. Enclosure with transparent lid 20 mm	DIN rail TS 35*	Earth rail	Mounting plate
17.01	170 x 134 x 130	2	17.01 10 00	17.01 10 10**	•	•	•
17.02	170 x 170 x 130	4	17.02 10 00	17.02 10 10**	•	•	•
17.03	170 x 269 x 130	4	17.03 10 00	17.03 10 10**	•	•	•
17.04	269 x 269 x 130	4	17.04 10 00	17.04 10 10**	•	•	•
17.05	269 x 540 x 130	6	17.05 10 00	17.05 10 10**	•	•	•
17.06	269 x 441 x 130	4	17.06 10 00	-	•	•	•

* TS 32 on request

** Enclosure with transparent lid on request

Flanges and accessories (for all types)

Blind flange I	17.00 31 00
Blind flange II	17.00 32 00
PG flange II, 19 x PG9/PG13,5	17.00 34 00
PG flange II, 16 x PG11/PG16	17.00 35 00
PG flange II, 10 x PG9/PG13.5; 4 x PG11/PG16; 2 x PG21/PG29	17.00 33 00
Connecting flange I	17.00 36 00
Connecting flange II	17.00 37 00
Fixing angle (set of 4), for type 17.05 2 sets required	17.00 42 00
Threaded inserts (set of 10)	10.03 50 03
External brackets (set of 4)	10.03 11 04
Spare wedges (set of 10)	17.00 41 00

- Thermoplastic enclosure for industrial applications
- ECO version: base with smooth side walls, lid version standard or transparent
- PCI version: base with knock-outs for cable glands

Included in delivery:
Enclosure consisting of lid, seal, incl. captive +/-lid screws, set of screws for fastening incl. sealing caps

Technical data

Material	PS thermoplastic
Ingress protection	IP 66 to EN 60529
Impact resistance	2 Joule to EN 60068-2-75
Insulation	protection class II to VDE 0140
Flammability	UL 94 HB
Toxicity	low-halogen
Weather resistance	generally good, do not expose to direct sun light
Chemical resistance	generally good, but not resistant to benzine, diesel, oils and fats as well as strong acids
Colour	RAL 7035, light grey; special colour on request
Temperature range	-25°C to +40°C



ECO/PCI compact enclosures

Product range

Type	Order No.	Dimensions (mm) W x L x H	DIN rails for terminals TS 15 TS 35*	Mounting- plate	External brackets pair	External hinges pair	Knurled screw (hand turn lock)	Spacers as distance plug	Double membrane connecting piece	Ventilation plug
ECO line										
ECO 01-6	60.07 07 11	65 x 65 x 57	•	•	•	•	•	•	•	•
ECO 01-8	60.07 07 21	65 x 65 x 81	•	•	•	•	•	•	•	•
ECO 02-6	60.07 09 11	65 x 94 x 57	•	•	•	•	•	•	•	•
ECO 02-8	60.07 09 21	65 x 94 x 81	•	•	•	•	•	•	•	•
ECO 03-6	60.09 09 11	94 x 94 x 57	•	•	•	•	•	•	•	•
ECO 03-8	60.09 09 21	94 x 94 x 81	•	•	•	•	•	•	•	•
ECO 03-6t	60.09 09 12	94 x 94 x 57	•	•	•	•	•	•	•	•
ECO 03-8t	60.09 09 22	94 x 94 x 81	•	•	•	•	•	•	•	•
ECO 04-6	60.09 13 11	94 x 130 x 57	• •	•	•	•	•	•	•	•
ECO 04-8	60.09 13 21	94 x 130 x 81	• •	•	•	•	•	•	•	•
ECO 04-6t	60.09 13 12	94 x 130 x 57	• •	•	•	•	•	•	•	•
ECO 04-8t	60.09 13 22	94 x 130 x 81	• •	•	•	•	•	•	•	•
ECO 05-7	60.11 11 11	110 x 110 x 66	• •	•	•	•	•	•	•	•
ECO 05-9	60.11 11 21	110 x 110 x 90	• •	•	•	•	•	•	•	•
ECO 05-7t	60.11 11 12	110 x 110 x 66	• •	•	•	•	•	•	•	•
ECO 05-9t	60.11 11 22	110 x 110 x 90	• •	•	•	•	•	•	•	•
ECO 06-7	60.13 13 11	130 x 130 x 75	• •	•	•	•	•	•	•	•
ECO 06-10	60.13 13 21	130 x 130 x 99	• •	•	•	•	•	•	•	•
ECO 06-7t	60.13 13 12	130 x 130 x 75	• •	•	•	•	•	•	•	•
ECO 06-10t	60.13 13 22	130 x 130 x 99	• •	•	•	•	•	•	•	•
ECO 07-6	60.09 18 11	94 x 180 x 57	• •	•	•	•	•	•	•	•
ECO 07-8	60.09 18 21	94 x 180 x 81	• •	•	•	•	•	•	•	•
ECO 07-6t	60.09 18 12	94 x 180 x 57	• •	•	•	•	•	•	•	•
ECO 07-8t	60.09 18 22	94 x 180 x 81	• •	•	•	•	•	•	•	•
ECO 08-9	60.11 18 11	110 x 180 x 90	• •	•	•	•	•	•	•	•
ECO 08-11	60.11 18 21	110 x 180 x 111	• •	•	•	•	•	•	•	•
ECO 08-9t	60.11 18 12	110 x 180 x 90	• •	•	•	•	•	•	•	•
ECO 08-11t	60.11 18 22	110 x 180 x 111	• •	•	•	•	•	•	•	•
ECO 09-9	60.18 18 11	180 x 182 x 90	• •	•	•	•	•	•	•	•
ECO 09-11	60.18 18 21	180 x 182 x 111	• •	•	•	•	•	•	•	•
ECO 09-16	60.18 18 31	180 x 182 x 165	• •	•	•	•	•	•	•	•
ECO 09-9t	60.18 18 12	180 x 182 x 90	• •	•	•	•	•	•	•	•
ECO 09-11t	60.18 18 22	180 x 182 x 111	• •	•	•	•	•	•	•	•
ECO 09-16t	60.18 18 32	180 x 182 x 165	• •	•	•	•	•	•	•	•
ECO 10-6t	60.18 25 09	180 x 254 x 63	• •	•	•	•	•	•	•	•
ECO 10-6	60.18 25 10	180 x 254 x 63	• •	•	•	•	•	•	•	•
ECO 10-9	60.18 25 11	180 x 254 x 90	• •	•	•	•	•	•	•	•
ECO 10-11	60.18 25 21	180 x 254 x 111	• •	•	•	•	•	•	•	•
ECO 10-16	60.18 25 31	180 x 254 x 165	• •	•	•	•	•	•	•	•
ECO 10-9t	60.18 25 12	180 x 254 x 90	• •	•	•	•	•	•	•	•
ECO 10-11t	60.18 25 22	180 x 254 x 111	• •	•	•	•	•	•	•	•
ECO 10-16t	60.18 25 32	180 x 254 x 165	• •	•	•	•	•	•	•	•
ECO 11-11	60.25 36 11	254 x 361 x 111	• •	•	•	•	•	•	•	•
ECO 11-16	60.25 36 21	254 x 361 x 165	• •	•	•	•	•	•	•	•
ECO 11-11t	60.25 36 12	254 x 361 x 111	• •	•	•	•	•	•	•	•
ECO 11-16t	60.25 36 22	254 x 361 x 165	• •	•	•	•	•	•	•	•
t= transparent lid										
PCI line										
PCI 01-6M	60.07 07 15	65 x 65 x 57	•	•	•	•	•	•	•	•
PCI 02-6M	60.07 09 15	65 x 94 x 57	•	•	•	•	•	•	•	•
PCI 03-6M	60.09 09 15	94 x 94 x 57	•	•	•	•	•	•	•	•
PCI 04-6M	60.09 13 15	94 x 130 x 57	• •	•	•	•	•	•	•	•
PCI 05-9M	60.11 11 15	110 x 110 x 90	• •	•	•	•	•	•	•	•
PCI 06-7M	60.13 13 15	130 x 130 x 75	• •	•	•	•	•	•	•	•
PCI 07-6M	60.09 18 15	94 x 180 x 57	• •	•	•	•	•	•	•	•
PCI 08-9M	60.11 18 15	110 x 180 x 90	• •	•	•	•	•	•	•	•
PCI 08-11M	60.11 18 25	110 x 180 x 111	• •	•	•	•	•	•	•	•
PCI 09-9M	60.18 18 15	180 x 182 x 90	• •	•	•	•	•	•	•	•
PCI 09-11M	60.18 18 25	180 x 182 x 111	• •	•	•	•	•	•	•	•
PCI 10-6M	60.18 25 05	180 x 254 x 63	• •	•	•	•	•	•	•	•
PCI 10-9M	60.18 25 15	180 x 254 x 90	• •	•	•	•	•	•	•	•
PCI 10-11M	60.18 25 25	180 x 254 x 111	• •	•	•	•	•	•	•	•
PCI 11-11M	60.25 36 15	254 x 361 x 111	• •	•	•	•	•	•	•	•

* TS 32 on request

- Enclosure system with hidden external hinge
- Standard version or with window
- Polycase version with integrated handle

Included in delivery:

Enclosure consisting of base and door;
please order door lock separately, press-in
inserts in base for internal and external
mounting.



UL certificate only for product group 21

Technical data

Material	glass fibre reinforced, duroplastic polyester
Ingress protection	IP 66 to EN 60529
Door opening angle	135°
Impact resistance	7 Joule to EN 60079-0
Surface resistance	>10 ¹² Ohm to IEC 60093
Disruptive strength	18 KV/mm to IEC 60243-1
Insulation	fully insulated to VDE 0100
Flammability	self-extinguishing, UL 94 V-0
Toxicity	halogen-free
Colour	RAL 7038, agate grey special colour on request
Temperature range	-40°C to +100°C window version -40°C to +80°C

Product range

Polyglas / Polycase	Dimensions (mm) W x L x H	Order No.			
		Polyglas	Polyglas with window	Polycase*	Polycase with window*
Size 1	300 x 400 x 200	21.30 40 00	22.30 40 00	23.30 40 00	24.30 40 00
Size 2	400 x 600 x 250	21.40 60 00	22.40 60 00	23.40 60 00	24.40 60 00

* Please specify component side!

Note: Standard delivery enclosure without lock, please order separately!

Optional lock types (loose)

Triangular lock 8 mm (2 pcs)	21.61 00 03
Square lock 8 mm (2 pcs)	21.61 00 04
Square lock 7 mm (2 pcs)	21.61 00 14
Daimler-Benz lock (2 pcs)	21.61 00 06
Double ward lock 3 mm (2 pcs)	21.61 00 07
Knob (2 pcs)	21.61 00 01
Knob, to lock (2 pcs)	21.61 00 02

Accessories (loose)

Mounting plate for size 1 (galvanized sheet steel)	10.01 12 03
Mounting plate for size 2 (galvanized sheet steel)	10.01 12 04
External brackets (4 pcs)	10.03 10 09
Hole covers for fixing through the cabinet base (4 pcs)	10.03 90 01
Socket wrench, triangular 8 mm	10.04 70 03
Socket wrench square 8 mm	10.04 70 04
Socket wrench square 7 mm	10.04 70 14
Socket wrench Daimler-Benz	10.04 70 06
Socket wrench double ward 3 mm	10.04 70 07

- Mini-Polyglas enclosure with hidden external hinge for MCR technology
- Standard version or with window

Included in delivery:

Enclosure consisting of base and door;
please order door lock separately, press-in
inserts in base for internal mounting



UL certificate only for product group 21

Technical data

Material	glass fibre reinforced, duroplastic polyester
Ingress protection	IP 66 to EN 60529
Door opening angle	120°
Impact resistance	7 Joule to EN 60079-0
Surface resistance	>10 ¹² Ohm to IEC 60093
Disruptive strength	18 KV/mm to IEC 60243-1
Insulation	fully insulated, VDE 0100
Flammability	self-extinguishing, UL 94 V-0
Toxicity	halogen free
Colour	RAL 7038, agate grey special colour on request
Temperature range	-40°C to +100°C window version -40 °C to +80 °C

Product range

Polyglas / Polycase	Dimensions (mm) W x L x H	Order No.		
		Mini-Polyglas	Mini-Polyglas with window	Mounting plate (sheet steel, loose)
Size 1	120 x 200 x 100	21.12 20 00	22.12 20 00	10.01 12 07
Size 2	160 x 260 x 100	21.16 26 00	22.16 26 00	10.01 12 08
Size 3	160 x 340 x 100	21.16 34 00	22.16 34 00	10.01 12 09
Size 4	200 x 150 x 100	21.20 15 00	22.20 15 00	10.01 12 10
Size 5	200 x 200 x 170	21.20 20 00	22.20 20 00	10.01 12 01
Size 6	200 x 300 x 170	21.20 30 00	22.20 30 00	10.01 12 02

Note: Standard delivery enclosure without locking screws, please order separately

Locking screws optional (loose)

Triangular screw 8 mm (2 pcs)	21.63 00 03
Square screw 8 mm (2 pcs)	21.63 00 04
Square screw 6 mm (2 pcs)	21.63 00 24
Phillips screw (2 pcs)	21.63 00 05

Accessories (loose)

External brackets (4 pcs)	10.03 10 08
Socket wrench, triangular 8 mm	10.04 70 03
Socket wrench square 8 mm	10.04 70 04
Socket wrench Phillips	10.04 70 05

- Enclosure system with hinged lid for MCR technology
- Standard version or with window panel or transparent door (ABS)

Included in delivery:

Enclosure consisting of base and door;
please order door lock separately, press-in
inserts in base for internal and external
mounting.



UL certificate only for product group 21

Technical data

Material	glass fibre reinforced, duroplastic polyester	ABS
Ingress protection	IP 65 to EN 60529	IP 65 to EN 60529
Door opening angle	135°	135°
Impact resistance	7 Joule to EN 60079-0	> 7 Joule to EN 60079-0
Surface resistance	4 x 10 ¹⁵ Ohm to IEC 60093	4 x 10 ¹⁴ Ohm to IEC 60093
Disruptive strength	26 KV/mm to IEC 60243-1	24 KV/mm to IEC 60243-1
Insulation	fully insulated, VDE 0100	fully insulated, VDE 0100
Flammability	self-extinguishing, UL 94 V-0	UL 94 HB
Toxicity	halogen-free	halogen-free
Colour	RAL 7032, pebble grey special colour on request	RAL 7035, light grey special colour on request
Temperature range	-55°C to +90°C with window -55 °C to +80 °C	-40°C to +70°C

Product range

	Dimensions (mm) W x L x H	Order No. ABS	ABS with transparent door	GRP	GRP with window
Size 1	200 x 250 x 150	21.20 25 90	22.20 25 90	-	-
Size 2	250 x 300 x 170	21.25 30 90	22.25 30 90	-	-
Size 1	200 x 250 x 150	-	-	21.20 25 00	22.20 25 00
Size 2	250 x 300 x 170	-	-	21.25 30 00	22.25 30 00

Note: Standard delivery enclosure without lock, please order separately

Optional lock types (loose)

Triangular lock 8 mm	21.62 00 03
Square lock 8 mm	21.62 00 04
Knob	21.62 00 01
Knob, to lock	21.62 00 02

Accessories (loose)

Mounting plate for size 1 (laminated paper)	10.01 12 05
Mounting plate for size 2 (laminated paper)	10.01 12 06
Internal aluminium front panel with stud bolts for size 1	10.01 31 01
Internal aluminium front panel with stud bolts for size 2	10.01 31 02
External brackets (4 pcs)	10.03 10 10
Hole covers for fixing through the cabinet base (4 pcs)	10.03 90 02
Socket wrench, triangular 8 mm	10.04 70 03
Socket wrench square 8 mm	10.04 70 04

- Break proof polyamide enclosure for individual fitting of 22.5 mm control switches (lid mounting or base mounting) and pilote lamps
- Execution with 22.5 mm lid holes or without lid holes
- Gland holes M20 / M25 on two sides



Including in delivery:

Enclosure consisting of lid and base with screws base with M20 and M25 hole for cable entry; mounting possibility of TS 35/7,5 mm DIN rails and adaption plates of several manufacturer

Technical data

Material	polyamide 6
Ingress protection	IP 65, EN 60529
Impact resistance	7 Joule, EN 60079-0
Surface resistance	10 ¹² Ohm, IEC 60093
Flammability	UL 94 V-2
Colour	base: RAL 9005, jet black top: RAL 7035, light grey
Temperature range	-20°C to +60°C

Product range

Order No.	Type	Dimensions (mm) H x W x D	Quantity holes 22.5 mm in lid
31.10 01 00	CS Box 110-0	110 x 110 x 85	0
31.10 01 01	CS Box 110-1	110 x 110 x 85	1
31.10 02 00	CS Box 160-0	110 x 160 x 85	0
31.10 02 02	CS Box 160-2	110 x 160 x 85	2
31.10 02 03	CS Box 160-3	110 x 160 x 85	3
31.10 03 00	CS Box 230-0	110 x 230 x 85	0
31.10 03 04	CS Box 230-4	110 x 230 x 85	4
31.10 03 05	CS Box 230-5	110 x 230 x 85	5

Accessories

31.10 99 01	CS Box 110 adapter plate Telemechanique
31.10 99 02	CS Box 160 adapter plate Telemechanique
31.10 99 03	CS Box 230 adapter plate Telemechanique
31.10 99 04	Lid safety strip(set = 2 pcs.)
31.10 99 05	Blind plug set (1 x M25; 1 x M20)
10.06 14 91	DIN rail TS35/7,5 CS Box 110
10.06 14 92	DIN rail TS35/7,5 CS Box 160
10.06 14 93	DIN rail TS35/7,5 CS Box 230

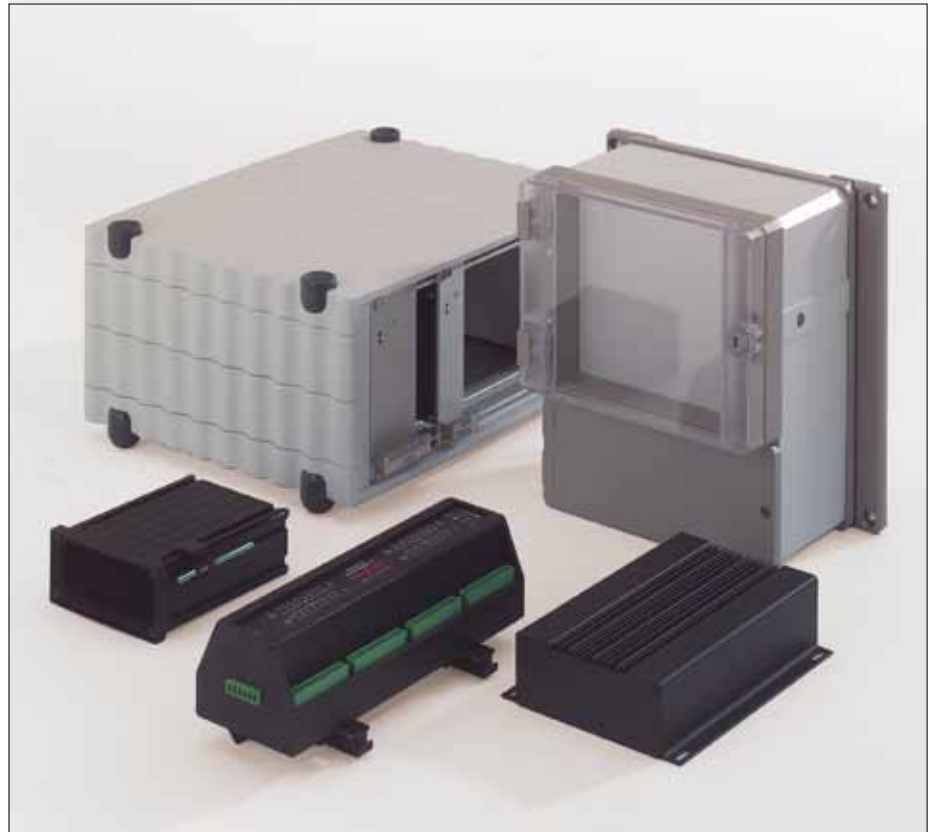
Electronic enclosures

Developments in electronics are progressing faster and faster. Whereas complete modules could be housed in large standard enclosures just a few years ago, for added space, today's enclosures must adapt themselves permanently to new requirements.

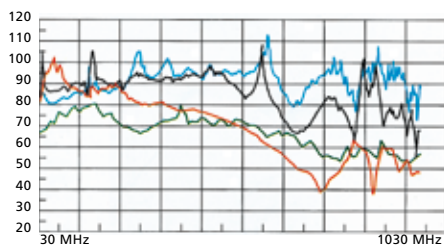
In addition to conventional protection requirements such as the IP ingress protection classification, the toughness against electro-magnetic interfering radiation is now an important selection criteria.

ROSE electronic enclosures comply with all current requirements for quality electronic enclosures:

- EMC or standard protection version
- 19" technology or PCB direct insertion
- for external, switchgear cabinet and internal use
- implementation as table, wall or regulator enclosure
- ingress protection up to IP 65
- design and functionality



Screening attenuation of EMC electronic enclosures



- Multitronic TS
- PROFITRONIC 19 with conductive silicone seal
- ALUFORM enclosure with conductive silicone seal
- Circuit board enclosure with conductive silicone seal

Multitronic

- 9 enclosure variants in sizes from 105 x 185 x 36 mm to 208 x 185 x 54 mm and from 105 x 185 x 50 mm to 105 x 185 x 110 mm
- application area: EMC mounting enclosure for MCR-technology

Multitronic TS/TS-F

- 34 enclosure variants in sizes from 46 x 105 x 72 mm to 105 x 185 x 87 mm
- application area: EMC enclosure for MCR-technology / DIN rail mounting

Multitronic SE

- 6 enclosure variants in sizes from 96 x 82 x 48 mm to 96 x 138 x 96 mm
- application area: EMC panel mounting enclosure for MCR-technology

SE 200

- 26 standard variants in sizes from 96 x 72 x 85 mm to 192 x 336 x 175 mm
- custom dimensions on request
- application area: panel mounting enclosure

NoVoTronic

- enclosure system in profile sizes from 80 x 36 x 100 mm to 200 x 105 x 330 mm
- in 3 standard sizes or customized length
- application area: PCB enclosure for MCR-technology

NoVoTronic 19

- enclosure system for 19" inserts (height 3 RU) in sizes 28 HP and 42 HP
- application area: MCR-technology, communication engineering, base-technology, mechanical engineering

Profitronic I

- 6 enclosure variants in sizes from 105 x 175 x 45 mm to 196 x 239 x 106 mm
- application area: PCB slot-in enclosure for MCR-technology

Profitronic I/F, I/A

- 30 enclosure variants in sizes from 105 x 129 x 85 mm to 196 x 238 x 203 mm
- application area: PCB slot-in enclosure for MCR-technology

Profitronic 19

- 39 enclosure variants in sizes from 148 x 235 x 149 mm to 265 x 276 x 241 mm
- application area: mechanical engineering, MCR-technology, Bus-technology

Profitronic 19U

- 12 enclosure variants in sizes from 148 x 258 x 149 mm to 265 x 280 x 241 mm
- application area: mechanical engineering, MCR-technology

Pult-Profitronic

- 3 enclosure variants in sizes from 201 x 241 x 121 mm to 201 x 483 x 121 mm
- application area: MCR-, laboratory and weighing technology

Wavetronic

- 8 enclosure variants in sizes from 324 x 268 x 55 mm to 324 x 268 x 194 mm
- application area: MCR-technology, laboratory and PC areas

For detailed information see our catalogue "Electronic enclosures"

- EMC aluminium electronic enclosures for MCR technology
- Integrated guide grooves for PCB's
- External mounting slots with spring nuts

Included in delivery:

Enclosure with two aluminium lids, screwed.



Technical data

Material	DIN EN 573 EN AW-ALMgSi
Ingress protection	IP 40 to EN 60529
Painting	powder coating
Colour	RAL 9005, jet black
Temperature range	-40°C to +100°C

Product range

Type	Order No.	Dimensions (mm) W x L x H	Version	Profile	max. PCB dimensions (mm)
Multitronic 1 	77.31 00 00	105 x 185 x 36	1 PCB guide 2 mounting slots	1	100 x 180
Multitronic 2 	77.32 00 00	165 x 185 x 65	2 PCB guides integrated heat sink surfaces 2 mounting slots	1	160 x 180
Multitronic 3 	77.33 00 00	208 x 185 x 54	4 PCB guides Front plate sheet aluminium lid with fixing fins	1	2 x 57 x 180 1 x 87 x 180 1 x 204 x 180
Multitronic 4 	77.34 00 00	190 x 185 x 51	6 PCB guides Arched shape Fixing fin on enclosure body	1	160 x 180
Multitronic 11 	77.11 00 00	105 x 185 x 50	2 PCB guides 4 mounting slots	2	100 x 180
Multitronic 12 	77.12 00 00	105 x 185 x 80	3 PCB guides 4 mounting slots	2	100 x 180
Multitronic 13 	77.13 00 00	105 x 185 x 110	4 PCB guides 4 mounting slots	2	100 x 180
Multitronic 21 	77.21 00 00	105 x 185 x 56	1 PCB guide Upper profile as heat sink 2 mounting slots	2	100 x 180
Multitronic 22 	77.22 00 00	105 x 185 x 86	2 PCB guides Upper profile as heat sink 2 mounting slots	2	100 x 180
Special lengths	77.99 99 99 8	for all profiles			

Accessories

External mounting brackets (4 pcs.)	77.00 01 00*
Snap foot, plastic, for rail mounting on TS 35	77.00 35 01
Table feet (set, self adhesive, black)	10.07 00 19
Mounting feet (2 pcs.) grey	07.70 00 81

* except for Multitronic 3 and 4

- Aluminium electronic enclosure for MCR technology
- Variable length version using profile technology
- Single or clam-shell enclosure construction with heat sink option

Included in delivery:

Enclosure with two aluminium lids, screwed.



Technical data

Material	DIN EN 573 EN AW-AlMgSi
Ingress protection	IP 40 to EN 60529
Painting	powder coating
Colour	RAL 9005, jet black
Temperature range	-40°C to +100°C

Product range

Type	Order No.	External dimensions (mm) W x H x D	max. PCB dimensions in mm	DIN rail	Wall mounting	Free print terminal/ plug connector access	Closed design
TS 111	77.01 11 00	46 x 105 x 72	42,6 x 100	•			•
TS 111-F	77.41 11 00	46 x 105 x 72	42,6 x 100	•			•
TS 112	77.01 12 00	46 x 105 x 72	42,6 x 100		•		•
TS 112-F	77.41 12 00	46 x 105 x 72	42,6 x 100		•		•
TS 121	77.01 21 00	46/76 x 105 x 61	42,6/72,6 x 100	•		•	
TS 121-F	77.41 21 00	46/76 x 105 x 61	42,6/72,6 x 100	•		•	
TS 122	77.01 22 00	46/76 x 105 x 61	42,6/72,6 x 100		•	•	
TS 122-F	77.41 22 00	46/76 x 105 x 61	42,6/72,6 x 100		•	•	
TS 141	77.01 41 00	46/105 x 105 x 57	42,6/100,6 x 100	•		•	
TS 141-F	77.41 41 00	46/105 x 105 x 57	42,6/100,6 x 100	•		•	
TS 142	77.01 42 00	46/105 x 105 x 57	42,6/100,6 x 100		•	•	
TS 142-F	77.41 42 00	46/105 x 105 x 57	42,6/100,6 x 100		•	•	
TS 221	77.02 21 00	76 x 105 x 51	72,6 x 100	•			•
TS 221-F	77.42 21 00	76 x 105 x 51	72,6 x 100	•			•
TS 222	77.02 22 00	76 x 105 x 51	72,6 x 100		•		•
TS 222-F	77.42 22 00	76 x 105 x 51	72,6 x 100		•		•
TS 231	77.02 31 00	76 x 105 x 64,5	72,6 x 100	•			•
TS 231-F	77.42 31 00	76 x 105 x 64,5	72,6 x 100	•			•
TS 232	77.02 32 00	76 x 105 x 64,5	72,6 x 100		•		•
TS 232-F	77.42 32 00	76 x 105 x 64,5	72,6 x 100		•		•
TS 331	77.03 31 00	76 x 105 x 78	72,6 x 100	•			•
TS 331-F	77.43 31 00	76 x 105 x 78	72,6 x 100	•			•
TS 332	77.03 32 00	76 x 105 x 78	72,6 x 100		•		•
TS 332-F	77.43 32 00	76 x 105 x 78	72,6 x 100		•		•
TS 441	77.04 41 00	105 x 185 x 45	100,6 x 180	•			•
TS 441-F	77.44 41 00	105 x 185 x 45	100,6 x 180	•			•
TS 442	77.04 42 00	105 x 185 x 45	100,6 x 180		•		•
TS 442-F	77.44 42 00	105 x 185 x 45	100,6 x 180		•		•
TS 461	77.04 61 00	105 x 185 x 66	100,6 x 180	•			•
TS 461-F	77.44 61 00	105 x 185 x 66	100,6 x 180	•			•
TS 462	77.04 62 00	105 x 185 x 66	100,6 x 180		•		•
TS 462-F	77.44 62 00	105 x 185 x 66	100,6 x 180		•		•
TS 662	77.06 62 00	105 x 185 x 87	100,6 x 180		•		•
TS 662-F	77.46 62 00	105 x 185 x 87	100,6 x 180		•		•

Accessories

Spare snap foot for TS 32 and TS 35 for snapping to enclosure	77.00 35 00
Snap foot plastic for rail mounting on TS 35	77.00 35 01
Metal snap foot (Set = 2 pcs) for TS 35 for screwing onto enclosure	77.00 36 00
Table feet (set, self adhesive, black)	10.07 00 19
Mounting feet (2 pcs.) grey	07.70 00 81

- Aluminium electronic enclosure for MCR-technology
- Variable depth version using profile technology
- Standard sizes 96 x 48 and 96 x 96 mm

Included in delivery:

Enclosure with seal (for front plate and for panel mounting), rear panel lid and mounting bracket (2x)



Technical data

Material	DIN EN 573 EN AW-ALMgSi
Ingress protection	front side: IP 65 to EN 60529 mounting side: IP 40 to EN 60529
Painting	powder coating
Colour	RAL 9005, jet black
Temperature range	-30°C to +80°C, by front cover frame -20°C to +80°C

Product range / Accessories

Type	Order No.	Dimensions (mm) W x L x H	Front cover frame self-adhesive	Front plate	Spare mounting set
MT-SE 48/1	77.70 05 01	96 x 82 x 48	77.70 99 03	77.70 99 01	77.70 99 05
MT-SE 48/2	77.70 05 02	96 x 116 x 48	77.70 99 03	77.70 99 01	77.70 99 05
MT-SE 48/3	77.70 05 03	96 x 138 x 48	77.70 99 03	77.70 99 01	77.70 99 05
MT-SE 48/So	77.70 05 99	special length	77.70 99 03	77.70 99 01	77.70 99 05
MT-SE 96/1	77.70 10 01	96 x 82 x 96	77.70 99 04	77.70 99 02	77.70 99 05
MT-SE 96/2	77.70 10 02	96 x 116 x 96	77.70 99 04	77.70 99 02	77.70 99 05
MT-SE 96/3	77.70 10 03	96 x 138 x 96	77.70 99 04	77.70 99 02	77.70 99 05
MT-SE 96/So	77.70 10 99	special length	77.70 99 04	77.70 99 02	77.70 99 05

- Aluminium electronic enclosure for MCR-technology
- Variable width and height version using profile technology
- Constant profile depths 85 and 175 mm

Included in delivery:

Enclosure with screwed rear plate, please order front plate and fixing elements separately.

**Technical data**

Material	DIN EN 573 EN AW-ALMgSi
Ingress protection	front side: IP 65 to EN 60529 mounting side: IP 40 to EN 60529
Painting	powder coating
Colour	RAL 9005, jet black
Temperature range	-40°C to +80°C

Product range

Type	Order No.	Dimensions (mm) W x H x D	Front plate
SE 200-1	65.10 07 09	96 x 72 x 85	65.00 00 01
SE 200-2	65.10 07 18	96 x 72 x 175	65.00 00 01
SE 200-3	65.10 10 09	96 x 96 x 85	65.00 00 03
SE 200-4	65.10 10 18	96 x 96 x 175	65.00 00 03
SE 200-5	65.10 14 09	96 x 144 x 85	65.00 00 05
SE 200-6	65.10 14 18	96 x 144 x 175	65.00 00 05
SE 200-7	65.10 19 09	96 x 192 x 85	65.00 00 07
SE 200-8	65.10 19 18	96 x 192 x 175	65.00 00 07
SE 200-9	65.10 24 09	96 x 240 x 85	65.00 00 09
SE 200-10	65.10 24 18	96 x 240 x 175	65.00 00 09
SE 200-11	65.14 14 09	144 x 144 x 85	65.00 00 11
SE 200-12	65.14 14 18	144 x 144 x 175	65.00 00 11
SE 200-13	65.14 19 09	144 x 192 x 85	65.00 00 13
SE 200-14	65.14 19 18	144 x 192 x 175	65.00 00 13
SE 200-15	65.14 24 09	144 x 240 x 85	65.00 00 15
SE 200-16	65.14 24 18	144 x 240 x 175	65.00 00 15
SE 200-17	65.14 29 09	144 x 288 x 85	65.00 00 17
SE 200-18	65.14 29 18	144 x 288 x 175	65.00 00 17
SE 200-19	65.19 19 09	192 x 192 x 85	65.00 00 19
SE 200-20	65.19 19 18	192 x 192 x 175	65.00 00 19
SE 200-21	65.19 24 09	192 x 240 x 85	65.00 00 21
SE 200-22	65.19 24 18	192 x 240 x 175	65.00 00 21
SE 200-23	65.19 29 09	192 x 288 x 85	65.00 00 23
SE 200-24	65.19 29 18	192 x 288 x 175	65.00 00 23
SE 200-25	65.19 34 09	192 x 336 x 85	65.00 00 25
SE 200-26	65.19 34 18	192 x 336 x 175	65.00 00 25
Special sizes	65.99 00 00		65.00 00 99

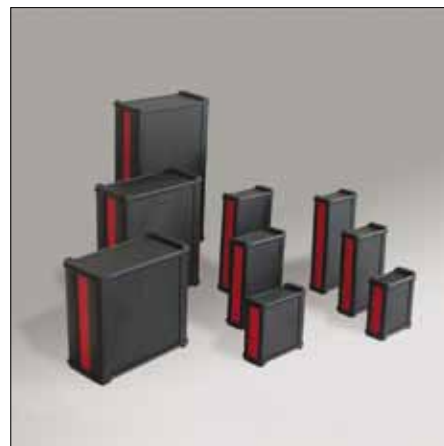
Accessories

External fixing set for panel mounting (4 pcs)	65.00 01 00
Fastening clamp set for front plate (10 pcs)	65.00 02 00
PCB holder 60 mm long (2 pcs)	65.00 04 09
PCB holder 140 mm long (2 pcs)	65.00 04 18
Fastening set for front plate (85 mm)	65.00 05 09
Fastening set for front plate (200 mm)	65.00 05 18

- Aluminium profile enclosure system in 5 dimensions for data, PC and MCR technology
- External screw channels guarantee internal area without splinter
- Integrated guide grooves for PCB's
- External system groove (except NoVoTronic 200)
- Variable length by profile system

Included in delivery

Enclosure with 2 Aluminium diecast lids
and 2 multi-function profiles, not screwed



Technical data

Material	enclosure profile: DIN EN 573 EN AW-AMgSi enclosure lid: DIN EN 1706 EN AC-AISI 12 (Fe)
Ingress protection	IP 65 to EN 60529
Painting	powder coating
Colour	enclosure body and enclosure lid: RAL 9005, jet black multi function profile: RAL 3003, ruby red
EMC	optional EMC version
Temperature range	-40°C to +90°C transparent cover: -40°C to +60°C

Product range

Type	Order No. standard	Order No. EMC version	External dimensions (mm) W x H x D	Internal dimensions (mm) W x H x D
NoVo-Tronic 80-100	07.50 10 10	07.51 10 10	106 x 49 x 120	80 x 36 x 100
NoVo-Tronic 80-160	07.50 10 11	07.51 10 11	106 x 49 x 180	80 x 36 x 160
NoVo-Tronic 80-200	07.50 10 12	07.51 10 12	106 x 49 x 220	80 x 36 x 200
NoVo-Tronic 80-SL	07.50 10 99	07.51 10 99	106 x 49 x SL	80 x 36 x SL
NoVo-Tronic 100-100	07.50 20 10	07.51 20 10	126 x 49 x 120	100 x 36 x 100
NoVo-Tronic 100-160	07.50 20 11	07.51 20 11	126 x 49 x 180	100 x 36 x 160
NoVo-Tronic 100-200	07.50 20 12	07.51 20 12	126 x 49 x 220	100 x 36 x 200
NoVo-Tronic 100-SL	07.50 20 99	07.51 20 99	126 x 49 x SL	100 x 36 x SL
NoVo-Tronic 130-130	07.50 25 10	07.51 25 10	157 x 69 x 150	130 x 57 x 130
NoVo-Tronic 130-160	07.50 25 11	07.51 25 11	157 x 69 x 180	130 x 57 x 160
NoVo-Tronic 130-200	07.50 25 12	07.51 25 12	157 x 69 x 220	130 x 57 x 200
NoVo-Tronic 130-SL	07.50 25 99	07.51 25 99	157 x 69 x SL	130 x 57 x SL
NoVo-Tronic 160-160	07.50 30 10	07.51 30 10	190 x 90 x 180	160 x 76 x 160
NoVo-Tronic 160-200	07.50 30 11	07.51 30 11	190 x 90 x 220	160 x 76 x 200
NoVo-Tronic 160-300	07.50 30 12	07.51 30 12	190 x 90 x 320	160 x 76 x 300
NoVo-Tronic 160-SL	07.50 30 99	07.51 30 99	190 x 90 x SL	160 x 76 x SL
NoVo-Tronic 200-220	07.50 40 10	07.51 40 10	233 x 121 x 240	200 x 105 x 220
NoVo-Tronic 200-280	07.50 40 11	07.51 40 11	233 x 121 x 300	200 x 105 x 280
NoVo-Tronic 200-330	07.50 40 12	07.51 40 12	233 x 121 x 350	200 x 105 x 330
NoVo-Tronic 200-SL	07.50 40 99	07.51 40 99	233 x 121 x SL	200 x 105 x SL

SL = special length

NoVoTronic

Accessories

	Order No.	NoVoTronic 80	NoVoTronic 100	NoVoTronic 130	NoVoTronic 160	NoVoTronic 200
Wall profile 80/100-100	07.50 90 11	•	•			
Wall profile 80/100-160	07.50 90 12	•	•			
Wall profile 80/100-200	07.50 90 13	•	•			
Wall profile 80/100-SL	07.50 90 99	•	•			
Wall profile 130/160-130	07.50 91 11			•	•	
Wall profile 130/160-160	07.50 91 12			•	•	
Wall profile 130/160-200	07.50 91 13			•	•	
Wall profile 130/160-300	07.50 91 14			•	•	
Wall profile 130/160-SL	07.50 91 99			•	•	
Lid wall holder 80/100	07.50 90 02	•	•			
NoVo wall holder P80	07.50 90 03	•				
NoVo wall holder P100	07.50 90 04		•			
NoVo wall holder P130	07.50 90 15			•		
NoVo wall holder P160	07.50 90 05				•	
Foot / connection element 80	07.50 90 06	•				
Foot / connection element 100	07.50 90 07		•			
Foot / connection element 130	07.50 90 14			•		
Foot / connection element 160	07.50 90 08				•	
Battery insert 9V Block	83.90 00 03	•	•	•	•	•
Battery insert 4 cells AA	83.90 00 06	•	•	•	•	•
NoVoTronic PCB profile 200-220	07.50 92 11					•
NoVoTronic PCB profile 200-280	07.50 92 12					•
NoVoTronic PCB profile 200-330	07.50 92 13					•
NoVoTronic PCB profile 200-SL	07.50 92 99					•
NoVoTronic PCB profile 80/100	07.50 92 14	•	•			
NoVoTronic PCB profile 130 adjustable	07.50 92 15			•		
NoVoTronic PCB profile 160 adjustable	07.50 92 16				•	
Transparent cover 160	07.50 90 10				•	

SL = special length

Applications



- Variable possibility of combine connection compartment and profile
- 2 enclosure sizes 28HP and 42HP
- Optional with transparent cover
- Variable length by profile technic

Included in delivery

Enclosure system - depending on version either with connection compartment, swivel intermediate frame, profile and screwed lid.



Technical data

Material	enclosure profile: DIN EN 573 EN AW-AlMgSi connection compartment: DIN EN 1706 EN AC-AlSi 12 (Fe)
Ingress protection	IP 65 to EN 60529, outdoor application on request
Painting	powder coating
Colour	RAL 7043, traffic grey B
EMC	optional EMC version
Temperature range	seal: -40°C to +90°C transparent cover: -40°C to +60°C

Product range

Order No.	Order No. EMC		Dimensions (mm) W x H x D
Connection compartment			
07.60 28 01	07.61 28 01	connection compartment, screwed lid	256 x 270 x 110
07.60 28 02	07.61 28 02	connection compartment, screwed front panel frame	256 x 270 x 118
07.60 28 03	07.61 28 03	connection compartment, screwed front panel frame and transparent cover	256 x 270 x 139
07.60 28 04	07.61 28 04	connection compartment, hinged front panel frame	256 x 270 x 118
07.60 28 05	07.61 28 05	connection compartment, screwed front panel frame and transparent cover	256 x 270 x 139
07.60 42 01	07.61 42 01	connection compartment, screwed lid	327 x 270 x 110
07.60 42 02	07.61 42 02	connection compartment, screwed front panel frame	327 x 270 x 118
07.60 42 03	07.61 42 03	connection compartment, screwed front panel frame and transparent cover	327 x 270 x 139
07.60 42 04	07.61 42 04	connection compartment, hinged front panel frame	327 x 270 x 118
07.60 42 05	07.61 42 05	connection compartment, hinged front panel frame and transparent cover	327 x 270 x 139
Connection compartment with profile and intermediate frame			
07.60 28 11	07.61 28 11	connection compartment, swivel intermediate frame, profile and screwed lid	256 x 270 x 297
07.60 28 12	07.61 28 12	connection compartment, swivel intermediate frame, profile and front panel frame	256 x 270 x 305
07.60 28 15	07.61 28 15	connection compartment, swivel intermediate frame, profile and front panel frame with transparent cover	256 x 270 x 326
07.60 42 11	07.61 42 11	connection compartment, swivel intermediate frame, profile and screwed lid	327 x 270 x 297
07.60 42 12	07.61 42 12	connection compartment, swivel intermediate frame, profile and front panel frame	327 x 270 x 305
07.60 42 15	07.61 42 15	connection compartment, swivel intermediate frame, profile and front panel frame with transparent cover	327 x 270 x 326
Profile			
07.60 28 21	07.61 28 21	profile and screwed lid	214 x 161 x 231
07.60 28 22	07.61 28 22	lid, profile and front panel frame	214 x 161 x 239
07.60 28 25	07.61 28 25	lid, profile and front panel frame with transparent cover	214 x 161 x 260
07.60 42 21	07.61 42 21	profile and screwed lid	249 x 161 x 231
07.60 42 22	07.61 42 22	lid, profile and front panel frame	285 x 161 x 239
07.60 42 25	07.61 42 25	lid, profile and front panel frame with transparent cover	285 x 161 x 260

Accessories

07.60 28 81	19" mounting frame for 28HP
07.60 42 81	19" mounting frame for 42HP
07.60 00 01	Transparent cover with cylinder lock 28 HP
07.60 00 02	Special lock with socket wrench for connection compartment (mounted)
07.60 00 03	External brackets for wall mounting for enclosure without connection compartment (set =2 pcs)
07.60 00 04	Spare latch for connection compartment lid (plastic)
07.60 00 05	Transparent cover with cylinder lock 42 HP
07.60 28 85	Partition wall (28HP), detachable for separating connection compartment (2 areas)
07.60 42 85	Partition wall (42HP), detachable for separating connection compartment (2 areas)
07.00 00 10	PCB guide rail fixed (set = 10 pcs)
07.00 00 11	PCB guide rail variable (set = 10 pcs)
07.28 00 30	Mounting plate for connection compartment (28HP version)
07.42 00 30	Mounting plate for connection compartment (42HP version)
10.07 00 19	Table feet (set, self adhesive, black)
07.70 00 81	Mounting feet (2 pcs) grey
07.60 28 30	Aluminium front plate 28HP, for front panel frame
07.60 42 30	Aluminium front plate 42HP, for front panel frame
07.61 28 30	Aluminium front plate 28 HP for front panel frame EMC
07.61 42 30	Aluminium front plate 42 HP for front panel frame EMC

Applications



- Aluminium electronic enclosure for telecommunication and MCR technology
- Variable length version using profile technology
- Different lid versions depending on enclosure type
- Integrated guide grooves for PCBs

Included in delivery:

Enclosure with two sheet aluminium or cast lids, screwed



Technical data

Material	DIN EN 573 EN AW-ALMgSi
Ingress protection	IP 65 or IP 40 to EN 60529 dep. on lid version
Painting	powder coating
Colour	RAL 9005, jet black
Temperature range	-30°C to +80°C

Product range

Type	Order No.	Ext. dimensions* (mm) W x L x H	Version	Ingress protection	max. PCB dimensions (mm)
07.01 	07.01 01 17	105 x 175 x 45	2 sheet aluminium lids without seal standard length = 170 mm	IP 40	100 x 170
07.02 	07.02 01 17	105 x 175 x 69	2 sheet aluminium lids without seal standard length = 170 mm	IP 40	100 x 170
07.03 	07.03 12 22 07.03 13 22	196/166 x 239 x 106 196/166 x 232 x 106	2 cast aluminium lids with seal cast aluminium flat lids and mounting rear panel standard length = 220 mm	IP 65 IP 40	100/160 x 220 100/160 x 220
07.10 	07.10 06 18	105 x 198 x 73,5	2 cast aluminium flat lids with seal standard length = 180 mm	IP 65	100 x 180
07.11 	07.11 06 18	105 x 200 x 49	2 cast aluminium lids with seal standard length = 180 mm	IP 65	100 x 180

* Dimensions without fixing brackets

EMC version: product group 70.xx xx xx

- Aluminium electronic enclosure for MCR technology and automation engineering
- Variable length version using profile technology
- Enclosure system with different front lid and rear panel versions
- Integrated guide grooves for PCBs

Included in delivery:

Enclosure with two sheet aluminium or cast lid, screwed; versions with protective collar lid have self-adhesive anodized aluminium front panel is added separate



Technical data

Material	DIN EN 573 EN AW-ALMgSi
Ingress protection	IP 65 or IP 40 to EN 60529 depending on lid version
Painting	powder coating
Colour	enclosure profile: RAL 7035, light grey enclosure lid: RAL 7030, stone grey
Temperature range	-40°C to +80°C; cover -20°C to +60°C

Product range

Type	Order No.	Ext. dimen.* (mm) W x L x H	Version	Ingress protection	max. PCB dimensions (mm)
07.05 	07.05 20 12	105 x 129 x 85	2 sheet aluminium lids without seal	IP 40	80/100 x 125
	07.05 21 12	105 x 129 x 85	Sheet aluminium lid and sheet aluminium rear mounting panel without seal	IP 40	80/100 x 125
	07.05 22 12	112 x 141 x 92	2 cast aluminium lids without seal	IP 65	80/100 x 125
	07.05 23 12	112 x 143 x 112	Cast aluminium flat lid and cast aluminium rear mounting panel with seal	IP 65	80/100 x 125
	07.05 24 12	112 x 175 x 92	2 cast aluminium protective collar lids with seal	IP 65	80/100 x 125
	07.05 25 12	112 x 158 x 92	1 cast alum. protective collar lid and 1 cast flat lid with seal	IP 65	80/100 x 125
	07.05 26 12	112 x 160 x 112	Cast alum. protective collar lid and cast alum. rear mounting panel with seal	IP 65	80/100 x 125
07.06 	07.06 20 18	165 x 184 x 105	2 sheet aluminium lids without seal	IP 40	100/160 x 180
	07.06 21 18	165 x 184 x 105	Sheet aluminium lid and sheet aluminium rear mounting panel without seal	IP 40	100/160 x 180
	07.06 22 18	173 x 196 x 113	2 cast aluminium lids without seal	IP 65	100/160 x 180
	07.06 23 18	173 x 198 x 135	Cast aluminium flat lid and cast aluminium rear mounting panel with seal	IP 65	100/160 x 180
	07.06 24 18	173 x 230 x 113	2 cast aluminium protective collar lids with seal	IP 65	100/160 x 180
	07.06 25 18	173 x 213 x 113	1 cast protective collar lid and 1 cast flat lid with seal	IP 65	100/160 x 180
	07.06 26 18	173 x 215 x 135	Cast protective collar lid and cast rear mounting panel with seal	IP 65	100/160 x 180
	07.06 27 18	173 x 195 x 113	1 cast al. front panel lid and 1 cast al. flat lid with seal	IP 65	100/160 x 180
	07.06 28 18	173 x 197 x 135	Cast al. front panel lid and cast al. rear mounting panel with seal	IP 65	100/160 x 180
	07.06 29 18	180 x 218 x 113	Transparent cover, cast al. front panel lid and cast al. flat lid	IP 65	100/160 x 180
	07.06 30 18	180 x 220 x 135	Transparent cover, cast al. front panel lid and cast al. rear mounting panel	IP 65	100/160 x 180
	07.07 20 18	196 x 184 x 167	2 sheet aluminium lids without seal	IP 40	160/189 x 180
07.07 	07.07 21 18	196 x 184 x 167	Sheet aluminium lid and sheet aluminium rear mounting panel without seal	IP 40	160/189 x 180
	07.07 22 18	203 x 200 x 174	2 cast aluminium lids without seal	IP 65	160/189 x 180
	07.07 23 18	203 x 202 x 196	Cast aluminium flat lid and cast aluminium rear mounting panel with seal	IP 65	160/189 x 180
	07.07 24 18	203 x 234 x 175	2 cast aluminium protective collar lids with seal	IP 65	160/189 x 180
	07.07 25 18	203 x 217 x 174	1 cast protective collar lid and 1 cast flat lid with seal	IP 65	160/189 x 180
	07.07 26 18	203 x 219 x 196	Cast protective collar lid and cast rear mounting panel with seal	IP 65	160/189 x 180
	07.07 27 18	204 x 197 x 175	1 cast alum. front panel lid and 1 cast alum. flat lid with seal	IP 65	160/189 x 180
	07.07 28 18	204 x 199 x 196	Cast alum. front panel lid and cast alum. rear mounting panel with seal	IP 65	160/189 x 180
	07.07 29 18	204 x 219 x 175	Transparent cover, cast alum. front panel lid and cast alum. flat lid	IP 65	160/189 x 180
	07.07 30 18	204 x 220 x 196	Transparent cover, cast al. front panel lid and cast al. rear mounting panel	IP 65	160/189 x 180
	07.09 00 15	196 x 238 x 203	Cast alum. protective collar lid, connection enclosures with cast alum. lid and cast alum. rear mounting panel length of front profile = 145 mm	IP 65	100/160 x 145
					

* Dimensions without fixing brackets

EMC version: product group 70.xx xx xx

Accessories

Transparent cover for protective collar lid with knurled lock for 07.06	07.80 80 01
Transparent cover for front plate lid for 07.06	07.80 80 03
Transparent cover for front plate lid for 07.07	07.80 80 04
Table feet (set, self adhesive, black)	10.07 00 19
Mounting feet (2 pcs.), grey	07.70 00 81

- Aluminium electronic enclosure for 19" fittings in 3 sizes (height 3RU): 19, 28 and 42 HP
- Variable length options using profile technology
- Standard construction or version with connection compartment
- Optional polycarbonate transparent cover

Included in delivery:

Enclosure system – depending on version either with cast aluminium covers, connection compartment or transparent cover; please order fixing elements separately



Technical data

Material	enclosure body: DIN EN 573 EN AW-ALMgSi connection compartment: DIN EN 1706 EN AC-ALSi 12 (Fe)
Ingress protection	IP 65 to EN 60529, outdoor use on request
Opening angle	for connection compartments and transparent cover 110°
Painting	powder coating
Colour	enclosure body and connection compartment: RAL 7035, light grey enclosure lid and external brackets: RAL 7030, stone grey
Temperature range	lid seal: -40°C to +80°C transparent cover: -40°C to +70°C

Product range

Type	19" mounting frame	19" mounting frame with transparent cover	Front plate lid	Front lid	Front plate lid and transparent cover	Dimensions* W x L x H (mm)
enclosure with connection compartment standard (63,5 mm)						
19HP	07.19 11 00	07.19 21 00	07.19 31 00	07.19 33 00**	07.19 23 00	148 x 236 x 241
28HP	07.28 11 00	07.28 21 00	07.28 31 00	07.28 33 00**	07.28 23 00	191 x 236 x 241
42HP	07.42 11 00	07.42 21 00	07.42 31 00	07.42 33 00**	07.42 23 00	265 x 236 x 241
enclosure with connection compartment deep (103,5 mm)						
19HP	07.19 11 01	07.19 21 01	07.19 31 01	07.19 33 01**	07.19 23 01	148 x 276 x 241
28HP	07.28 11 01	07.28 21 01	07.28 31 01	07.28 33 01**	07.28 23 01	191 x 276 x 241
42HP	07.42 11 01	07.42 21 01	07.42 31 01	07.42 33 01**	07.42 23 01	265 x 276 x 241
enclosure without connection compartment						
19HP	07.19 12 00	07.19 22 00	07.19 32 00	-	-	148 x 235 x 149
28HP	07.28 12 00	07.28 22 00	07.28 32 00	-	-	191 x 235 x 149
42HP	07.42 12 00	07.42 22 00	07.42 32 00	-	-	265 x 235 x 149

* length without lid

** enclosure length is equal to connection compartment depth

EMC version: product group 70.xx xx xx

Accessories

External fixings for enclosures with connection compartment (set of 2)		07.00 01 00
External fixings for enclosures without connection compartment (set of 2)		07.00 02 00
Special lock with socket wrench for connection compartment (mounted)		07.00 00 17
Turning handle for transparent cover (mounted)		07.00 00 18
Cylinder lock, for transparent cover (mounted)		07.00 00 19
Board guides for PCB's, fixed (set of 10)		07.00 00 10
Board guides for PCB's, variable (set of 10)		07.00 00 11
Insulating strip to fix bus boards (set of 2)	type	07.19 07.19 00 20 07.28 07.28 00 20 07.42 07.42 00 20
Aluminium profile (Z rails) to fix connector bars (set of 2)	type	07.19 07.19 00 10 07.28 07.28 00 10 07.42 07.42 00 10
Mounting plate for connection compartment	type	07.19 07.19 00 30 07.28 07.28 00 30 07.42 07.42 00 30
Table feet (set, self adhesive, black)		10.07 00 19
Mounting feet (2 pcs.), grey		07.70 00 81

- Aluminium electronic enclosure in 3 sizes
- Variable length options using profile technology
- Standard construction or version with connection compartment
- Optional polycarbonate transparent cover

Included in delivery:

Enclosure system – depending on version either with cast aluminium lids, connection compartment or transparent cover; please order fixing elements separately



Technical data

Material	enclosure body: DIN EN 573 EN AW-ALMgSi connection compartment: DIN EN 1706 EN AC-ALSi 12 (Fe)
Ingress protection	IP 65 to EN 60529, outdoor application on request
Opening angle	for connection compartments and transparent covers 110°
Painting	powder coating
Colour	enclosure body and connection compartment: RAL 7035, light grey enclosure lid and external bracket: RAL 7030, stone grey
Temperature range	lid seal: -40°C to +80°C transparent cover: -40°C to +70°C

Product range

Type	19" mounting frame with transparent cover	Dimensions (mm) W x L x H	Front plate lid	Dimensions (mm) W x L x H
	enclosure with connection compartment (63,5 mm)			
19HP	07.19 21 11	148 x 285 x 241	07.19 31 11	148 x 280 x 241
28HP	07.28 21 11	191 x 285 x 241	07.28 31 11	191 x 280 x 241
42HP	07.42 21 11	265 x 285 x 241	07.42 31 11	265 x 280 x 241
	enclosure without connection compartment			
19HP	07.19 22 11	148 x 263,5 x 149	07.19 32 11	148 x 258,5 x 149
28HP	07.28 22 11	191 x 263,5 x 149	07.28 32 11	191 x 258,5 x 149
42HP	07.42 22 11	265 x 263,5 x 149	07.42 32 11	265 x 258,5 x 149

EMC version: product group 70.xx xx xx

Accessories

External fixings for enclosures with connection compartment (set of 2)	07.00 01 00
External fixings for enclosures without connection compartment (set of 2)	07.00 02 00
Special lock with socket wrench for connection compartment (mounted)	07.00 00 17
Turning handle for transparent cover (mounted)	07.00 00 18
Cylinder lock for transparent cover (mounted)	07.00 00 19
Mounting plate for connection compartment	type 07.19 07.19 00 30 07.28 07.28 00 30 07.42 07.42 00 30
Table feet (set, self adhesive, black)	10.07 00 19
Mounting feet (2 pcs.), grey	07.70 00 81

- Aluminium electronic enclosure for console applications
- Variable length version using profile technology
- Enclosure with integrated guide grooves for PCBs

Included in delivery:
Enclosure system with 2 cast aluminium
lids and front plate screwed



Technical data

Material	enclosure body: DIN EN 573 EN AW-AMgSi sides: diecast aluminium
Ingress protection	IP 65 to EN 60529
Painting	powder coating
Colour	RAL 7035, light grey
Temperature range	-40°C to +80°C

Product range

Type	Order No.	External dimensions* (mm) W x L x H	max. PCB dimensions (mm)
07.04	07.04 14 24	201 x 241 x 121/47,5	100 / 189
	07.04 14 36	201 x 362 x 121/47,5	100 / 189
	07.04 14 48	201 x 483 x 121/47,5	100 / 189

EMC version: product group 70.xx xx xx

- Aluminium desktop enclosure for MCR technology
- Individual height version by profile technology
- Stacking capability using special foot shape
- Internal groove for spring nuts M4 and M5

Included in delivery:

Enclosure system with foot/head elements;
please order front plate/rear wall separately



Technical data

Material	half shell: DIN EN 1706 EN AC-AISi 12 (Fe) profile: DIN EN 573 EN AW-ALMgSi
Ingress protection	IP 40 to EN 60529
Painting	powder coating
Colour combinations	enclosure RAL 7035, light grey / foot elements RAL 7024, graphite grey or enclosure RAL 9005, jet black / foot elements RAL 3003, ruby red
Temperature range	-40°C to +80°C

Product range

Type	Order No.	External dimension* (mm) W x L x H	Colour combination	Front plate/rear wall (set of 2)	Front plate connector area
Wavetronic 1	07.70 01 01	324 x 268 x 55	grey/anthracite	07.70 00 91	287 x 37
Wavetronic 1	07.70 02 01	324 x 268 x 55	black/red	07.70 00 91	287 x 37
Wavetronic 2	07.70 01 02	324 x 268 x 101	grey/anthracite	07.70 00 92	287 x 83
Wavetronic 2	07.70 02 02	324 x 268 x 101	black/red	07.70 00 92	287 x 83
Wavetronic 3	07.70 01 03	324 x 268 x 147	grey/anthracite	07.70 00 93	287 x 129
Wavetronic 3	07.70 02 03	324 x 268 x 147	black/red	07.70 00 93	287 x 129
Wavetronic 4	07.70 01 04	324 x 268 x 194	grey/anthracite	07.70 00 94	287 x 176
Wavetronic 4	07.70 02 04	324 x 268 x 194	black/red	07.70 00 94	287 x 176
Wavetronic SH	07.70 01 99	324 x 268 x SH**	grey/anthracite	07.70 00 99	287 x SH***
Wavetronic SH	07.70 02 99	324 x 268 x SH**	black/red	07.70 00 99	287 x SH***

* dimensions without foot elements

** front panel fitting area +18 mm

*** min. special height = 75 mm; max. special height = 300 mm

Accessories

Mounting feet (2 pcs), grey	07.70 00 81
Carrying handle	07.70 00 82
19" insert set (53HP / 3RU)	07.70 00 83
Spring nuts M4 (4 pcs.)	29.00 00 50
Spring nuts M5 (8 pcs.)	10.03 60 01

Within areas of explosive atmosphere, there will be given special safety-relevant guidelines, which specifies the use of special approved equipment.

ROSE Systemtechnik offers a broad range of approved Ex equipment:

- Ex empty enclosures and junction boxes
- Ex approved push-buttons, switches and pilot lamps
- Ex control stations
- flameproof Ex-d-enclosures from material aluminium and stainless steel
- Ex cable glands and other equipment

ROSE Ex enclosures from aluminium, polyester and stainless steel correspond to the ATEX and IEC guidelines. They have the approval Ex II 2G, Ex II 2D tD A21 and may be used in the zones 1, 2, 21 and 22.

The standard temperature area of applications corresponds to T6, T5 and T4 (except Polyglas). The junction boxes have the approval IECEx, ATEX, INMETRO, GOST-R, GOST-K and further.

Ex control stations are based on Ex e approved enclosure systems from material stainless steel, aluminium and polyester. The number of applicable switches, push-buttons and control lighting elements depends on the size of the enclosure.



Ex Aluminium enclosures

- more than 50 different variants

Ex Polyester enclosures

- more than 50 different standard versions
- versions: standard, flange and version with external screw points

Ex Stainless steel enclosures

- more than 40 different standard versions
- versions: standard, flange and cabinets
- individual versions and dimensions on request

Ex Beluga enclosures

Ex d Flameproof enclosures

- in aluminium or stainless steel combined with Ex e connection boxes

Ex CS Box

Control equipment

- switches, push buttons and indicator lamps in different versions and colours

Control stations

- individual fitting with control equipment
- custom made solutions

Polyester enclosure for mining industry

E30 fire protection enclosures

For detailed information see our catalogue "Ex Equipment"

- Enclosure systems of diecast aluminium usable in all Ex-areas
- Empty enclosures for individual fittings or Ex e / Ex ia junction box
- Optional version with window
- Temperature classes T6 / T5 / T4

Included in delivery:

Empty enclosure:
Enclosure with silicone seal and external earth connection

Junction box:
Enclosure system - depending on version either with silicone seal, external earthing, DIN rails, internal earthing connection, terminals, manufacturing, cable glands



Technical data

Explosion protection	Ex e II T6 (increased safety) Ex ia IIC T6 (intrinsic safety) Ex e (ia) IIC T6 (mixed fitting) temperature classes T5 and T4 on request
II 2G II 2D	
Certificates	IECEX PTB 08.0005U, PTB 98 ATEX 3101U, INMETRO MC AEX-8297-X, TR/TS IECEX PTB 08.0006, PTB 00 ATEX 1063, INMETRO MC AEX-8502-X, TR/TS S-XPL/12.0779; further on request
Material	aluminium diecast DIN EN 1706 EN AC-ALSi 12 (Fe)
Painting	powder coating
Colour	RAL 7001, silver grey
Ingress protection	IP 66 to EN 60529
Impact resistance	7 Joule to EN 60079-0
Temperature range	-20°C to +40°C (corresponds T6 = 85°C max. surface temperature) -20°C to +55°C (corresponds T5 = 100°C max. surface temperature) -20°C to +90°C (corresponds T4 = 135°C max. surface temperature) to -55°C with special marking on request

Product range

Order No.			Dimensions	Order No.			Dimensions (mm)
Ex e	Ex ia	empty enclosure	W x L x H (mm)	Ex e	Ex ia	empty enclosure	W x L x H
05.06 06 03	15.06 06 03	25.06 06 03	64 x 58 x 34	05.16 36 09	15.16 36 09	25.16 36 09	160 x 360 x 91
05.06 10 03	15.06 10 03	25.06 10 03	64 x 98 x 34	05.16 56 09	15.16 56 09	25.16 56 09	160 x 560 x 91
05.06 15 03	15.06 15 03	25.06 15 03	64 x 150 x 34	05.18 18 10	15.18 18 10	25.18 18 10	180 x 180 x 101
05.08 08 06	15.08 08 06	25.08 08 06	80 x 75 x 57	05.18 28 10	15.18 28 10	25.18 28 10	180 x 280 x 101
05.08 13 06	15.08 13 06	25.08 13 06	80 x 125 x 57	05.23 10 11	15.23 10 11	25.23 10 11	230 x 100 x 111
05.08 18 06	15.08 18 06	25.08 18 06	80 x 175 x 57	05.23 20 11	15.23 20 11	25.23 20 11	232 x 202 x 111
05.08 25 05	15.08 25 05	25.08 25 05	80 x 250 x 52	05.23 20 18	15.23 20 18	25.23 20 18	232 x 202 x 181
05.10 10 08	15.10 10 08	25.10 10 08	100 x 100 x 81	05.23 28 11	15.23 28 11	25.23 28 11	230 x 280 x 111
05.10 16 08	15.10 16 08	25.10 16 08	100 x 160 x 81	05.23 33 11	15.23 33 11	25.23 33 11	230 x 330 x 111
05.10 20 08	15.10 20 08	25.10 20 08	100 x 200 x 81	05.23 33 18	15.23 33 18	25.23 33 18	230 x 330 x 181
05.12 12 08	15.12 12 08	25.12 12 08	120 x 122 x 81	05.23 40 11	15.23 40 11	25.23 40 11	230 x 400 x 111
05.12 12 09	15.12 12 09	25.12 12 09	120 x 122 x 91	05.23 40 23	15.23 40 23	25.23 40 23	230 x 400 x 225
05.12 22 08	15.12 22 08	25.12 22 08	120 x 220 x 81	05.23 60 11	15.23 60 11	25.23 60 11	230 x 600 x 111
05.12 22 09	15.12 22 09	25.12 22 09	120 x 220 x 91	05.31 40 11	15.31 40 11	25.31 40 11	313 x 404 x 111
05.12 36 08	15.12 36 08	25.12 36 08	120 x 360 x 81	05.31 40 14	15.31 40 14	25.31 40 14	312 x 403 x 141
05.14 14 09	15.14 14 09	25.14 14 09	140 x 140 x 91	05.31 40 18	15.31 40 18	25.31 40 18	313 x 404 x 181
05.14 20 09	15.14 20 09	25.14 20 09	140 x 200 x 91	05.31 40 23	15.31 40 23	25.31 40 23	313 x 404 x 227
05.16 16 09	15.16 16 09	25.16 16 09	160 x 160 x 91	05.31 60 11	15.31 60 11	25.31 60 11	310 x 600 x 111
05.16 26 09	15.16 26 09	25.16 26 09	160 x 260 x 91	05.31 60 18	15.31 60 18	25.31 60 18	310 x 600 x 181
				05.60 60 20	15.60 60 20	25.60 60 20	600 x 600 x 202

Ex Polyester enclosure

Product group
06/16/26

Ex Polyester flange enclosure

- Glass fibre reinforced polyester enclosure system for application in all Ex areas
- Empty enclosures for individual fittings and Ex e / Ex ia junction boxes
- Optional: version with window
- Temperature classes T6 / T5 / T4

Included in delivery:

Empty enclosure:

Enclosure system with silicone seal

Junction box:

Enclosure system - depending on version
either with silicone seal, DIN rails, internal
earthing connection, terminals, continuity
plate, manufacturing, cable glands



Technical data

Explosion protection	Ex e II T6 (increased safety) Ex ia IIC T6 (intrinsic safety) Ex e(ia) IIC T6 (mixed fitting) temperature classes T5 and T4 on request (polyester flange T5 on request)
Certificates	IECEx PTB 08.0003U, PTB 01 ATEX 1061U, INMETRO MC AEX-8296-U, TR/T5 IECEx PTB 08.0004, PTB 00 ATEX 1002, INMETRO MC AEX-8503-X, TR/T5 S-XPL/12.0778; further on request
Material	glass fibre reinforced, duroplastic polyester, graphite added
Colour	RAL 9011, graphite black
Ingress protection	IP 66 to EN 60529 (IP 65 polyester flange)
Impact resistance	7 Joule to EN 60079-0
Flammability	self-extinguishing, UL 94 V-0
Surface resistance	<10 ⁹ Ohm to IEC 60093
Toxicity	halogen-free
Temperature range	-20°C to +40°C (corresponds T6 = 85°C max. surface temperature) -20°C to +55°C (corresponds T5 = 100°C max. surface temperature) -20°C to +90°C (corresponds T4 = 135°C max. surface temperature) to -55°C with special marking on request

Product range

Order No.			Dimensions (mm)	Order No.			Dimensions (mm)
Ex e	Ex ia	empty enclosure	W x L x H	Ex e	Ex ia	empty enclosure	W x L x H
06.08 08 06	16.08 08 06	26.08 08 06	75 x 80 x 56	06.16 16 09	16.16 16 09	26.16 16 09	160 x 160 x 91
06.08 08 08	16.08 08 08	26.08 08 08	75 x 80 x 75	06.16 26 09	16.16 26 09	26.16 26 09	160 x 260 x 91
06.08 11 06	16.08 11 06	26.08 11 06	75 x 110 x 56	06.16 36 09	16.16 36 09	26.16 36 09	160 x 360 x 91
06.08 11 08	16.08 11 08	26.08 11 08	75 x 110 x 75	06.16 56 09	16.16 56 09	26.16 56 09	160 x 560 x 91
06.08 16 06	16.08 16 06	26.08 16 06	75 x 160 x 56	06.25 26 12	16.25 26 12	26.25 26 12	250 x 255 x 121
06.08 16 08	16.08 16 08	26.08 16 08	75 x 160 x 75	06.25 26 16	16.25 26 16	26.25 26 16	250 x 255 x 161
06.08 19 06	16.08 19 06	26.08 19 06	75 x 190 x 56	06.25 40 12	16.25 40 12	26.25 40 12	250 x 400 x 121
06.08 19 08	16.08 19 08	26.08 19 08	75 x 190 x 75	06.25 40 16	16.25 40 16	26.25 40 16	250 x 400 x 161
06.08 23 06	16.08 23 06	26.08 23 06	75 x 230 x 56	06.25 60 12	16.25 60 12	26.25 60 12	250 x 600 x 121
06.08 23 08	16.08 23 08	26.08 23 08	75 x 230 x 75	06.36 36 09	16.36 36 09	26.36 36 09	360 x 360 x 91
06.12 12 09	16.12 12 09	26.12 12 09	120 x 122 x 91	06.41 40 12	16.41 40 12	26.41 40 12	405 x 400 x 121
06.12 22 09	16.12 22 09	26.12 22 09	120 x 220 x 91	06.41 40 20	16.41 40 20	26.41 40 20	406 x 401 x 201

Polyester flange enclosures				No. of flanges
06.14 01 00	16.14 01 00	26.14 01 00	170 x 270 x 136	2
06.14 02 00	16.14 02 00	26.14 02 00	270 x 270 x 136	4
06.14 03 00	16.14 03 00	26.14 03 00	270 x 541 x 136	6

- Glass fibre reinforced polyester enclosure system for applications in all Ex-areas
- Empty enclosures for individual fittings and Ex e / Ex ia junction boxes
- Enclosures with external fixing brackets
- Temperature classes T6 / T5 / T4

Including in delivery

Empty enclosure:

Enclosure with silicone seal

Junction box:

Enclosure system - depending on version
either with silicone seal, continuity plate, DIN
rails, internal earthing connection, terminals,
manufacturing, cable glands



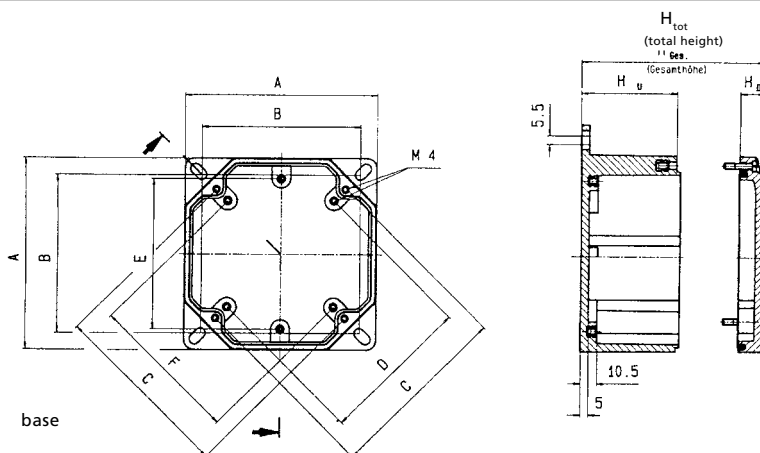
Technical data

Explosion protection	Ex e II T6 (increased safety)
II 2G	Ex ia IIC T6 (intrinsic safety)
II 2D	Ex e(ia) IIC T6 (mixed fitting)
	temperature classes T5 and T4 on request
Certificates	IECEx PTB 08.0003U, PTB 01 ATEX 1061U, INMETRO MC AEX-8296-U, TR/T5 IECEx PTB 08.0004, PTB 00 ATEX 1002, INMETRO MC AEX-8503-X, TR/T5 S-XPL/12.0778; further on request
Material	glass fibre reinforced duroplastic polyester, graphite added
Colour	RAL 9011, graphite black
Ingress protection	IP 66 to EN 60529
Impact resistance	7 Joule to EN 60079-0
Flammability	self-extinguishing, UL 94 V-0
Surface resistance	<10 ⁹ Ohm to IEC 60093
Toxicity	halogen-free
Temperature range	-20°C to +40°C (corresponds T6 = 85°C max. surface temperature) -20°C to +55°C (corresponds T5 = 100°C max. surface temperature) -20°C to +90°C (corresponds T4 = 135°C max. surface temperature) to -55°C with special marking on request



Product range

Order No.	Ex e	Ex ia	empty enclosure	Dimensions (mm) W x L x H
06.88 01 00		16.88 01 00	26.88 01 00	81 x 81 x 75
06.88 02 00		16.88 02 00	26.88 02 00	121 x 121 x 75
06.88 03 00		16.88 03 00	26.88 03 00	161 x 161 x 93
06.88 04 00		16.88 04 00	26.88 04 00	201 x 201 x 125



Type	A	B	C	D	E	F	H _u	H _D	H _{tot}
06/16/28.88 01 00	81	68	73	-	59	-	60.5	15	75.5
06/16/28.88 02 00	121	100	118	92	92	-	60.5	15	75.5
06/16/28.88 03 00	161	140	175	99	132	99	73	20	93
06/16/28.88 04 00	201	175	216.4	150	160	150	105	20	125.5

- Polyester GRP enclosure systems for Ex application
- Application: Ex junction boxes, Ex control stations
- Two level fitting possibility
- Easy wall mounting by partitional open screw channel

Technical data

Explosion protection	Ex e II T6 (increased safety) Ex ia IIC T6 (intrinsic safety) Ex e(ia) IIC T6 (mixed fitting)
 2 IIG	
 2 IID	
Certificates	IECEX PTB 07.0059U, PTB 00 ATEX 1101U, INMETRO MC AEX-8298-U, TR/TS IECEX PTB 07.0060, PTB 00 ATEX 1052, INMETRO MC AEX-8504-X, TR/TS S-XPL/12.0778; further on request
Material	glass fibre reinforced, duroplastic polyester, graphite added
Colour	RAL 9011, graphite black
Ingress protection	IP 66, EN 60529
Impact resistance	7 Joule, EN 60079-0
Toxicity	halogen-free
Flammability	self-extinguishing, UL 94 V-0
Surface resistance	<10 ⁹ Ohm, IEC 60093
Temperature range	-20°C to +40°C (corresponds T6 = 85°C max. surface temperature) -20°C to +55°C (corresponds T5 = 100°C max. surface temperature) -20°C to +90°C (corresponds T4 = 135°C max. surface temperature) to -55°C with special marking on request

Product range

Ex	Ex ia	Ex e	Type	Dimension (mm)
Empty enclosure	Junction box	Junction box Control Station		H x W x D
26.01 22 15	16.01 22 15	06.01 22 15	CombiBox 1	177 x 177 x 145
26.01 24 15	16.01 24 15	06.01 24 15	CombiBox 2	360 x 177 x 145
26.01 44 15	16.01 44 15	06.01 44 15	CombiBox 3	360 x 360 x 145

Accessories

10.10 00 01	CombiBox 1 continuity plate 177 x 177 mm
10.10 00 02	CombiBox 2 continuity plate 177 x 360 mm
10.06 80 03	PE bar 177 mm along
10.06 80 04	PE bar 177 mm across
10.06 80 05	PE bar 360 mm along
10.06 80 06	PE bar 360 mm across
10.06 14 85	DIN rail TS 35/7.5 160 mm
10.06 14 86	DIN rail TS 35/7.5 110 mm
10.06 14 87	DIN rail TS 35/7.5 145 mm
10.06 14 88	DIN rail TS 35/7.5 293 mm
10.06 14 94	Bearer plate 110 mm
10.06 14 95	Bearer plate 360 mm
10.06 14 96	Bearer plate 360 mm long
26.01 99 01	Flange
02.01 99 02	CombiBox 1 mounting frame 177 x 177 mm
02.01 99 03	CombiBox 2 mounting frame 177 x 360 mm
02.01 99 04	CombiBox 3 mounting frame 360 x 360 mm
02.01 99 05	Mounting frame fastening set
02.01 99 06	Lid safety strip
02.01 99 07	Spread insert set
02.01 99 10	Mounting plate CombiBox 1
02.01 99 11	Mounting plate CombiBox 2
02.01 99 12	Mounting plate CombiBox 3



Included in delivery

Empty enclosure:
Base and top with silicon seal, internal fixing,
sleeves for base mounting, 4 polyamide
system elements for individual height adjust-
ment
Junction box:
Enclosure system - as before - with individual
fitting, DIN rails, terminals, cable glands

- Glass fibre reinforced polyester enclosure system for application in all Ex areas
- Empty enclosures for individual fittings and Ex e / Ex ia junction box
- Enclosures with hinged door for individual fittings
- Temperature classes T6 / T5

Included in delivery

Empty enclosure:
Enclosure with silicone seal and square lock
Junction box:
Enclosure system - depending on version
with silicone seal, continuity plate,
with DIN rails, internal earthing
connections, terminals, manufacturing,
cable glands, square lock



Technical Data

Explosion protection	Ex e II T6 (increased safety) Ex ia IIC T6 (intrinsic safety) Ex e(ia) IIC T6 (mixed fittings) temperature class T5 on request
Certificates	IECEx PTB 08.0003U, PTB 01 ATEX 1061U, INMETRO MC AEX-8296-U, TR/TS IECEx PTB 08.0004, PTB 00 ATEX 1002, INMETRO MC AEX-8503-X, TR/TS S-XPL/12.0778; further on request
Material	glass fibre reinforced duroplastic polyester, graphite added
Colour	RAL 9011, graphite black
Ingress protection	IP 66 to EN 60529
Impact resistance	7 Joule to EN 60079-0
Flammability	self-extinguishing, UL 94 V-0
Surface resistance	<10 ⁹ Ohm to IEC 60093
Toxicity	halogen-free
Temperature range	-20°C to +40°C (corresponds T6 = 85°C surface temperature) -20°C to +55°C (corresponds T5 = 100°C surface temperature) to -55°C with special marking on request

Product range

Order No.	Ex e	Ex ia	empty enclosure	Dimensions (mm) W x L x H
06.20 20 00	16.20 20 00	26.20 20 00		200 x 200 x 168
06.20 30 00	16.20 30 00	26.20 30 00		200 x 300 x 168
06.30 40 00	16.30 40 00	26.30 40 00		405 x 305 x 202
06.40 60 00	16.40 60 00	26.40 60 00		605 x 405 x 252

Accessories

Type	DIN rail TS 35	Mounting plate	External mounting brackets
Polyester cabinets "Mini-Polyglas"			
06/16/26.20 20 00	•	•	•
06/16/26.20 30 00	•	•	•
Polyester cabinets "Polyglas"			
06/16/26.30 40 00	•	•	•
06/16/26.40 60 00	•	•	•

- High-quality enclosure systems for aggressive areas according ATEX and IECEx-directives
- Empty enclosures for individual fittings and Ex e / Ex ia junction boxes
- Optional version with window
- Temperature classes T6 / T5 / T4

Included in delivery

Empty enclosure:

Enclosure with silicone seal and external earth connection

Junction box:

Enclosure system - depending on version either with silicone seal, continuity plate, DIN rails, internal earthing connection, terminals, manufacturing, cable glands



Technical data

Explosion protection	Ex e II T6 (increased safety) Ex ia IIC T6 (intrinsic safety) Ex e(ia) IIC T6 (mixed fitting) temperature classes T5 and T4 on request
II 2G II 2D	
Certificates	IECEx PTB 07.0059U, PTB 00 ATEX 1101U, INMETRO MC AEX-8298-U, TR/TS IECEx PTB 07.0060, PTB 00 ATEX 1052, INMETRO MC AEX-8504-X, TR/TS S-XPL/12.0777; further on request
Material	stainless steel 1,25 mm or 1,5 mm 1.4404 / 316L
Surface	grinded, grain 240
Ingress protection	IP 66 to EN 60529
Impact resistance	7 Joule to EN 60079-0
Temperature range	-20°C to +40°C (corresponds T6 = 85°C max. surface temperature) -20°C to +55°C (corresponds T5 = 100°C max. surface temperature) -20°C to +90°C (corresponds T4 = 135°C max. surface temperature) to -55°C with special marking on request

Product range

Order No. Ex e	Ex ia	Empty enclosure	Dimensions (mm) H x W x D
35.10 10 06	36.10 10 06	34.10 10 06	100 x 100 x 61
35.15 10 06	36.15 10 06	34.15 10 06	150 x 100 x 61
35.15 15 08	36.15 15 08	34.15 15 08	150 x 150 x 81
35.20 10 06	36.20 10 06	34.20 10 06	200 x 100 x 61
35.20 20 08	36.20 20 08	34.20 20 08	200 x 200 x 81
35.20 20 12	36.20 20 12	34.20 20 12	200 x 200 x 121
35.30 15 08	36.30 15 08	34.30 15 08	300 x 150 x 81
35.30 20 08	36.30 20 08	34.30 20 08	300 x 200 x 81
35.30 20 12	36.30 20 12	34.30 20 12	300 x 200 x 121
35.30 30 12	36.30 30 12	34.30 30 12	300 x 300 x 121
35.30 30 16	36.30 30 16	34.30 30 16	300 x 300 x 161
35.38 38 16	36.38 38 16	34.38 38 16	380 x 380 x 161
35.40 15 08	36.40 15 08	34.40 15 08	400 x 150 x 81
35.40 20 12	36.40 20 12	34.40 20 12	400 x 200 x 121
35.40 30 16	36.40 30 16	34.40 30 16	400 x 300 x 161
35.50 30 16	36.50 30 16	34.50 30 16	500 x 300 x 161
35.50 40 16	36.50 40 16	34.50 40 16	500 x 400 x 161
35.60 20 12	36.60 20 12	34.60 20 12	600 x 200 x 121
35.99 99 99	36.99 99 99	34.99 99 99	special size on request

Accessories

External mounting brackets (set = 4 pcs.)	37.10 50 00
Mounting set (screws, sealing washer, nuts)	37.99 00 01
External hinge set (2 pcs.)	37.00 00 02

- Top quality stainless steel flange enclosure for aggressive environments
- Empty enclosure for individual fittings or Ex e / Ex ia junction box
- Execution with 1 flange standard, optional up to 4 flanges
- Standard version grinded, optional electro-polished or painted

Technical Data

Explosion protection	Ex e II T6 (increased safety) Ex ia IIC T6 (intrinsic safety) Ex e(ia) IIC T6 (mixed fitting) temperature classes T5 and T4 on request
II 2G II 2D	
Certificates	IECEX PTB 07.0059U, PTB 00 ATEX 1101U, INMETRO MC AEX-8298-U, TR/T5 IECEX PTB 07.0060, PTB 00 ATEX 1052, INMETRO MC AEX-8504-X, TR/T5 S-XPL/12.0777; further on request
Material	stainless steel 1.5 mm, 1.4404/316L, flange plate: 3.0 mm, 1.4404/316L
Surface	Standard grinded, optional electro-polished or painted
Ingress protection	IP 66 to EN 60529
Impact resistance	7 Joule to EN 60079-0
Temperature range	-20°C to +40°C (corresponds T6 = 85°C surface temperature) -20°C to +55°C (corresponds T5 = 100°C surface temperature) -20°C to +90°C (corresponds T4 = 135°C surface temperature) to -55°C with special marking on request

Product range

Order No.			Enclosure size	Number of flanges	Dimensions (mm)
Ex e	Ex ia	empty enclosure			H x W x D
35.06 02 00	36.06 02 00	34.06 02 00	02	1	260 x 260 x 205
35.06 03 00	36.06 03 00	34.06 03 00	03	1	306 x 306 x 205
35.06 04 00	36.06 04 00	34.06 04 00	04	1	380 x 260 x 205
35.06 05 00	36.06 05 00	34.06 05 00	05	1	458 x 382 x 205
35.06 06 00	36.06 06 00	34.06 06 00	06	1	480 x 480 x 205
35.06 07 00	36.06 07 00	34.06 07 00	07	1	500 x 350 x 205
35.06 08 00	36.06 08 00	34.06 08 00	08	1	620 x 450 x 205
35.06 09 00	36.06 09 00	34.06 09 00	09	1	740 x 550 x 205
35.06 10 00	36.06 10 00	34.06 10 00	10	1	762 x 508 x 205
35.06 11 00	36.06 11 00	34.06 11 00	11	2	860 x 640 x 205
35.06 12 00	36.06 12 00	34.06 12 00	12	2	914 x 610 x 205
35.06 13 00	36.06 13 00	34.06 13 00	13	2	980 x 740 x 205

Electro polished version: 34/35/36. 04 xx xx

Accessories

34.06 50 02	Blind flange F1 165 x 139 fitting area
34.06 50 03	Blind flange F2 211 x 139 fitting area
34.06 50 04	Blind flange F3 266 x 139 fitting area
34.06 50 05	Blind flange F4 310 x 139 fitting area
34.06 50 06	Blind flange F5 363 x 139 fitting area
34.06 50 07	Blind flange F6 405 x 139 fitting area
34.06 50 08	Blind flange F7 510 x 139 fitting area
34.06 50 09	Blind flange F8 645 x 139 fitting area
34.04 51 02	Mounting plate for type 02
34.04 51 03	Mounting plate for type 03
34.04 51 04	Mounting plate for type 04
34.04 51 05	Mounting plate for type 05
34.04 51 06	Mounting plate for type 06
34.04 51 07	Mounting plate for type 07
34.04 51 08	Mounting plate for type 08
34.04 51 09	Mounting plate for type 09
34.04 51 10	Mounting plate for type 10
34.04 51 11	Mounting plate for type 11
34.04 51 12	Mounting plate for type 12
34.04 51 13	Mounting plate for type 13

Version with rain protection roof and document case on request

Rail fixing set on request



Included in delivery:

Empty enclosure:
Enclosure with hinged lid, flange plates
(3 mm)silicone lid seal, silicone flange seal,
welded external brackets, external earth
bolt M10, internal fixing bolts, from enclosure
type 9 with lid lifting device
Junction box:
Enclosure system - as before with individual
fitting, DIN rail, terminals, cable glands

- High-quality enclosure systems for aggressive areas according ATEX and IECEx-directives
- Empty enclosures for individual fittings and Ex e / Ex ia junction boxes
- With covered hinges and double ward locks
- Temperature classes T6 / T5 / T4

Included in delivery

Empty enclosure:

Enclosure with hinged lid, double ward lock, silicone seal and external earth connection.

Junction box:

depending on design with hinged lid, double ward lock, silicone seal, external earth, DIN rail, internal earth connection, terminals, machining, cable glands.

Mounting set order separately



Technical data

Explosion protection	Ex e II T6 (increased safety) Ex ia IIC T6 (intrinsic safety) Ex e(ia) IIC T6 (mixed fitting) temperature class T5 and T4 on request
Certificates	IECEx PTB 07.0059U, PTB 00 ATEX 1101U, INMETRO MC AEX-8298-U, TR/TS IECEx PTB 07.0060, PTB 00 ATEX 1052, INMETRO MC AEX-8504-X, TR/TS S-XPL/12.0777; further on request
Material	stainless steel 1,25 mm or 1,5 mm, 1.4301 / 304 1.4404 / 316L on request
Surface	grinded, grain 240
Ingress protection	IP 66 to EN 60529
Impact resistance	7 Joule to EN 60079-0
Temperature range	-20°C to +40°C (corresponds T6 = 85°C max. surface temperature) -20°C to +55°C (corresponds T5 = 100°C max. surface temperature) -20°C to +90°C (corresponds T4 = 135°C max. surface temperature) to -55°C with special marking on request

Product range

Order No. Ex e	Ex ia	Empty enclosure	Dimensions W x L x H (mm)
35.00 22 09	36.00 22 09	34.00 22 09	200 x 250 x 97
35.00 22 15	36.00 22 15	34.00 22 15	200 x 250 x 157
35.00 33 16	36.00 33 16	34.00 33 16	300 x 300 x 167
35.00 32 09	36.00 32 09	34.00 32 09	350 x 250 x 97
35.00 44 16	36.00 44 16	34.00 44 16	380 x 380 x 167
35.00 44 21	36.00 44 21	34.00 44 21	380 x 380 x 217
35.00 53 16	36.00 53 16	34.00 53 16	500 x 300 x 167
35.00 63 16	36.00 63 16	34.00 63 16	600 x 300 x 167
35.00 64 21	36.00 64 21	34.00 64 21	600 x 380 x 217
35.00 99 99	36.00 99 99	34.00 99 99	Special size on request

Accessories

External brackets (set 4 pcs.)	37.10 50 00
Mounting set (screws, sealing washer, nuts)	37.99 00 01



- Handheld enclosure as empty enclosure for Ex applications
- 3 enclosure sizes
- Optional version with display area

Included in delivery

Enclosure system with lid and base with seal
Version 0=open including display window
and mounting material



Technical data

Explosion protection	 II 2G  Ex e II
Certificates	PTB 02 ATEX 1076U, IECEx PTB 09.0019U
Material	polyamide 12
Surface resistance	<10 ⁹ Ohm to IEC 60093
Flammability	UL 94 HB
Colour	RAL 9005, jet black
Ingress protection	IP 65 to EN 60529
Impact resistance	7 Joule to EN 60079-0
Temperature range	-20°C to +60°C

Product range

Type	Order No.	Version	Dimensions W x L x H (mm)
Beluga 180 O Ex	28.02 02 00	open	106/75 x 187 x 50
Beluga 180 G Ex	28.02 02 01	closed	106/75 x 187 x 50
Beluga 220 O Ex	28.02 04 00	open	116/85 x 220 x 51
Beluga 220 G Ex	28.02 04 01	closed	116/85 x 220 x 51
Beluga 380 Ex	28.02 05 01	closed	380 x 117 x 68

Accessories

Display screen Ex Beluga 180	28.99 00 01
Display screen Ex Beluga 220	28.99 00 02



Ex d II B Flame proof enclosures EJB

Product group
40

- Ex d flame proof aluminium diecast enclosures for installation of non Ex approved equipment
- Possible combination of Ex e connection departments
- Execution II B

Included in delivery

Enclosure system consisting of base and lid with screws, external earth connection, hinge, mounting plate and external brackets



Technical Data

Explosion protection	Ex d, Ex d[ia] II B
 II 2 G Ex dII B + H2	
 II 2 D Ex tD A21	
Certificates	BKI 08 ATEX 019; IECEx BKI 09.0005; GOST-R: POCC IT.ГБ05.802537; No. 07/43-269; Gost K
Material	Copper free aluminium (Cu < 0.1 %)
Painting	RAL 9006, white aluminium
Ingress protection	IP 65 to EN 60529
Temperature range	Standard: -20°C to +40°C Optional: -50°C to +130°C

Product range

Order No.	Type	Internal dimensions (mm) H x W x D	External dimensions (mm) H x W x D
40.00 20 01	EJB 11	115 x 115 x 90	175 x 175 x 125
40.00 20 02	EJB 21	217 x 175 x 122	285 x 245 x 169
40.00 20 03	EJB 22	240 x 140 x 130	300 x 200 x 177
40.00 20 04	EJB 30	340 x 245 x 120	415 x 315 x 168
40.00 20 05	EJB 31	340 x 245 x 200	415 x 315 x 250
40.00 20 06	EJB 51	495 x 295 x 203	568 x 365 x 257
40.00 20 07	EJB 61	595 x 395 x 310	670 x 470 x 360
40.00 20 08	EJB 63	595 x 395 x 184	670 x 470 x 235
40.00 20 09	EJB 71	645 x 445 x 360	742 x 572 x 425
40.00 20 10	EJB 91	830 x 530 x 370	960 x 660 x 460

Accessories

Optional internal painting: anticondensate painting orange RAL 2004

O-ring gaskets on cover

Glass window on cover

Drain plugs



Ex d II B Flame proof enclosures EJB INX

Product group
40

- Ex d Flame proof enclosures from material stainless steel for installation of non Ex approved equipment
- Possible combinations of Ex e connection departments
- Execution II B

Included in delivery

Enclosure system consisting of base and lid with screws, external earth connection, hinge, handle, mounting plate and external brackets.

Ex e connection department please order separately



Technical Data

Explosion protection	Ex d, Ex d[ia] II B
 II 2 G Ex d II B + H2 T6	
 II 2 D tD A21	
Certificates	BKI 08 ATEX 019; IECEx BKI 09.0005; GOST-R: POCC IT.ГБ05.Б02537; No. 07/43-269; Gost K
Material	Stainless steel AISi 316L
Ingress protection	IP 66 to EN 60529
Temperature range	Standard: -20°C to +40°C Optional: -50°C to +130°C

Product range

Order No.	Type	Internal dimensions (mm) H x W x D	External dimensions (mm) H x W x D
40.00 24 01	EJB-21 INX	215 x 175 x 122	285 x 245 x 194
40.00 24 02	EJB-22 INX	230 x 130 x 177	300 x 200 x 218
40.00 24 03	EJB-30 INX	335 x 235 x 117	415 x 315 x 158
40.00 24 04	EJB-31 INX	335 x 235 x 180	415 x 315 x 223
40.00 24 05	EJB-51 INX	480 x 280 x 190	565 x 365 x 233
40.00 24 06	EJB-61 INX	590 x 390 x 290	670 x 470 x 344
40.00 24 07	EJB-63 INX	590 x 390 x 180	670 x 470 x 229
40.00 24 08	EJB-91 INX	843 x 543 x 364	960 x 660 x 431

Accessories

Optional internal painting: anticondensate painting orange RAL 2004

O-ring gaskets on cover

Glass window on cover

Drain plugs



Ex d II C Flame proof enclosures GUB

Product group
40

- Ex d flame proof enclosures from material aluminium for installation of non Ex approved equipment
- Possible combination of Ex e connection departments
- Execution II C

Included in delivery

Enclosure system consisting of base and lid,
external earth connection and mounting plate



Technical Data

Explosion protection	Ex d, Ex d[ia] II C
II 2 G Ex D II C	
II 2 D Ex tD A21	
Certificates	BKI 08 ATEX 048; IECEx BKI 09.0004; GOST-R: POCC IT.ГБ05.В02537; No. 07/43-269; Gost K
Material	copper free aluminium (Cu < 0,1 %)
Colour	RAL 9006, white aluminium
Ingress protection	IP 66 to EN 60529
Temperature range	without window: Standard: -20°C to +80°C Optional: -60°C to +130°C with window: Standard: -50°C to +80°C

Product range

Order No.	Type	Internal dimensions (mm) H x W x D	External dimensions (mm) H x W x D
40.00 22 01	GUE 1	110 x 110 x 45	135 x 135 x 108
40.00 22 02	GUB 0	140 x 140 x 80	168 x 168 x 140
40.00 22 03	GUB 1	170 x 170 x 90	198 x 198 x 150
40.00 22 05	GUB 03	248 x 273 x 125	280 x 305 x 225
40.00 22 06	GUB 23	243 x 280 x 102	270 x 310 x 180
40.00 22 07	GUB 4	390 x 390 x 150	420 x 420 x 284
40.00 22 08	GUB 5	550 x 550 x 210	600 x 600 x 334
40.00 22 09	GUBW 11	152 x 152 x 77	180 x 180 x 146
40.00 22 11	GUBW 03	248 x 273 x 125	280 x 305 x 235

Accessories

Optional internal painting: anticondensate painting orange RAL 2004

O-ring gaskets on cover

Glass window on cover

Drain plugs



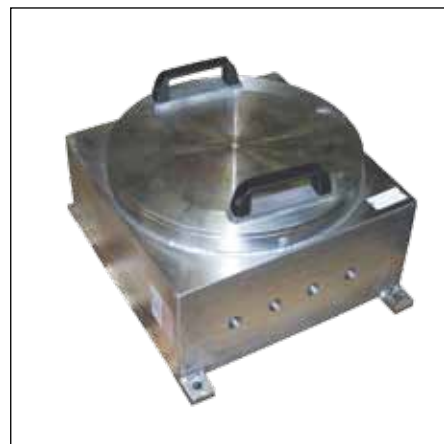
Ex d II C Flame proof enclosures GUB INX

Product group
40

- Ex d flame proof enclosures for installation of non Ex approved equipment
- Possible combination of Ex e connection departments
- Execution II C

Included in delivery

Enclosure system consisting of base and lid,
mounting plate and external earth connection
Please order Ex e connection department
seperately



Technical Data

Explosion protection	Ex d, Ex d[ia] II C
II 2 G Ex D II C	
II 2 D tD A21	
Certificates	BKI 08 ATEX 048; GOST-R: POCC IT.ГБ05.В02537; KAZ No. 06-03/1598; Gost K
Material	Stainless steel AISi 316L
Surface	glass bead pearled
Ingress protection	IP 66 to EN 60529
Temperature range	without window: Standard: -20°C to +80°C Optional: -60°C to +130°C with window: Standard: -50°C to +80°C

Product range

Order No.	Type	External dimensions (mm) H x W x D
40.00 23 01	GUE 1 INX	135 x 135 x 108
40.00 23 02	GUB 0 INX	168 x 168 x 140
40.00 23 03	GUB 1 INX	198 x 198 x 150
40.00 23 04	GUB 02 INX	235 x 280 x 173
40.00 23 05	GUB 03 INX	280 x 305 x 225
40.00 23 06	GUB 23 INX	270 x 310 x 180
40.00 23 07	GUB 4 INX	420 x 420 x 284
40.00 23 08	GUB 5 INX	600 x 600 x 334
40.00 23 09	GUBW 11 INX	180 x 180 x 146
40.00 23 10	GUBW 2 INX	235 x 280 x 167
40.00 23 11	GUBW 3 INX	280 x 305 x 235

Accessories

Optional internal painting: anticondensate painting orange RAL 2004

Glass window on cover

- Ex d Instrumentation enclosures with window for installation of display instruments
- Material: Aluminium
- Execution II C

Included in delivery

Enclosure system consisting of base and lid, mounting plate and external earth connection



Technical Data

Explosion protection

Ex

II 2 G Ex d II C

Ex

II 2 D Ex tD A21

Certificates INERIS 02 ATEX 0069X; GOST-R: POCC IT.ГБ05.В02537; GOST-K: No. 07/43-269

Material copper free aluminium (Cu < 0,1 %)

Colour RAL 9006, white aluminium

Ingress protection IP 66 to EN 60529

Temperature range -20°C to +52°C

Product range

Order No.	Type	Window Ø	External dimensions (mm) H x W x D
40.00 25 01	EMH 9.2	90	152 x 140 x 125
40.00 25 02	EMH 9.22	90	152 x 140 x 125
40.00 25 03	EMH 9.2V	90	152 x 140 x 125
40.00 25 04	EMH 9.22V	90	152 x 140 x 125

Accessories

Optional internal painting: anticondensate painting orange RAL 2004



Ex d II C Junction and distribution enclosures GUA-EAHF

Product group
40

- Ex d Junction and distribution enclosures for installation of terminals
- Material: Aluminium
- Execution II C

Included in delivery

Enclosure system consisting of base and lid, mounting plate and external earth connection



Technical Data

Explosion protection

Ex II 2 G Ex d II C

Ex II 2 D Ex tD A21

Certificates

INERIS 03 ATEX 0048; GOST-R: POCC IT.ГБ05.В02537;
GOST-K: No. 07/43-269

Material

copper free aluminium (Cu < 0,1 %)

Colour

RAL 9006, white aluminium

Ingress protection

IP 65 to EN 60529

Temperature range

-20°C to +40°C

Product range

Order No.	Type	Ø enclosure x internal depth (mm)	Ø enclosure x external depth (mm)
40.00 26 01	GUA 16	77 x 40	87 x 75
40.00 26 02	GUA 17	100 x 50	113 x 79
40.00 26 03	GUA 26	77 x 40	87 x 75
40.00 26 04	GUA 27	100 x 50	113 x 79
40.00 26 05	GUA 36	77 x 40	87 x 75
40.00 26 06	GUA 37	100 x 50	113 x 79
40.00 26 07	GUA 59	135 x 75	154 x 110
40.00 26 08	GUA 69	135 x 75	154 x 110
40.00 26 09	EAHF 26	77 x 61	87 x 79

Accessories

Optional internal painting: anticondensate painting orange RAL 2004



- Ex d Control Stations for individual fitting with switches, push button and for selector switches
- Material: Aluminium
- Execution II B

Included in delivery

Enclosure system consisting of base and lid, mounting plate and external earth connection



Technical Data

Explosion protection	Ex d, Ex d[ia] II B
II 2 G Ex d II B	
II 2 D Ex tD A21	
Certificates	INERIS 03 ATEX 0047; GOST-R: POCC IT.ГБ05.В02538; GOST-K: No. 07/43-269
Material	copper free aluminium (Cu < 0,1 %)
Colour	RAL 9006, white aluminium
Ingress protection	IP 65 to EN 60529
Temperature range	-20°C to +55°C

Product range

Order No.	Type	External dimensions (mm) H x W x D
40.00 27 01	EFG 6	195 x 130 x 100
40.00 27 02	EFG 10	370 x 145 x 100
40.00 27 03	EFG 12	430 x 145 x 100

Accessories

Optional internal painting: anticondensate painting orange RAL 2004



Ex d II B Selector switch stations

Product group
40

EFSC218 M310

- Ex d Enclosure with 1 or 2 selector switches
- Ex d Enclosure with 3 pole fuse switch with 1 or 2 fuses
- Execution II B

Included in delivery

Enclosure system consisting of base and lid, switches, mounting plate and external earth connection



Technical Data

Explosion protection	Ex d, Ex d[ia] II B
II 2 G Ex d II B	
II 2 D Ex tD A21	
Certificates	INERIS 03 ATEX 0047; GOST-R: POCC IT.ГБ05.В02538; GOST-K: No. 07/43-269
Temperature class	Gas: T5 / T4 Dust: T100°C / T125°C
Material	copper free aluminium (Cu < 0,1 %)
Colour	RAL 9006, white aluminium
Ingress protection	IP 65 to EN 60529
Temperature range	-20°C to +55°C

Product range

Order No.	Type	Execution	Dimensions (mm) H x W x D
40.00 27 10	EFSC218 M310	Selector switch, 2 switches, 500 V, 10 A	195 x 185 x 130
40.00 27 11	EFSC218 M310L	Selector switch, 1 switch, 1 padlock switch 500 V, 10 A	195 x 185 x 130
40.00 27 12	EFSC218 313V16	3 pole fuse switch 500 V, 2 x E16 delayed fuse, 16 A	195 x 185 x 130
40.00 27 13	EFSC218 313V25	3 pole fuse switch 500 V, 2 x E25 delayed fuse, 25 A	195 x 185 x 130

Ex d II B Circuit breaker and earth leakage circuit EFSC218 GUS

Product group
40

- Ex d enclosures with circuit breaker 415 V, 6 kA
- Ex d enclosures with 2 to 4 pole execution for nominal currents 6-63 A
- Ex d enclosures with earth leakage circuit breakers, 230/400 V, 300 mA 1 PH+N - 3 PH+N
- Execution II B

Technical Data

Explosion protection	Ex d, Ex d[ia] II B
 II 2 G Ex d II B	
 II 2 D Ex tD A21	
Certificates	INERIS 03 ATEX 0047; GOST-R: POCC IT.ГБ05.В02538; GOST-K: No. 07/43-269
Temperature class	Gas: T5 / T4 Dust: T100°C / T125°C
Material	copper free aluminium (Cu < 0,1 %)
Colour	RAL 9006, white aluminium
Ingress protection	IP 66 to EN 60529
Temperature range	-20°C to +55°C



Included in delivery

Enclosure system consisting of base and lid, switches, mounting plate and external earth connection

Product range

Order No.	Type	Execution	I/A	Dimensions (mm) H x W x D
40.00 27 14	EFSC218 GUSC 3206	Circuit breaker, 415 V, 6 kA, 2-pole	6 A	195 x 185 x 130
40.00 27 15	EFSC218 GUSC 3210	Circuit breaker, 415 V, 6 kA, 2-pole	10 A	195 x 185 x 130
40.00 27 16	EFSC218 GUSC 3216	Circuit breaker, 415 V, 6 kA, 2-pole	16 A	195 x 185 x 130
40.00 27 17	EFSC218 GUSC 3220	Circuit breaker, 415 V, 6 kA, 2-pole	20 A	195 x 185 x 130
40.00 27 18	EFSC218 GUSC 3225	Circuit breaker, 415 V, 6 kA, 2-pole	25 A	195 x 185 x 130
40.00 27 19	EFSC218 GUSC 3232	Circuit breaker, 415 V, 6 kA, 2-pole	32 A	195 x 185 x 130
40.00 27 20	EFSC218 GUSC 3240	Circuit breaker, 415 V, 6 kA, 2-pole	40 A	195 x 185 x 130
40.00 27 21	EFSC218 GUSC 3250	Circuit breaker, 415 V, 6 kA, 2-pole	50 A	195 x 185 x 130
40.00 27 22	EFSC218 GUSC 3263	Circuit breaker, 415 V, 6 kA, 2-pole	63 A	195 x 185 x 130
40.00 27 23	EFSC218 GUSC 3306	Circuit breaker, 415 V, 6 kA, 3-pole	6 A	195 x 185 x 130
40.00 27 24	EFSC218 GUSC 3310	Circuit breaker, 415 V, 6 kA, 3-pole	10 A	195 x 185 x 130
40.00 27 25	EFSC218 GUSC 3316	Circuit breaker, 415 V, 6 kA, 3-pole	16 A	195 x 185 x 130
40.00 27 26	EFSC218 GUSC 3320	Circuit breaker, 415 V, 6 kA, 3-pole	20 A	195 x 185 x 130
40.00 27 27	EFSC218 GUSC 3325	Circuit breaker, 415 V, 6 kA, 3-pole	25 A	195 x 185 x 130
40.00 27 28	EFSC218 GUSC 3332	Circuit breaker, 415 V, 6 kA, 3-pole	32 A	195 x 185 x 130
40.00 27 29	EFSC218 GUSC 3340	Circuit breaker, 415 V, 6 kA, 3-pole	40 A	195 x 185 x 130
40.00 27 30	EFSC218 GUSC 3350	Circuit breaker, 415 V, 6 kA, 3-pole	50 A	195 x 185 x 130
40.00 27 31	EFSC218 GUSC 3363	Circuit breaker, 415 V, 6 kA, 3-pole	63 A	195 x 185 x 130
40.00 27 32	EFSC218 GUSC 3406	Circuit breaker, 415 V, 6 kA, 4-pole	6 A	195 x 185 x 130
40.00 27 33	EFSC218 GUSC 3410	Circuit breaker, 415 V, 6 kA, 4-pole	10 A	195 x 185 x 130
40.00 27 34	EFSC218 GUSC 3416	Circuit breaker, 415 V, 6 kA, 4-pole	16 A	195 x 185 x 130
40.00 27 35	EFSC218 GUSC 3420	Circuit breaker, 415 V, 6 kA, 4-pole	20 A	195 x 185 x 130
40.00 27 36	EFSC218 GUSC 3425	Circuit breaker, 415 V, 6 kA, 4-pole	25 A	195 x 185 x 130
40.00 27 37	EFSC218 GUSC 3432	Circuit breaker, 415 V, 6 kA, 4-pole	32 A	195 x 185 x 130
40.00 27 38	EFSC218 GUSC 3440	Circuit breaker, 415 V, 6 kA, 4-pole	40 A	195 x 185 x 130
40.00 27 39	EFSC218 GUSC 3450	Circuit breaker, 415 V, 6 kA, 4-pole	50 A	195 x 185 x 130
40.00 27 40	EFSC218 GUSC 3463	Circuit breaker, 415 V, 6 kA, 4-pole	63 A	195 x 185 x 130
40.00 27 41	EFSC218 GUSV 3225	Earth leakage circuit breaker, 230 V, 2-pole	25 A	195 x 185 x 130
40.00 27 42	EFSC218 GUSV 3240	Earth leakage circuit breaker, 230 V, 2-pole	40 A	195 x 185 x 130
40.00 27 43	EFSC218 GUSV 3425	Earth leakage circuit breaker, 400/230 V, 3-pole	25 A	195 x 185 x 130
40.00 27 44	EFSC218 GUSV 3440	Earth leakage circuit breaker, 400/230 V, 3-pole	40 A	195 x 185 x 130
40.00 27 45	EFSC218 GUSV 3463	Earth leakage circuit breaker, 400/230 V, 3-pole	63 A	195 x 185 x 130



Ex d II B Thermal magnetic motor

Product group
40

protection EFSC218 SMT

- Ex d enclosures with thermal magnetic motor protection 415 V
- Ex d enclosures with 2 to 4 pole execution
- for nominal currents 6-63 A
- Execution II B

Included in delivery

Enclosure system consisting of base and lid, thermal magnetic motor protection, mounting plate and external earth connection



Technical Data

Explosion protection	Ex d, Ex d[ia] II B
II 2 G Ex d II B	
II 2 D Ex tD A21	
Certificates	INERIS 03 ATEX 0047; GOST-R: POCC IT.ГБ05.В02538; GOST-K: No. 07/43-269
Temperature class	Gas: T5 / T4 Dust: T100°C / T125°C
Material	copper free aluminium (Cu < 0,1 %)
Colour	RAL 9006, white aluminium
Ingress protection	IP 66 to EN 60529
Temperature range	-20°C to +55°C

Product range

Order No.	Type	Execution	I/A	Dimensions (mm) H x W x D
40.00 27 46	EFSC218 SMT 034	Thermal magnetic motor protection, 660 V	0,20 - 0,35 A	195 x 185 x 130
40.00 27 47	EFSC218 SMT 036	Thermal magnetic motor protection, 660 V	0,35 - 0,6 A	195 x 185 x 130
40.00 27 48	EFSC218 SMT 301	Thermal magnetic motor protection, 660 V	0,6 - 1 A	195 x 185 x 130
40.00 27 49	EFSC218 SMT 302	Thermal magnetic motor protection, 660 V	1 - 1,6 A	195 x 185 x 130
40.00 27 50	EFSC218 SMT 303	Thermal magnetic motor protection, 660 V	1,6 - 2,5 A	195 x 185 x 130
40.00 27 51	EFSC218 SMT 304	Thermal magnetic motor protection, 660 V	2,5 - 4 A	195 x 185 x 130
40.00 27 52	EFSC218 SMT 306	Thermal magnetic motor protection, 660 V	4 - 6,6 A	195 x 185 x 130
40.00 27 53	EFSC218 SMT 310	Thermal magnetic motor protection, 660 V	6 - 10 A	195 x 185 x 130
40.00 27 54	EFSC218 SMT 316	Thermal magnetic motor protection, 660 V	10 - 16 A	195 x 185 x 130

Ex d II Push buttons / Control Stations

EFDC / EFSC

- Small Ex d Control Stations with push button and switches
- Material: Aluminium
- Individual fitting on request

Included in delivery

Enclosure system consisting of base and lid, switches, push buttons, mounting plates and external earth connection



Technical Data

Explosion protection	Ex d, Ex d[ia] II C
 II 2 G Ex D II C	
 II 2 D Ex tD A21	
Certificates	INERIS 03 ATEX 0047; GOST-R: POCC IT.ГБ05.В02538; GOST-K: No. 07/43-269
Material	copper free aluminium (Cu < 0,1 %)
Colour	RAL 9006, white aluminium
Ingress protection	IP 66 to EN 60529
Temperature range	-20°C to +40°C -20°C to +55°C



Ex Control equipment

Control devices with diameter 22,5 mm

Technical Data

Explosion protection	Ⓔ ATEX
Certificates	INERIS - 02 ATEX 9007-U INERIS - 04 ATEX 9003-U
Certification gas explosion protection	Zone1, 2: Ex II 2G Ex ed/em IIC T6
Connection technology	Screw terminals
Switch in capacity	AC 15: 240 V / 3 A
Temperature range	-20°C to +40°C



Product range

 	Push button Plastic and metal version with/without silicone boot Contact N/O Actuator colour white, black, green, red, yellow and blue
 	Mushroom push button, 40 mm head Plastic and metal version Contact N/O Actuator colour black, green, red, yellow and blue
	Push button Metal version Contact N/O Actuator colour white, black, green, red, yellow and blue
 	Emergency stop button, 40 mm head Plastic and metal version with push pull, turn bolt fastener or key release Contact N/O (actuator black) or N/C (actuator red)
 	Selector switch Plastic and metal version with 2 or 3 stay put Standard or key switch Contact N/O Colour black
 	Selector switch Plastic and metal version with 2 or 3 stay put Standard or key switch Contact N/O Colour black
	Illuminated push button Metal version Version stay put or flush Contact N/O or N/C (actuator red) Actuator colour white, green, red, yellow and blue
	Illuminated selector switch Metal version with 2 or 3 stay put Contact N/O or N/C (actuator red) Actuator colour white, green, red, yellow and blue
 	Pilot light Plastic and metal version Version stay put or flush Contact N/O or N/C (actuator red) Actuator colour white, green, red, yellow and blue



Ex Control equipment

Control devices with diameter 30 mm

Technical Data

Explosion protection	Ⓔ ATEX
Certificates	PTB97 ATEX 1081U
Certification gas explosion protection	Zone1, 2: Ex II 2G Ex ed ia/ib IIC T6
Connection technology	Screw terminals
Switch in capacity	AC 15: 400 V / 10 A
Temperature range	-55°C to +50°C



Product range

	Push button Plastic version with / without silicone boot Contact N/O Actuator colour black, green, red and yellow
	Emergency stop button, 40 mm head Plastic version Turn bolt fastener or key release Colour red
	Selection switch Plastic version with 2 or 3 stay put Key switch Colour black
	Selection switch Plastic version with 2 or 3 stay put Colour black
	Pilot light Plastic version Actuator colour black, green, red and yellow



Control Stations

- Engineering and manufacturing
- Individual fitting with push-buttons, switches and indicating diode lamps
- Enclosures from material stainless steel, polyester and aluminium

Technical Data

Explosion protection	II 2G II 2D
Certificates	Aluminium enclosure: PTB 00 ATEX 1063 Polyester enclosure: PTB 00 ATEX 1002 Stainless steel enclosure: PTB 00 ATEX 1052
Ingress protection	IP 66 to EN 60529
Impact resistance	7 Joule to EN 60079-0
Temperature range acc. EN	acc. installation





- Polyester enclosure with impact resistance 20 Joule
- Empty enclosure for individual fittings
- Silicone seal and allen lid screws

Included in delivery

Empty enclosure:
Enclosure system with silicone seal
Junction box:
Enclosure system - depending on version with silicone seal, DIN rails, internal earthing connection, terminals, continuity plate, manufacturing, cable glands



Technical Data

Explosion protection	 I M 2 Ex e I  I M 1 Ex ia I
Certificate	IBExU; 06 ATEX 1065U
Material	glass fibre reinforced, duroplastic polyester, graphite added
Colour	RAL 9011, graphite black
Ingress protection	IP 54 to EN 60529
Impact resistance	20 Joule to EN 60079-0
Flammability	self-extinguishing, UL 94 V-0
Surface resistance	<10 ⁹ Ohm to IEC 60093
Toxicity	halogen-free
Temperature range of application acc. EN	-55°C to +100°C

Product range

Order No.	Dimensions (mm) W x L x H
48.08 08 06	75 x 80 x 56
48.08 08 08	75 x 80 x 75
48.08 11 06*	75 x 110 x 56
48.08 11 08	75 x 110 x 75
48.08 16 06*	75 x 160 x 56
48.08 16 08	75 x 160 x 75
48.08 19 06*	75 x 190 x 56
48.08 19 08	75 x 190 x 75
48.12 12 09*	120 x 122 x 91
48.12 22 09*	120 x 220 x 91
48.16 16 09*	160 x 160 x 91
48.16 26 09*	160 x 260 x 91
48.16 36 09*	160 x 360 x 91
48.16 56 09	160 x 560 x 91
48.25 26 12*	250 x 255 x 121
48.25 26 16	250 x 255 x 161
48.25 40 12*	250 x 400 x 121
48.25 40 16	250 x 400 x 161
48.25 60 12	250 x 600 x 121
48.36 36 09	360 x 360 x 91
48.41 40 12	405 x 400 x 121
48.41 40 20	405 x 400 x 201

* Storage types

- Removable door with wide opening area (180°)
- Depth adjustable mounting plate (thickness 2 mm)
- 30° sloped roof
- Integrated document holder

Included in delivery:

Enclosure with mounting plate and flange,
document holder

**Technical Data**

Material	Enclosure body: 2 mm stainless steel 1.4404/316 (RAL 2008 bright red orange on request) Flange: stainless steel 1.4404/316 optional brass (6 mm)
	Enclosure body: mild steel, powder coated, RAL 2008 bright red orange Flange: brass
	Mounting plate: 2 mm galvanised steel
Ingress protection	IP 66 to EN 60529
Seal	CR flat seal
Temperature range	-30°C to +60°C

Product range

Order No. Stainless steel	Order No. Mild steel coated	Dimensions (mm) W x H x D
32.02 00 01	32.01 00 01	400 x 400 x 270
32.02 00 02	32.01 00 02	700 x 500 x 220
32.02 00 03	32.01 00 03	700 x 500 x 370
32.02 00 04	32.01 00 04	1000 x 800 x 220
32.02 00 05	32.01 00 05	1000 x 800 x 420

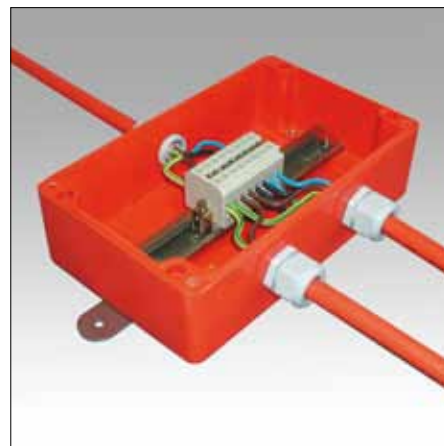
Accessories

	Stainless steel	Brass
Replacement flange for type 32.xx 00 01	32.09 99 01	32.09 99 11
Replacement flange for type 32.xx 00 02	32.09 99 02	32.09 99 12
Replacement flange for type 32.xx 00 03	32.09 99 03	32.09 99 13
Replacement flange for type 32.xx 00 04	32.09 99 04	32.09 99 14
Replacement flange for type 32.xx 00 05	32.09 99 05	32.09 99 15

- Fire protection enclosure from special halogen free polyester material
- Enclosure system with general certification to DIN 4102 part 12
- Individual modification with special approval ceramic terminal blocks and cable glands

Included in delivery:

Enclosure system with DIN rail and external brackets
Optimal with machining and for the enclosure system with approved terminals and cable glands



Technical data

Material	glass fibre reinforced, duroplastic special polyester
Certificate	P-MPA-E-02-024
Ingress protection	IP 66 to EN 60529
Seal	CR round seal
Approval	general certification to DIN 4102 T 12
Temperature range	-40°C to +90°C

Product range

Order No.	Dimensions (mm) W x L x H	max. terminal fitting	
		SAKK4	SAKK10
E30.12 12 09	120 x 120 x 90	7 pcs.	4 pcs.
E30.12 22 09	120 x 220 x 90	18 pcs.	12 pcs.
E30.16 16 09	160 x 160 x 90	11 pcs.	8 pcs.
E30.16 26 09	160 x 260 x 90	23 pcs.	16 pcs.
E30.25 26 12	250 x 260 x 120	2 x 23 pcs.	2 x 16 pcs.

Accessories

Terminals			
E30.00 01 04	SAKK4	ceramic terminal block	0,5 to 6 mm ² (single strip) 0,5 to 4 mm ² (multi strip)
E30.00 01 16	SAKK10	ceramic terminal block	2,5 to 16 mm ² (single strip) 2,5 to 10 mm ² (multi strip)
E30.00 01 91	AP/SAKK 4/10	lid	
E30.00 01 92	QL 2/SAKK4	bridge, 2 pol to SAKK 4	
E30.00 01 93	QL 3/SAKK4	bridge, 3 pol to SAKK 4	
E30.00 01 94	QL 4/SAKK4	bridge, 4 pol to SAKK 4	
E30.00 01 96	QL 2/SAKK10	bridge, 2 pol to SAKK 10	
E30.00 01 97	QL 3/SAKK10	bridge, 3 pol to SAKK 10	
E30.00 01 98	QL 4/SAKK10	bridge, 4 pol to SAKK 10	
E30.00 02 01	EW 1	end clamp TS 32	
Cable glands			
08.08 05 12	M 12 x 1,5	range 3 – 7 mm	
08.08 05 16	M 16 x 1,5	range 5 – 10 mm	
08.08 05 20	M 20 x 1,5	range 8 – 13 mm	
08.08 05 25	M 25 x 1,5	range 11 – 17 mm	
08.08 05 32	M 32 x 1,5	range 15 – 21 mm	
08.08 05 40	M 40 x 1,5	range 19 – 28 mm	

Hand held enclosures

The increasing mobility prevalent in all areas of industry requires portable hand enclosures. The materials, sizes and versions vary depending on the application area. Cable-connected systems made of robust polyamide or polyester with high ingress protection are in use, especially in automation engineering. In contrast, the data acquisition and instrumentation industries prefer to use light enclosures with integrated power supplies. The ROSE range of hand enclosure products covers all areas in mobile applications.



Taguan 130 / 180 / 230

- 8 enclosure variants in four sizes from 125 x 80 x 37 mm to 229 x 97 x 52 mm
- Application area: data acquisition, instrumentation

Beluga 180 / 220 / 380

- 5 enclosure variants in three sizes from 187 x 106 x 50 mm to 380 x 117 x 68 mm
- Application area: instrumentation and automation engineering, analytical control

Limanda

- Enclosure system for control components, sizes 270 x 248 x 64 mm and 311 x 281 x 72 mm
- Application area: control and automation engineering

Norvent

- 6 enclosure variants in sizes 121 x 274 x 35 mm to 166 x 274 x 50 mm
- Application area: communication and automation engineering

Pilot 250

- 2 enclosure variants in size 280 x 140 x 86 mm
- Application area: instrumentation and automation engineering, control systems

Pilot 50

- 3 enclosure variants in sizes 280 x 191 x 76 mm to 440 x 191 x 76 mm
- Application area: instrumentation and automation engineering, control systems

Pilot 10 / 20 / 30

- 3 enclosure variants with integrated handle in sizes 190 x 70 x 93 mm to 295 x 164 x 116 mm
- Application area: pushbutton and switch enclosures, crane control units

Pilot 110 to 150

- 5 enclosure variants with integrated handle in sizes 206 x 85 x 85 mm to 266 x 105 x 85 mm
- Application area: pushbutton and switch enclosures

- ABS hand held enclosure for data acquisition and measurement
- With integrated battery compartment
- Version with or without display opening
- Optional EMC version with internal coating

Included in delivery:

Taguan 130: 5-part enclosure with top and base, battery compartment, battery compartment cover, head and shaft cover, fixing and enclosure screws. Open version incl. display screen and punched seal.

Taguan 180/230: enclosure with top and base, keyboard cover, head and shaft cover, fastening and enclosure screws. Open version incl. display screen and punched seal. Please order battery compartment separately

Technical data

Material	ABS
Ingress protection	IP 40 to EN 60529
Flammability	UL 94 HB
Surface resistance	4 x 10 ¹⁴ Ohm to IEC 60093
Colour	top and base, battery compartment cover, head/shaft cover: RAL 5020, ocean blue keyboard cover, battery compartment/battery pack: RAL 7024, graphite grey
Temperature range	-40°C to +80°C



Taguan 130



Taguan 180/230

Product range

Type	Order No.	Versions	Dimensions (mm) W x L x H
Taguan 130 FO	27.01 02 00	flat, open	80/70 x 125 x 36.7/28.5
Taguan 130 FG	27.01 02 01	flat, closed	80/70 x 125 x 36.7/28.5
Taguan 130 TO	27.01 02 10	deep, open	80/70 x 125 x 46.7/28.5
Taguan 130 TG	27.01 02 11	deep, closed	80/70 x 125 x 46.7/28.5
Taguan 180 O	27.01 04 00	open	84/70 x 180 x 52.5/37.5
Taguan 180 G	27.01 04 01	closed	84/70 x 180 x 52.5/37.5
Taguan 230 O	27.01 06 00	open	97/70 x 229 x 52.5/37.5
Taguan 230 G	27.01 06 01	closed	97/70 x 229 x 52.5/37.5

Accessories

Battery holder 4 micro cells AAA (T 130)	27.01 02 80	Switch mat set 24 keys (T 180)	27.01 04 81
Battery holder 9 V monobloc (T 130)	27.01 02 81	Switch mat set 36 keys (T 230)	27.01 06 81
Battery holder for 9V monobloc (T 180 / 230)	27.01 00 94	Switch mat set 12 keys (T 180 / 230)	27.01 00 95
Clip (T 130)	27.01 02 82	Hand strap (T 180)	27.01 04 84
Keypad FT 130b, 12 keys common connection printed (T 130)	82.10 00 01	Hand strap (T 230)	27.01 06 84
Keypad FT 130e, 12 keys with insert Matrix (T 130)	82.10 00 02	Spare display screen set (T 130)	27.01 02 88
Shaft cover in enclosure colour	27.01 02 85	Spare display screen set (T 180)	27.01 04 88
Shaft cover, transparent	27.01 02 86	Spare display screen set (T 230)	27.01 06 88
Shaft cover for infrared	27.01 02 87	Spare screws set	27.01 00 90
Battery compartment empty (T 180 / 230) 30 g	27.01 00 80	Head cover, stepped, in enclosure colour (T 180 / 230)	27.01 00 85
Battery charging station (T 180 / 230)	27.20 00 01	Head cover, stepped, for infrared (T 180 / 230)	27.01 00 87
Connector charger (T 180 / 230)	27.20 00 02	Head cover, stepped, transparent (T 180 / 230)	27.01 00 89
Rechargeable battery pack NiMH 4.8 V / 2100 mAh (T 180 / 230)	27.20 00 03	Head cover, straight, in enclosure colour (T 180 / 230)	27.01 00 91
Spring contact, 2-pole (T 180 / 230)	27.01 00 82	Head cover, straight, transparent (T 180 / 230)	27.01 00 92
Wrist strap (T 180 / 230)	27.01 00 83	Head cover, straight, for infrared (T 180 / 230)	27.01 00 93
Display fixing set (T 180)	27.01 04 80	Connector 13-pole (T 130)	82.20 00 13
Display fixing set (T 230)	27.01 06 80	Scratch resistant display screen	on request

- Polyamide hand held enclosure for MCR- and automation engineering
- Version with or without display opening
- Prepared for acceptance of keypads/silicone switch mats
- Optional EMC version with internal coating and EMC-seal

Included in delivery:

Beluga 180/220: double-skinned enclosure with top and base unit, each with fixing domes, fastening and enclosure screws. Open version incl. display screen and punched seal.

Beluga 380: double-skinned enclosure with top and base unit, each with fixing domes, mounting / hook set, fastening and enclosure screws



Beluga 180/220



Beluga 380

Technical data

Material	polyamide
Ingress protection	IP 65 to EN 60529
Surface resistance	10 ¹² Ohm to IEC 60093
Flammability	UL 94 V-2
Colour	RAL 7021, black grey
Temperature range	-40°C to +60°C

Product range

Type	Order No.	Versions	Dimensions (mm) W x L x H
Beluga 180 O	27.02 02 00	open	106/75 x 187 x 50
Beluga 180 G	27.02 02 01	closed	106/75 x 187 x 50
Beluga 220 O	27.02 04 00	open	116/85 x 220 x 51
Beluga 220 G	27.02 04 01	closed	116/85 x 220 x 51
Beluga 380	27.02 05 01	closed	380 x 117 x 68

Accessories

Hook set without magnet (B 180 / 220)	27.02 00 80
Hook set with magnet (B 180 / 220)	27.02 00 81
Keypad FT 180b, 15 keys, printed (B 180) (Matrix)	82.10 00 03
Keypad FT 180e, 15 keys, with insert (B 180) (Matrix)	82.10 00 04
Keypad FT 220b, 18 keys, printed (B 220) (Matrix)	82.10 00 05
Keypad FT 220e, 18 keys, with insert (B 220) (Matrix)	82.10 00 06
Keypad FT 180ge, 12 keys, common connection with insert (B 180)	82.10 00 07
Display fixing set (B 180)	27.01 06 80
Display fixing set (B 220)	27.02 04 82
Cable gland with bending protection M 16 x 1,5	08.10 01 16
Cable gland with bending protection M 20 x 1,5	08.10 01 20
Hand strap (B 180/220)	27.02 00 83
Carrying strap (B 380)	27.02 05 80
Hand strap (B 380)	27.02 05 81
Wall holder set stainless steel (B 380)	27.02 05 82
Spare screws set (B 180 / 220)	27.02 00 82
Spare screws set (B 380)	27.02 05 83
Spare display screen set (B 180)	27.01 06 88
Spare display screen set (B 220)	27.02 04 83
Enabling switch 2-step, blue	83.50 00 10
Battery compartment without contacts (B 180 / 220)	27.02 00 85
Battery holder for 4 round cells for battery compartment	27.02 00 86
Battery holder for 9 V monobloc for battery compartment	27.02 00 87
Wall holder set (B 180 / 220)	27.02 00 84
Connector (B 180)	82.20 00 08
Connector (B 220)	82.20 00 09
Scratch resistant display screen	on request

- Polyamide hand held enclosure for MCR, automation engineering and data acquisition
- 2 sizes 270 x 248 x 64 mm to 311 x 281 x 72 mm
- For installations and command devices mobile and stationary applicable
- Variable mounting depths

Technical data

Material	enclosure: polyamide; border profile: NBR, black
Ingress protection	IP 65 to EN 60529
Surface resistance	10 ¹² Ohm to IEC 60093
Flammability	UL 94 V-2
Colour	RAL 7021, black grey
EMC	optional
Temperature range	-20°C to +60°C



Included in delivery:

Clam-shell enclosure with top and base, each with fixing domes incl. seals and border profile, 3 cover flaps for interface garages, screws and fixing material for front panel mounting

Product range

Order No.	Type	Dimensions (mm) W x L x H
27.03 03 00	Limanda I	311 x 281 x 72
27.03 03 01	Limanda I EMC	311 x 281 x 72
27.03 03 17	Limanda I for OP17	311 x 281 x 97
27.03 02 00	Limanda II	270 x 248 x 64
27.03 02 01	Limanda II EMC	270 x 248 x 64

Accessories

	Order No.
Limanda I Aluminium front plate, natural anodized finish	27.03 03 80
Limanda I EMC front plate	27.03 03 90
Limanda II Aluminium front plate, natural anodized finish	27.03 02 80
Limanda II EMC front plate	27.03 02 90
Limanda I intermediate frame	27.03 03 81
Limanda II intermediate frame	27.03 02 81
Limanda II mounting set for Siemens TP 170 / TP 070	27.03 02 82
Limanda I EMC intermediate frame	27.03 00 88
Limanda II EMC intermediate frame	27.03 02 88
Limanda I handle set without push button	27.03 00 83
Limanda holder	27.03 00 84
Limanda carrying strap	27.03 00 85
Limanda carrying strap comfort	27.03 00 92
Limanda I quiver	27.03 00 86
Limanda II table stand (set = 2 pcs.)	27.03 00 87
Limanda II quiver	27.03 00 89
Limanda I quiver with intermediate frame	27.03 00 90
Limanda II quiver with intermediate frame	27.03 00 91
Limanda I handle set with 3-step enabling switch (right-hand version)	27.03 00 71
Limanda I handle set with 3-step enabling switch (left-hand version)	27.03 00 72
Cable connection with bending protection M 16	08.10 01 16
Cable connection with bending protection M 20	08.10 01 20
Cable connection with bending protection M 25	08.10 01 25
Inclining adapter for mounting directly on wall or machine	50.02 00 01
Inclining adapter for mounting directly onto GT 48/2 tube	50.02 00 02
Inclining adapter for mounting directly onto GTK electronic tube	50.02 00 03
Inclining adapter for mounting directly onto GT 48/2 or GTK electronic	50.02 00 04
Inclining adapter for Limanda bracket on GT 48/2 tube	50.02 00 05
Inclining adapter for Limanda bracket on GTK electronic tube	50.02 00 06
Inclining adapter for Limanda bracket on wall or machine	50.02 00 07

- Design plastic enclosure for communication and automation engineering
- Optional with recess for membrane keypads
- Space for automation components

Included in delivery

Enclosure with top, base and side elements



Technical data

Material	PC / ABS
Ingress protection	IP 65, EN 60529
Colour	black (side part silver)
Temperature range	-20°C to +60°C

Product range

Type	Order No.	Dimensions (mm) W x L x H
Norvent S	27.04 01 00	274 x 121 x 35
Norvent L	27.04 02 00	274 x 166 x 35
Norvent XL	27.04 13 00	274 x 166 x 50
Norvent S-F	27.04 01 01	274 x 121 x 35
Norvent L-F	27.04 02 01	274 x 166 x 35
Norvent XL-F	27.04 13 01	274 x 166 x 50

F = with recess for foil

Accessories

Norvent quiver S/L/XL	27.04 99 01
Wall holder	on request

Pilot 250

- Polyamide hand held enclosure for MCR- and automation engineering
- Version with closed or front frame lid
- Rear battery compartment
- Optional EMC version with internal coating and EMC seal

Included in delivery

Double-skinned enclosure with top and base unit, each with fixing domes, battery compartment lid, fastening and enclosure screws



Technical data

Material	polyamide
Ingress protection	IP 65 to EN 60529
Impact resistance	7 Joule to EN 60079-0
Flammability	UL 94 HB
Colour	base and lid: RAL 7021, black grey rear cover: RAL 5003, sapphire blue
Temperature range	-40°C to +60°C

Product range

Type	Order No.	Version top part	Dimensions W x L x H (mm)
Pilot 250/1	29.25 00 01	closed	140/120 x 280 x 86
Pilot 250/2	29.25 00 02	lid frame	140/120 x 280 x 86

Accessories

Front panel, aluminium for Pilot 250/2	29.25 01 01
Magnet holder round	29.25 01 02
Battery holder for fixing in the enclosure base for 4 round cells	29.25 01 03
Battery holder for fixing in the enclosure base for 9 V monobloc	29.25 01 04
Wall fixing (2 hooks, 2 bolts with screws)	29.25 01 05
Cable gland with bending protection M 16 x 1,5	08.10 01 16
Cable gland with bending protection M 20 x 1,5	08.10 01 20
Enabling switch (3-steps)	on request

Pilot 50

- Polyamide / PVC hand held enclosure for MCR and automation engineering
- Large fitting space
- Variable length using profile technology

Included in delivery

Enclosure system consisting of polyamide internal enclosure with end covers, two PVC side cover profiles, Alucobond composite front plate, rear wall, 2 external end covers, with M 25 x 1,5 threaded hole for cable gland



Technical data

Material	polyamide / PVC
Ingress protection	IP 65 to EN 60529
Impact resistance	5 Joule to EN 60079-0
Flammability	end covers: UL 94 HB
Colour	end covers: RAL 1021, rape yellow PVC-profiles: RAL 9005, jet black
Temperature range	-20°C to +70°C

Product range

Ext. encl. dimensions W x L x H (mm)	Order No. Standard complete	Standard enclosure body without front plate/ without rear wall	Standard rear wall seperate	Standard front plate seperate	Standard rear wall recessed
280 x 191 x 76	29.11 10 00	29.11 00 00	29.11 00 01	29.11 00 02	-
330 x 191 x 76	29.12 10 00	29.12 00 00	29.12 00 01	29.12 00 02	-
440 x 191 x 76	29.13 10 00	29.13 00 00	29.13 00 01	29.13 00 02	29.13 00 03
Special length	29.19 10 00	29.19 00 00	29.19 00 01	29.19 00 02	-

Accessories

Cable gland with bending protection M 25 x 1,5	08.10 01 25
Cable gland reduction M 25 / M 12	08.01 25 12
Cable gland reduction M 25 / M 16	08.01 25 16
Cable gland reduction M 25 / M 20	08.01 25 20
Wall holder incl. enclosure modification	29.00 10 00
Spring nuts M4 for internal fixing, set of 4 pcs	29.00 00 50
PCB fixings, set of 4 pcs incl. spring nuts	29.00 00 60
Wall holder (set single)	29.00 00 70
Magnetic wall holder, 1 pc	29.00 00 80

Mobil control enclosures

Product group
29

Pilot 10/20/30

- Hand held enclosure for MCR and automation engineering
- Robust design (Polyamide or Polyester)
- Version with handle and integrated cable entry (Pilot 10, 20 standard)

Included in delivery:

Pilot 10/20: enclosure with handle, including cable gland M 20 x 1,5, front plate with fastening screw and wall holder

Pilot 30: two-part Polyester enclosure with self-adhesive aluminium front plate, enclosure screws and wall holder



Technical data

Material	Pilot 10 and Pilot 20: polyamide Pilot 30: polyester
Ingress protection	Pilot 10 and Pilot 20: IP 65 to EN 60529 Pilot 30: IP 66 to EN 60529
Impact resistance	7 Joule to EN 60079-0
Flammability	Pilot 10 and Pilot 20: UL 94 HB Pilot 30: self-extinguishing UL 94 V-0
Colour	RAL 1021, rape yellow
Temperature range	Pilot 10 and Pilot 20: -40°C to +60°C Pilot 30: -25°C to +90°C

Product range

Type	Order No.	Enclosure dimensions incl. handle W x L x H (mm)	Front plate dimensions W x H (mm)	Mounting depth (mm)
Pilot 10	29.40 02 00	70 x 93 x 190	61 x 59	67
Pilot 20	29.30 01 00	115 x 93 x 200	106 x 69	67
Pilot 30	29.50 01 00	164 x 116 x 295	70 x 280	71

Accessories

Mounting plate (Pilot 20)	29.31 00 00
Wall holder (2 pcs with screws)	29.60 01 00
Cable gland M 20 x 1,5 (Pilot 30)	08.10 01 20

Pilot 110 - 150

- Polyamide hand enclosure for automation and control engineering
- Version with handle and integrated cable entry
- Large fitting space

Included in delivery:

Enclosure with handle, including cable gland M 20 x 1,5, front plate, wall holder, enclosure and front panel screws



Technical data

Material	polyamide; front panel: polystyrol
Ingress protection	IP 65 to EN 60529
Impact resistance	7 Joule to EN 60079-0
Flammability	UL 94 HB
Colour	RAL 1021, rape yellow
Temperature range	-40°C to +60°C

Product range

Type	Order No.	Encl. dimensions incl. handle W x L x H (mm)	Front plate dimensions W x H (mm)	Mounting depth (mm)
Pilot 110	29.21 10 00	85 x 85 x 191	77 x 77	63.5
Pilot 120	29.21 20 00	115 x 85 x 191	107 x 77	63.5
Pilot 130	29.21 30 00	85 x 85 x 221	77 x 107	63.5
Pilot 140	29.21 40 00	160 x 85 x 211	152 x 97	63.5
Pilot 150	29.21 50 00	105 x 85 x 266	97 x 152	63.5

Accessories

Magnetic holder (for Pilot 120 - 150)	29.00 00 80
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Operating and display enclosures, suspension systems

Human - Machine - Interfaces, HMIs, are used for machine operation. These complex modules - from a simple emergency stop switch up to complete industrial PCs or CNC controllers - must be adapted to the rough environmental conditions placed on the machines. ROSE operating and display enclosures ensure guaranteed protection for the built-in electronic components and offer the very best in operator comfort.



Commander

For stationary application areas and fitting of control units and industrial PCs, the ROSE range offers a variety of enclosure types with more than 140 individual solutions - depending on controller size and construction. If your individual solution is not available here, please contact us.

Heat management

Operating and control systems need an enclosure system, which makes an optimal handling possible for the accommodation at the machine in the production process. ROSE offers for these applications special commander systems. These operating and control systems, usually realized on PC basis, produce a thermal power loss. For the avoidance of the loss of the devices or components and for the security of the production process there is air conditioning necessary. Therefore ROSE offers a complete range of cooling systems with additional heat sinks up to the modern Peltier cooling systems - all options are possible.

Suspension systems

Suspension systems link control enclosures with the respective machine. In addition to covering cable routing, they have the task of providing the control enclosure in an optimum position to the user. For this reason they have a variety of swivel joints, inclination sets and coupling elements available. The selection of a suitable suspension system depends on the weight and construction of the complete equipped control enclosure.

Height adjustment units GTN II

Height adjustment for flexible work place design

Moterm

Mobile console trolley for acceptance of Commander systems for flexible use with one or more machines.

- Small control enclosure in aluminium with protective collar
- Robust aluminium diecast enclosure body with front panel
- Transparent cover and handle set (optional)

Included in delivery:

Enclosure body with front frame and fastening screws (2 or 4 pcs.).
Please order front panel separately



Technical data

Material	DIN EN 1706 EN AC-AlSi 12 (Fe)
Ingress protection	IP 65 to EN 60529 (with transparent cover IP 54)
Impact resistance	7 Joule to EN 60079-0 (enclosure body)
Painting	powder coating
Colour	body: RAL 7038, agate grey front frame: RAL 7043, traffic grey B special colour on request
Temperature range	with PU (polyurethane) seal -40°C to +90°C with VMQ (silicone) seal -60°C to +130°C with CR seal -40°C to +100°C transparent cover -10°C to +50°C

Product range

Order No.	Dimensions (mm)	Front panel	Handle mounting options*				Accessories and modifications*						
	W x L x H						Ext. hinges diecast aluminium swivelling range appr. 150°	Int. hinges stainless steel swivelling range appr. 95°	Mounting plates sheet steel, non- corrosive	DIN rails non-corrosive TS 35/7.5	Silicone lid seal, resistant up to 130°	Trans- parent covers	Turn bolt lock
13.05 00 00	230 x 100 x 128	10.01 30 05	-	-	-	-	•	•	•	•	•	-	•
13.07 00 00	260 x 160 x 108	10.01 30 07	-	-	-	-	•	•	•	•	•	-	•
13.08 00 00	360 x 160 x 108	10.01 30 08	-	-	-	-	•	•	•	•	•	-	•
13.09 00 00	560 x 160 x 108	10.01.30 09	-	-	-	-	•	•	•	•	•	-	•
13.10 00 00	230 x 200 x 128	10.01 30 10	•	•	-	•	•	•	•	•	•	•	•
13.11 00 00	230 x 200 x 198	10.01 30 10	•	•	-	•	•	•	•	•	•	•	•
13.12 00 00	230 x 330 x 128	10.01 30 12	•	•	•	•	•	•	•	•	•	•	•
13.13 00 00	230 x 330 x 198	10.01 30 12	•	•	•	•	•	•	•	•	•	•	•
13.14 00 00	230 x 400 x 128	10.01 30 14	•	•	•	•	•	•	•	•	•	•	•
13.15 00 00	230 x 400 x 242	10.01 30 14	•	•	•	•	•	•	•	•	•	•	•
13.16 00 00	230 x 600 x 128	10.01 30 16	•	•	•	•	•	•	•	•	•	-	•
13.17 00 00	230 x 280 x 130	10.01 30 17	•	•	•	•	•	•	•	•	•	-	•
13.20 00 00	310 x 400 x 128	10.01 30 20	•	•	•	•	•	•	•	•	•	•	•
13.21 00 00	310 x 400 x 198	10.01 30 20	•	•	•	•	•	•	•	•	•	•	•
13.22 00 00	310 x 600 x 128	10.01 30 22	•	•	-	-	•	•	•	•	•	•	•
13.23 00 00	310 x 600 x 198	10.01 30 22	•	•	•	•	•	•	•	•	•	•	•
13.24 00 00	310 x 400 x 244	10.01 30 20	•	•	•	•	•	•	•	•	•	•	•
13.25 00 00	310 x 400 x 158	10.01 30 20	•	•	•	•	•	•	•	•	•	•	•

* Please order handle mounting, accessories and modifications in plain text.

Commander 1F

Product group
13

- Small control enclosure in aluminium with front frame for front panels and keypads
- Robust aluminium diecast enclosure body
- Handle set (optional)

Included in delivery:

Enclosure body with two-part front frame and fastening screws (2 or 4 pcs.).
Please order front panel separately



Technical data

Material	DIN EN 1706 EN AC-AISI 12 (Fe)
Ingress protection	IP 65 to EN 60529
Impact resistance	7 Joule to EN 60079-0
Painting	powder coating
Colour	enclosure body: RAL 7038, agate grey frame, top/base: RAL 7043, traffic grey B special colour on request
Temperature range	with PU (polyurethane) seal -40°C to +90°C with VMQ (silicone) seal -60°C to +130°C with CR seal -40°C to +100°C

Product range

Order No.	Dimensions (mm)	Front plate	Handle mounting options*				Accessories and modifications*					
	W x L x H						Ext. hinges diecast aluminium swivelling range appr. 150°	Int. hinges stainless steel swivelling range appr. 95°	Mounting plates sheet steel, non- corrosive	DIN rails non-corrosive TS 35/7.5	Silicone lid seal, resistant up to 130°	Turn bolt lock
13.07 05 00	260 x 160 x 109	10.01 32 07	-	-	-	-	•	•	•	•	•	•
13.08 05 00	360 x 160 x 109	10.01 32 08	-	-	-	-	•	•	•	•	•	•
13.10 05 00	230 x 200 x 129	10.01 32 10	•	•	-	•	•	•	•	•	•	•
13.10 05 10	230 x 200 x 153	10.01 32 10	•	•	-	•	•	•	•	•	•	•
13.11 05 00	230 x 200 x 199	10.01 32 10	•	•	-	•	•	•	•	•	•	•
13.12 05 00	230 x 330 x 129	10.01 32 12	•	•	•	•	•	•	•	•	•	•
13.12 05 10	230 x 330 x 153	10.01 32 12	•	•	•	•	•	•	•	•	•	•
13.13 05 00	230 x 330 x 199	10.01 32 12	•	•	•	•	•	•	•	•	•	•
13.14 05 00	230 x 400 x 129	10.01 32 14	•	•	•	•	•	•	•	•	•	•
13.15 05 00	230 x 400 x 243	10.01 32 14	•	•	•	•	•	•	•	•	•	•
13.17 05 00	230 x 280 x 129	10.01 32 17	•	•	-	-	•		•	•	•	•
13.20 05 00	310 x 400 x 129	10.01 32 20	•	•	•	•	•		•	•	•	•
13.21 05 00	310 x 400 x 199	10.01 32 20	•	•	•	•	•		•	•	•	•
13.25 05 00	310 x 400 x 158	10.01 32 20	•	•	•	•	•		•	•	•	•

* Please order handle mounting, accessories and modifications in plain text.

- Aluminium profile compact commander in 2 widths
- Applications: compact control equipment and display systems
- Standard integrated cooling system
- Variable profile lengths

Included in delivery:

Profile enclosure body, on rear side door or screwed wall; fastening elements for front panel; front panel order separately

**Technical data**

Material	enclosure profile: DIN EN 573 EN AW-AlMgSi enclosure lid: DIN EN 1706 EN AC-AlSi 12 (Fe)
Ingress protection	IP 65 to EN 60529
Painting	powder coating
Colour	enclosure body and enclosure lid: RAL 7035, light grey multi function profile: RAL 9005, jet black
Temperature range	-30°C to +65°C

Product range

Type	Order No.	Dimensions (mm) W x L x H	Order No. Front plate
CT 110-350-S	20.80 10 10	365 x 442 x 118	20.80 91 01
CT 110-520-S	20.80 10 20	365 x 612 x 118	20.80 91 02
CT 110-SL-S	20.80 10 99		20.80 91 98
CT 110-350-S-GT	20.80 11 10	365 x 442 x 118	20.80 91 01
CT 110-520-S-GT	20.80 11 20	365 x 612 x 118	20.80 91 02
CT 110-SL-S-GT	20.80 11 99		20.80 91 98
CT 145-350-S	20.80 40 10	453 x 442 x 153	20.80 91 03
CT 145-520-S	20.80 40 20	453 x 612 x 153	20.80 91 04
CT 145-SL-S	20.80 40 99		20.80 91 99
CT 145-350-S-GT	20.80 42 10	453 x 442 x 153	20.80 91 03
CT 145-520-S-GT	20.80 42 20	453 x 612 x 153	20.80 91 04
CT 145-SL-S-GT	20.80 42 99		20.80 91 99

SL = special length

Accessories

	Order No.
Wall holder - CT	20.80 90 01
Handle set 350 (length 350 mm)	20.80 90 02
Handle set 500 (length 500 mm)	20.80 90 03
Handle set SL	20.80 90 99
Cover plates 80 for CT 110 (4 pcs.)	20.80 90 04
Cover plates 120 for CT 145 (4 pcs.)	20.80 90 05
NoVoTronic adapter P80	20.80 90 06
NoVoTronic adapter P100	20.80 90 07
NoVoTronic adapter P160	20.80 90 08
Ventilator 60 for CT 110 (1 pcs.)	83.90 00 04
Ventilator 92 for CT 145 (1 pcs.)	83.90 00 05
Mounting angle with screws and spring nuts M5 (set 4 pcs.)	10.03 31 01
Spring nuts M5 (set 8 pcs.) for internal mounting	10.03 60 01

Push button and switches on request

- Enclosure system for control and display fittings
- Variable sizes in width and depth
- All-round adaptation capabilities for accessories
- Front panel insertion from front and rear

Included in delivery:

Enclosure body with rear wall or door, front panel fixing set, cover profile and T-groove cover.

Technical data

Material	profile: DIN EN 573 EN AW-ALMgSi front panel / rear wall: DIN EN 573 EN AW-ALMg 3 corner pieces: DIN EN 1706 EN AC-ALSi 12 (Fe)
Seal	CR round seal
Ingress protection	IP 65 to EN 60529
Painting	powder coating
Colour	enclosure: RAL 7035, light grey handle tube: RAL 3003, ruby red
Temperature range	-30°C to +80°C



Product range

Front panel dimensions H x W (mm)	Profile 1 mounting depth 80,5 mm	Profile 2 mounting depth 110 mm	Profile 3 mounting depth 185 mm	Front panel with drill hole (insert from rear)	Front panel without drill hole (insert from rear)
Rear wall screwed					
267 x 483	19.50 65 01	19.50 95 01	19.50 19 01	19.60 00 01	19.60 00 11
312 x 483	19.51 65 01	19.51 95 01	19.51 19 01	19.60 01 01	19.60 01 11
356 x 483	19.52 65 01	19.52 95 01	19.52 19 01	19.60 02 01	19.60 02 11
155 x 483	19.53 65 01	19.53 95 01	-	19.60 04 01	19.60 04 11
Special sizes*	19.59 65 01	19.59 95 01	19.59 19 01	19.60 03 01	19.60 03 11
Door at rear					
267 x 483	19.50 65 00	19.50 95 00	19.50 19 00	19.60 00 01	19.60 00 11
312 x 483	19.51 65 00	19.51 95 00	19.51 19 00	19.60 01 01	19.60 01 11
356 x 483	19.52 65 00	19.52 95 00	19.52 19 00	19.60 02 01	19.60 02 11
155 x 483	19.53 65 00	19.53 95 00	-	19.60 04 01	19.60 04 11
Special sizes*	19.59 65 00	19.59 95 00	19.59 19 00	19.60 03 01	19.60 03 11

* Please state front panel dimensions

Accessories

	Order No.		Order No.
Console attachment set 15° fixed for 155 mm console length (2 kg)	19.59 00 11	Fixing set 1 (12 spring nut, brackets, screws)	19.60 10 01
Console attachment set 30° fixed for 155 mm console length (2 kg)	19.59 00 12	Fixing set 2 (30 spring nut, brackets, screws)	19.60 10 02
Console attachment set variable	19.59 00 13	Rubber cover (5 mm)	19.60 10 06
Console attachment set 15° fixed custom length	19.59 00 98	Rubber cover (8 mm)	19.60 10 11
Console attachment set 30° fixed custom length	19.59 00 99	Quick fixing set (12 pcs.)	19.60 10 07
Keyboard holder (3 kg)	19.60 10 04	Document holder for direct mounting	19.60 10 09
Linking bar standard length 483 mm	19.59 00 20	Spring nut set M5 (8 pcs)	10.03 60 01
Linking bar custom length	19.59 00 21	Handle set (2 brackets, 1 tube), length 256 mm	19.60 20 01
Hinge set (2 hinges incl. screws)	19.60 10 08	Handle set (2 brackets, 1 tube), length 301 mm	19.60 20 04
Disk mounting bay	19.60 10 05	Handle set (2 brackets, 1 tube), length 345 mm	19.60 20 05
Panel mounting (6 elements incl. screws) for profiles 1+2	19.60 10 00	Handle set (2 brackets, 1 tube), length 472 mm	19.60 20 06
Panel mounting (6 elements incl. screws) for profile 3	19.60 10 03	Corner handle set (3 brackets, 1 tube) length 556/395 mm (1 kg)	19.60 20 02
Coupling flange profile 1 for GT 48/2 and GTK electronic	19.60 20 03	Handle set, special length	19.60 20 99
Coupling flange profile 2 for GT 48/2 and GTK electronic	19.60 20 11	Keyboard drawer	10.99 20 01
Coupling flange profile 3 for GT 48/2 and GTK electronic	19.60 20 12	Document holder for handle mounting	20.60 10 04
Coupling flange profile 2 for GT 50/2, GT 60/2 and GTN II	19.60 20 07	Document holder for direct mounting	20.60 10 05
Coupling flange profile 3 for GT 50/2, GT 60/2 and GTN II	19.60 20 08	Mousepad rack	20.60 10 06
Coupling flange profile 3 for GT 80/2 and GTK 80	19.60 20 13	Coupling flange profile 1 for GTS	19.60 20 15
Coupling flange profile 2 for GT 80/2	19.60 20 14	Coupling flange profile 2 for GTS	19.60 20 16

Caution: Connection to suspension system only using flange coupling or elbow flange coupling.

Company _____ Telephone _____
 Contact _____ Fax _____
 Address _____ E-Mail _____

☐ **Operation enclosures**
Version
☐ Door ☐ rear wall screwed
Dimensions
☐ Profile 1 ☐ Profile 2 ☐ Profile 3

☐ Recessed rear panel for _____ mm mounting depth

Please state front panel dimensions or manufacturer/controller type:



W x H (mm) _____ x _____

or manufacturer/type _____



W x H (mm) _____ x _____

or manufacturer/type _____



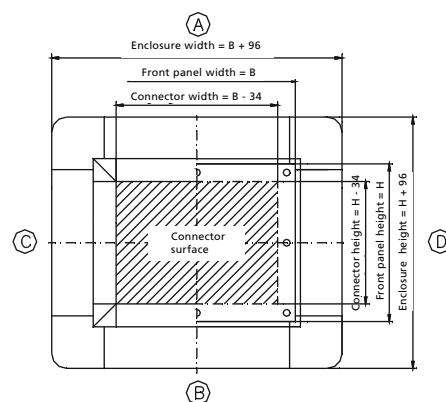
W x H (mm) _____ x _____

or manufacturer/type _____

Front panel
☐ 3 mm, with drill holes ☐ 3 mm, without drill holes ☐ other _____ mm

☐ Finish in accordance with drawing (please attach)

or state manufacturer/controller type: _____


☐ **Keyboard enclosures**
Version
☐ Door ☐ rear wall screwed
Dimensions
☐ Profile 1 ☐ Profile 2

Please state the number and dimensions of the front panel or the manufacturer and controller type.



W x H (mm) _____ x _____ or manufacturer/type _____



W x H (mm) _____ x _____ or manufacturer/type _____

Front panel
☐ 3 mm, with drill holes ☐ 3 mm, without drill holes ☐ other _____ mm

☐ Finish in accordance with drawing (please attach)

or state manufacturer/controller type: _____

Console attachment set
☐ standard _____ (Order No.) ☐ Custom length _____ mm
Suspension system
☐ GTK electronic / GT 48/2, on side _____ ☐ GT 50/2 / GT 60/2, on side _____
☐ GT 80/2 / GTK 80, on side _____ ☐ GTN II, on side _____
☐ GTS, on side _____ ☐ other _____ on side _____
☐ Moterm Operational enclosure from 236 mm front panel width
 Console enclosure (fixed inclination) from 440 mm front panel width
 Console enclosure (fixed inclination) from 580 mm front panel width
Handle set
☐ Standard _____ (Order No.) Mounting side _____
☐ Special length _____ mm Mounting side _____
Colour
☐ Standard (RAL 7035, handle red RAL 3003) ☐ Special colour (RAL) _____
Other accessories
☐ Disk mounting bay, mounting side _____ ☐ Hinge set, mounting side _____
☐ Keyboard holder ☐ Document holder ☐ Separation fin, number _____
☐ Panel mounting for profile 1 ☐ Panel mounting for profile 2 ☐ Panel mounting for profile 3
☐ Fixing set 12-piece ☐ Fixing set 30-piece ☐ Quick fixing set
☐ Spring nut set ☐ Rubber cover narrow 7 mm ☐ Rubber cover narrow 5 mm

- Universal control enclosure for automation engineering
- Variable size in height, width and depth
- Hinged door profile at front and rear
- Front panel insertion from front and rear

Included in delivery:

Enclosure body with rear wall, fixing element, cover profile with corners

Technical data

Material	profile: DIN EN 573 EN AW-ALMgSi cast corners: DIN EN 1706 EN AC-ALSi 12 Cu1 (Fe)
Ingress protection	IP 65 to EN 60529
Seal	CR- and/or PU-foam
Painting	powder coating
Colour	optional RAL 7035, light grey, or natural anodized, special colour on request
Temperature range	-30°C to +80° C



Accessories

Fixing set M4 (set, 12 pcs.)	20.60 10 01
Fixing set M5 (set, 12 pcs.)	20.60 10 02
Fixing set front panel (set, 12 pcs.)	26.60 10 03
Locking plate powdered GT 48/2 and GTK electronic	20.60 30 01
Locking plate powdered GT 50/2 und GT 60/2	20.60 30 02
Locking plate powdered GT 80/2	20.60 30 03
Locking plate powdered GTK 80	20.60 30 04
Locking plate powdered GTN II	20.60 30 05
Locking plate anodized GT 48/2 and GTK electronic	20.60 30 11
Locking plate anodized GT 50/2 and GT 60/2	20.60 30 12
Locking plate anodized GT 80/2	20.60 30 13
Locking plate anodized GTK 80	20.60 30 14
Locking plate anodized GTN II	20.60 30 15
Document holder for handle mounting	20.60 10 04
Document holder for direct mounting	20.60 10 05
Mousepad rack	20.60 10 06
Coupling flange GT 48/2 / GTK electronic	20.60 10 07
Adapter plate P1/P2 on GT 80/2	20.60 10 08
Mounting angle set	10.03 31 01
Keyboard drawer	10.99 20 01
Installation rail set, rail length 80 mm	54.00 00 16
Installation rail set, rail length 160 mm	54.00 00 24
Installation rail set, rail length 240 mm	54.00 00 32
Foil control panel 240/3	20.60 10 50
Foil control panel 335/6	20.60 10 51
Foil control panel 483/8	20.60 10 52
Mousepad rack	10.99 20 02
Other accessories	
Console attachment set 30°/50°	on request
Handle set	on request
Keyboard rack	on request

Commander SL 3000

I. Profile for installation with front panel



Profile 1: hinged frame profile
59.5 mm inner depth, approx. 70 mm external size



Profile 2: intermediate frames 125 mm
inner depth 119 mm



Profile 3: profile 170
inner depth 159.5 mm, approx. 170 mm external
for suspension system to GT 60/2



Profile 4: profile 220
inner depth 209.5 mm, approx. 220 mm external
suitable for all suspension systems

II. Profile for direct mounting of installations

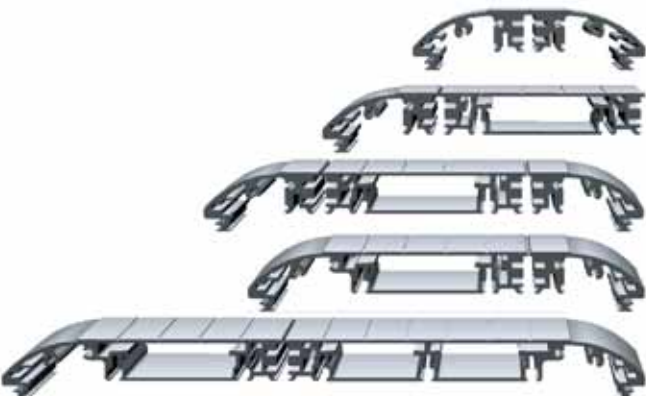


Profile 3 direct mounting



Profile 4 direct mounting

Examples of profile combination possibilities



Mounting depth 125 mm

Mounting depth 184 mm

Mounting depth 250 mm

Mounting depth 225 mm

Mounting depth 375 mm

- All profiles can be combined with each other
- Profile connection optionally fixed or hinged
- If connected to straight profile side (see example 2) the rear wall can also be constructed as a door

Company _____

Telephone _____

Contact _____

Fax _____

Address _____

E-Mail _____

Dimensions Operational enclosures

Console versions, please also fill out the following page - „Console attachment enclosures“.

Mounting depth T (mm) _____ of combination of profiles (please always specify from front to rear):

Profile no. _____ + Profile no. _____ + Profile no. . _____ + Profile no. _____

Connection: ☐ fixed ☐ fixed ☐ fixed

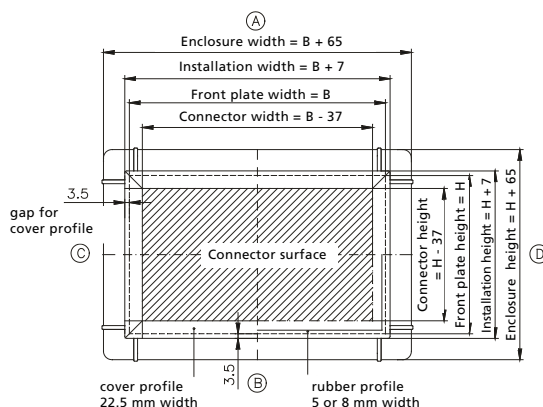
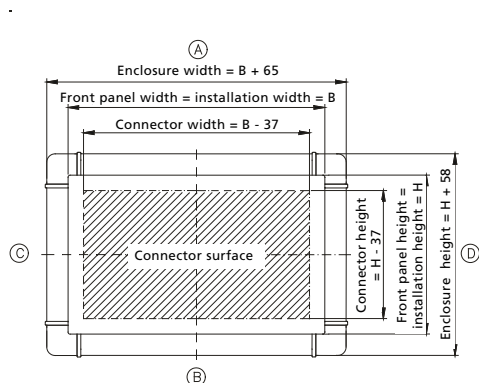
☐ hinged ☐ hinged ☐ hinged

side _____ side _____ side _____

Dimensions Please specify front panel dimensions W x H (mm) _____ x _____

and/or manufacturer/type _____

☐ Version I
Front panel without cover profile or rubber profile

☐ Version II
Front panel surrounding with cover profile or rubber profile
Front panel ☐ without front panel (direct mounting) ☐ with M4 fixing set or ☐ with M5 fixing set☐ Front panel with stud bolts (flush without cover profile, dimensions, see drawing version I)☐ Front panel with stud bolts (with cover profile, dimensions, see drawing version II)☐ Front panel with drill holes☐ Cover profile 22.5 mm (plastic black, dimensions s. version II)☐ Cover profile for front panel, 5 mm rubber (Version II)☐ Cover profile for front panel, 8 mm rubber (Version II)☐ other front panel _____☐ Finish in accordance with drawing no.: _____ (please attach)

and/or specify manufacturer/controller type: _____

☐ Separation fin quantity Position in accordance with drawing-no.: _____

Drawing no.: D-SL 3000 - _____ Bl. 1

Accessories SL 3000 for enquiry / order

Company _____

Rear wall with straight closure ☐ screwed ☐ hinged, hinges side _____
 with rounded closure ☐ screwed, flush ☐ with stud bolts, flush
☐ Modified according to drawing-no. _____ (please enclose if available)

Lock types ☐ Square 8 mm (Standard)
☐ Square 7 mm ☐ Triangular 7 mm ☐ Triangular 8 mm
☐ Double ward 3 mm ☐ Other _____

Colour Standard: ☐ Profile RAL 7035, corner pieces RAL 9006, corner caps RAL 7035 powdered or
☐ Natural anodized profile, corner pieces RAL 9006, corner caps RAL 9007 powdered
☐ Special colours (please specify RAL colour for each):

Profile RAL _____ Corner pieces RAL _____ Corner caps RAL _____

Suspension system ☐ GTK electronic, side _____ ☐ GT 48/2, side _____ ☐ GTS, side _____
☐ GT 50/2, side _____ ☐ GT 60/2, side _____ ☐ GT 80/2, side _____
☐ GTN II, side _____ ☐ GTK 80, side _____ (not Profile 1)
☐ Moterm ☐ Moterm with console
☐ Connection to console connector
☐ Connection to profile
☐ Other _____ Drawing-no.: _____ side _____
 Total weight of fittings approx. _____ kg
 for profile combination: Coupling hole on profile no. _____ or optional
 specify weight distribution _____

Handle set ☐ Quantity _____ side _____ ☐ Special colour RAL _____

Other accessories ☐ Disc drive-/interface bay with flap (as for SL 2000), side _____
☐ Insert bay for disk drive (from 415 mm front panel height), side _____
☐ Insert slot for: _____ side _____
☐ Finish in accordance with drawing-no.: _____
☐ For Siemens disk drive

Other modifications/ special versions

Further modifications _____

in accordance with drawing-no.: _____

Drawing no.: D-SL 3000 - _____ Bl. 2

stated by Rose profile length: width _____ mm height _____ mm

Dimensions

Console attachment enclosures

Company _____

Mounting depth

T (mm) _____ of combination of profiles (please always specify from front to rear):

Profile no. _____ + Profile no. _____

Connection: ☐ fixed ☐ hinged, page _____

Dimensions

Front panel total dimensions (dimension sheet s. operational enclosure) W x H (mm) _____ x _____ ☐ Version Iand/or manufacturer/type of controller _____ ☐ Version II

Front panel

☐ without front panel (direct mounting) ☐ with M4 fixing set or ☐ mwith M5 fixing set☐ Front panel with stud bolts (flush without cover profile, dimensions, see drawing version I)☐ Front panel with stud bolts (with cover profile, dimensions, see drawing version II)☐ Front panel with drill holes☐ Cover profile 22.5 mm (plastic black, dimensions s. version II)☐ Cover profile for front panel, 5 mm rubber (Version II)☐ Cover profile for front panel, 8 mm rubber (VersionII)☐ other front panel _____☐ Finish in accordance with drawing no.: _____ (please attach)

and/or specify manufacturer/controller type: _____

☐ Separation fin quantity _____ Position in accordance with drawing-no.: _____

Rear wall

with straight closure ☐ screwed ☐ hinged, hinges side _____with rounded closure ☐ screwed, flush ☐ with stud bolts, flush☐ Modified according to drawing-no. _____ (please enclose if available)

Lock types

☐ square 8 mm (standard)☐ square 7 mm☐ double ward 3 mm☐ triangular 7 mm☐ triangular 8 mm☐ Other _____

Colour

Standard: ☐ Profile RAL 7035, corner pieces RAL 9006, corner caps RAL 7035 powdered or☐ Natural anodized profile, corner pieces RAL 9006, corner caps RAL 9007 powdered☐ Special colours (please specify RAL colour for each):

Profile RAL _____ Corner pieces RAL _____ Corner caps RAL _____

Console attachment set

☐ Standard 30°☐ Standard 50°

Handle set

☐ Quantity _____ side _____ ☐ Special colour RAL _____

Other accessories

☐ Disc drive-/interface bay with flap (as for SL 2000), page _____☐ Insert bay for disk drive (from 415 mm front panel height), page _____☐ Insert slot for: _____ side _____☐ Finish in accordance with drawing-no.: _____☐ For Siemens disk drive

Other modifications/ special versions

Further modifications _____

in accordance with drawing-no.: _____

Drawing no.:

D-SL 3000 - _____ Bl. 3

stated by Rose

profile length: width _____ mm height _____ mm

Commander SL 4000

Product group
20

- Modern enclosure system for control and display systems
- Flexible size variability in height and width, 3 enclosure depths and profile combinations
- Easy mounting of door hinge
- Integrated handle system

Included in delivery

Complete enclosure system incl. corners, seals, fixing elements, rear panel or door, front panel fixing set.



Technical Data

Material	Profile: DIN EN 573 EN AW-ALMgSi Cast corner: DIN EN AC-AISI 12Cu 1 (Fe)
Seal	Corner: PE seal Front panel: CR seal
Painting / Surface	Powder coating or natural anodized
Colour	Profile: optional RAL 7035 or natural anodized Corner element: optional RAL 7035 or RAL 9007 Special colour on request
Ingress protection	IP 65 to EN 60529
Temperature range	-30°C to +80°C

Product range

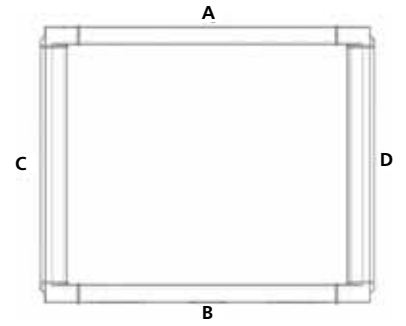
SL 4000 acc. to specification	20.10 99 99 8
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Accessories

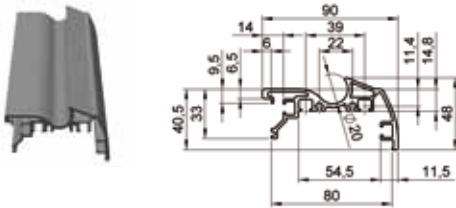
Hinge set for profile 1 and 2	20.10 90 50
Hinge set for profile 3	20.10 90 60
Wall holder set for profile 2 and 3	20.10 90 30
Document holder (A4 format)	20.10 90 10
Keyboard holder	20.10 90 20
Keyboard drawer (profile 3)	10.99 20 01
Fixing set M4	10.03 60 04
Fixing set M5	10.03 60 01
External handles (2 pcs.) 250 mm	20.60 40 02
External handles (2 pcs.) 300 mm	20.60 40 03
External handles (2 pcs.) 350 mm	20.60 40 04
External handles (2 pcs.) 400 mm	20.60 40 05
External handles (2 pcs.) 450 mm	20.60 40 06
External handles (2 pcs.) 500 mm	20.60 40 07
External handles (2 pcs.) 600 mm	20.60 40 09
External handles (2 pcs.) 650 mm	20.60 40 10
External handles (2 pcs.) 700 mm	20.60 40 11
External handles (2 pcs.) 750 mm	20.60 40 12
External handles (2 pcs.) 800 mm	20.60 40 13
USB Interface	20.90 10 01
RJ45 Interface	20.90 10 02
Interface flaps, version 1	20.90 10 10
Interface flaps, version 2	20.90 10 11
Interface flaps, version 3	20.90 10 12

Commander SL 4000

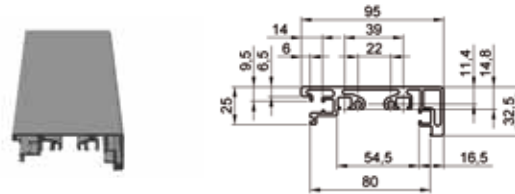
I. Profiles for control fitting by front panel



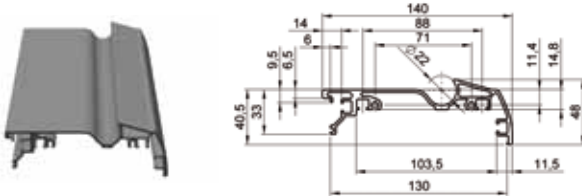
Profile 1 – Handle profile 90 Side C/D



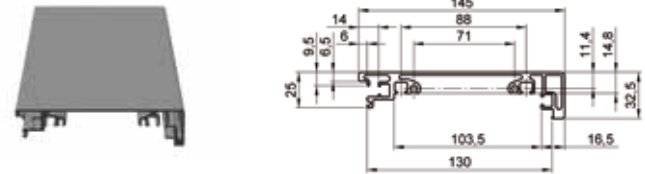
Profile 1 Body profile 90 Side A/B



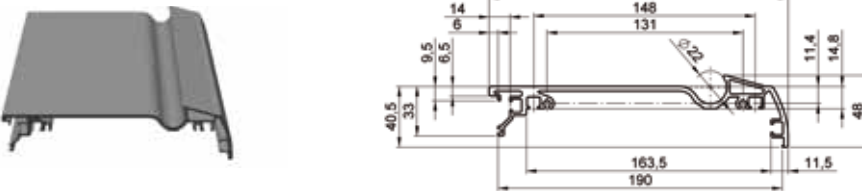
Profile 2 – Handle profile 140 Side C/D



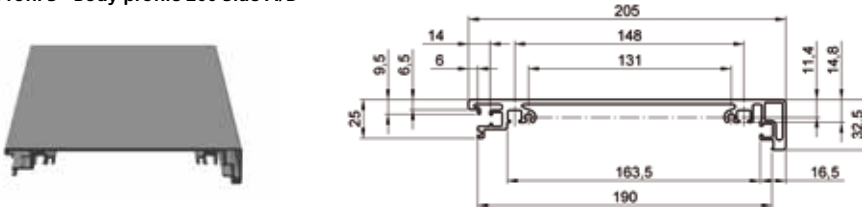
Profil 2 Body profile 140 Side A/B



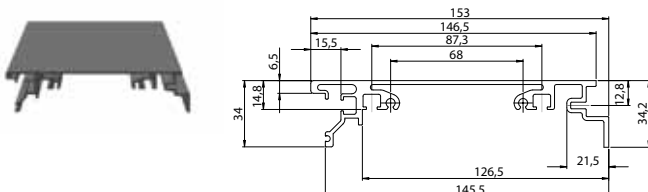
Profile 3 – Handle profile 200 Side C/D



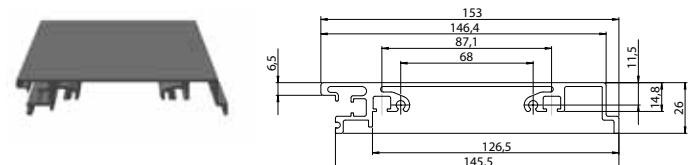
Profil 3 Body profile 200 Side A/B



Profile 4 Side C/D



Profile 4 Side A/B



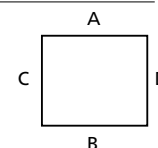
Company _____ Telephone _____

Contact _____ Fax _____

Address _____ E-Mail _____

☐ Operating enclosure

Profiles ☐ Profile 1 (Mounting depth = 80 mm) ☐ Profile 2 (Mounting depth = 130 mm) ☐ Profile 3 (Mounting depth = 190 mm)



Profile combination ☐ Profile 1 + 4 (Mounting depth = 220 mm) ☐ Profile 2 + 4 (Mounting depth = 270 mm)

Connection ☐ fixed ☐ hinged side (C or D) _____ (rear wall screwed)

Lock types ☐ Square (7 mm) ☐ Triangular (7 mm) ☐ Double ward (3 mm)
☐ Square (8 mm) ☐ Triangular (8 mm) ☐ Special lock type _____

Front plate ☐ without front plate
☐ Panel direct mounting by mounting frame / control type _____
☐ with front plate required connector surface W x H (mm) _____ x _____
required front panel dimension W x H (mm) _____ x _____

Colour **Standard** ☐ Profile RAL 7035, corner pieces RAL 7035
☐ Profile natural anodized, corner pieces RAL 9007
☐ Special colour RAL (please specify RAL colour for each) ☐ Profile RAL _____ corner RAL _____
☐ Profile anodized corner RAL _____

Door / Rear wall ☐ Rear wall screwed (always with hinged profile combination)
☐ Door ☐ left hinged (side C) ☐ right hinged (side D)
Lock types turn bolt fastener - small turn bolt fastener - large
☐ Square (6 mm) ☐ Square (8 mm) ☐ Triangular (7 mm)
☐ Triangular (6.5 mm) ☐ Square (7 mm) ☐ Triangular (8 mm)
☐ Slot (1.5 mm) ☐ Double ward (3 mm)
☐ Special lock type _____ (note: reduction of IP rating)
☐ Further information of machining _____
☐ Modified acc. drawing no. _____ (please enclose)

Modifications ☐ Modified acc. drawing no. _____ (please enclose)

Front plate ☐ Cutting W x H (mm) _____ x _____
☐ and/or manufacturer/type of controller _____
☐ Drill holes diameter (mm) _____ number _____
Other front plate modifications / special versions _____

Profile ☐ Modified acc. drawing no. _____ (please enclose)
☐ Cutting W x H (mm) _____ x _____
☐ Drill holes diameter (mm) _____ number _____
Other profile modifications / special versions (position etc.) _____

Connection - Suspension system Profile 1 / 2 / 3 / 4: ☐ GTKe ☐ GT 48/2 ☐ GTS ☐ Moterm (linkage only from below)
Profile 2 / 3 / 4: ☐ GT 50/2 ☐ GT 60/2 ☐ GTN II
Profile 3: ☐ GT 80/2 ☐ GTK 80
Profile 4: ☐ GT 80/2 profile in combination coupling hole on profile 4
☐ External system (please name drawing and manufacturer) _____
☐ Side A (above) ☐ Side B (below) ☐ Rear wall (on request)
Further information _____

Accessories

Handles (additionally)

Number _____ Side(s) _____

☐ Standard (Order No.): _____☐ Special length (mm) _____

Hinge set (only single profile)

Hinge side ☐ Side C (left) ☐ Side D (right)

Any further information of the position _____



Wall holder set (only single profile)

Position (side) ☐ Side C (left) ☐ Side D (right)

Any further information of the position _____



Document holder

Position (side) ☐ C (left) ☐ D (right)

Any further information of the position _____



Fixing set

☐ Spring nut set M4 (8 pieces) number _____☐ Spring nut set M5 (8 pieces) number _____

Single interfaces (IP 65) ☐ USB

☐ RJ45

Any further information to front panel interfaces (requirements, position etc.) _____

Multiple interfaces

Interfaces and power supplies for optional mounting on the front plate, rear wall or side of the profile 2, 3 and 4.

Single flap

Metal

☐ Type 1 ☐ Type 2 ☐ Type 3

Plastic with knob

☐ Type 4 ☐ Type 5 ☐ Type 6

Plastic with double ward

☐ Type 7 ☐ Type 8 ☐ Type 9

Double flap

Metal

☐ Type 11 ☐ Type 12 ☐ Type 13

Plastic with knob

☐ Type 14 ☐ Type 15 ☐ Type 16

Plastic with double ward

☐ Type 17 ☐ Type 18 ☐ Type 19

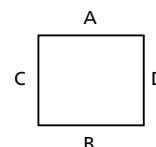
Power outlets (Screw terminals)

- ☐ USA (NEMA 5-15) ☐ Australia
☐ China (C C C) ☐ Denmark
☐ Germany (VDE) ☐ England (BS)
☐ France (UTE) ☐ India (IS 1293)
☐ Italy (CEI 23-16) ☐ Switzerland
☐ Germany (VDE) with cutout for circuit breaker (only with double flap, plastic)



Data interfaces

- ☐ SUB-D9 (socket) number _____
☐ SUB-D9 (plug) number _____
☐ SUB-D15 (socket) number _____
☐ RJ12, 6-pol. plastic number _____
☐ RJ45, 8-pol. Metal, CAT5e (socket/socket) number _____
☐ USB (socket/socket) number _____
☐ Combination (Specification see below)



Position

☐ Front plate ☐ Rear wall (door) ☐ Side profile (profile 2 / 3)

Any further information to front panel interfaces (requirements, position etc.) _____

Further accessories _____

☐ Console attachment

Profile type

☐ Profile 1
(Mounting depth = 80 mm)☐ Profile 2
(Mounting depth = 130 mm)

Front plate

☐ without front plate☐ Panel direct mounting by frame / control type _____☐ with front plate required connector surface W x H (mm) _____ x _____

required front panel dimension W x H (mm) _____ x _____

Colour

- Standard** ☐ Profile RAL 7035, corner pieces RAL 7035
- ☐ Profile natural anodized, corner pieces RAL 9007
- ☐ Special colours (please specify RAL colour for each)

☐ Profile RAL _____ corner RAL _____☐ Profile anodized corner RAL _____

Door / Rear wall

Standard ☐ screwed☐ other (on request) _____

Modification

Front plate

☐ Modified acc. drawing no. _____ (please enclose)☐ Cutting W x H (mm) _____ x _____☐ and/or manufacturer/type of controller _____☐ Drill holes diameter (mm) _____ number _____

Other front plate modifications (Positionen usw.) _____

Profile

☐ Modified acc. drawing no. _____ (please enclose)☐ Cutting W x H (mm) _____ x _____☐ Drill holes diameter (mm) _____ number _____

Other profile modifications (Positionen usw.) _____

Keyboard drawer and keyboard tray Keyboard holder

Order No.	Description
10.99 20 01	Keyboard drawer
10.99 20 02	Mousepad rack for keyboard drawer 10.99 20 01
10.99 20 03	Keyboard drawer with inclination 20°, front mounting
10.99 20 04	Keyboard drawer with inclination 20°, rear mounting without front plate
10.99 20 05	Keyboard tray, mild steel, inclination 15° for mounting between Moterm and Commander and mounting onto commander with suspension system connection from above
10.99 20 06	Keyboard tray, mild steel, inclination 15° for mounting between suspension system GTN II and GTS onto Commander below
10.99 20 07	Mousepad tray for keyboard tray 10.99 20 xx
19.60 10 04	Keyboard holder for SL 2000
20.10 90 20	Keyboard holder for SL 4000
20.10 90 21	Keyboard holder for SL 3000
20.10 90 22	Mousepad tray for keyboard holder for side mounting
20.60 10 06	Mousepad tray for side mounting
20.60 10 05	Document holder for Commander systems SL 2000, SL 3000, SL 4000, Comtronic onto side
20.60 10 04	Document holder for fixing onto tube handle at Commander systems



Adaptionmöglichkeiten onto wall / machine

Order No.	Description
20.80 90 01	Wall holder set for Comtronic
20.10 90 30	Wall holder set for SL 3000 and SL 4000 profile 2, 3 and 4
19.60 10 08	Hinge set for SL 2000
20.10 90 50	Hinge set for SL 4000 profile 1 and 2
20.10 90 60	Hinge set for SL 4000 profile 3
50.02 01 01	Inclining system
50.01 02 03	Adapter plate for inclining system onto SL 2000 profile 1
50.01 02 04	Adapter plate for inclining system onto SL 2000 profile 2
50.01 02 05	Adapter plate for inclining system onto SL 2000 profile 3
50.01 02 06	Adapter plate for inclining system onto SL 3000 profile 1
50.01 02 07	Adapter plate for inclining system onto SL 3000 profile 2 to 4
50.01 02 08	Adapter plate for inclining system onto SL 3000 Pultausführung
50.01 02 09	Adapter plate for inclining system universal (s. drawing)
50.01 02 10	Adapter plate for inclining system onto Beckhoff CP 7032
50.01 02 11	Adapter plate for inclining system onto ComTronic
50.01 02 12	Adapter plate for inclining system onto SL 3000 profile 4 (Direct mounting)
50.01 02 13	Flat panel adapter for inclining system
50.01 02 14	Adapter plate for inclining system onto SL 4000 profile 1 - 3
50.01 02 15	Adapter plate for inclining system onto SL 4000 desktop version



Interfaces

Order No.	Version	
Single interfaces (IP 65) incl. connection cable and plug		
20.90 10 01		USB-Interface incl. connection cable and plug
20.90 10 02		RJ45-Interface inkl. connection cable and plug
20.90 11 03		USB-Interface without cable
20.90 11 04		RJ45-Interface without cable
Single interface flaps, metal		
20.90 10 10	Version 1	Frame: Metal, dim nickel plated Lid: Plastic, transparent
20.90 10 11	Version 2	Frame: Metal, dim nickel plated Lid: Metal, dim nickel plated
20.90 10 12	Version 3	Frame: Metal, black coated Lid: Metal, black coated
Single interface flaps, plastic		
20.90 10 14	Version 7	Frame: Plastic, black Lid: Plastic transparent Lock: 3 mm Double ward
20.90 10 15	Version 4	Frame: Plastic, black Lid: Plastic transparent Lock: Knob
20.90 10 16	Version 8	Frame: Plastic, black Lid: Plastic, metallic silver Lock: 3 mm Double ward
20.90 10 17	Version 5	Frame: Plastic, black Lid: Plastic, metallic silver Lock: Knob
20.90 10 18	Version 9	Frame: Plastic, black Lid: Plastic light grey Lock: 3 mm Double ward
20.90 10 19	Version 6	Frame: Plastic, black Lid: Plastic, light grey Lock: Knob
Double interface flaps, metal		
20.90 11 10	Version 11	Frame: Metal, dim nickel plated Lid: Plastic transparent
20.90 11 11	Version 12	Frame: Metal, dim nickel plated Lid: Metal, dim nickel plated
20.90 11 12	Version 13	Frame: Metal, black Lid: Metal, black
Double interface flaps, plastic		
20.90 11 14	Version 17	Frame: Plastic, black Lid: Plastic transparent Lock: 3 mm Double ward
20.90 11 15	Version 14	Frame: Plastic, black Lid: Plastic transparent Lock: Knob
20.90 11 16	Version 18	Frame: Plastic, black Lid: Plastic metallic silver Lock: 3 mm Double ward
20.90 11 17	Version 15	Frame: Plastic, black Lid: Plastic metallic silver Lock: Knob
20.90 11 18	Version 19	Frame: Plastic, black Lid: Plastic light grey Lock: 3 mm Double ward
20.90 11 19	Version 16	Frame: Plastic, black Lid: Plastic light grey Lock: Knob
20.90 11 05	Germany (VDE) with additional cut-out for earth leakage circuit breaker (can only be used onto double flaps)	



Data Interfaces

Order No.	Description
20.90 10 30	SUB-D9; SUB-D9 2 × SUB-D9 (socket/pin)
20.90 10 31	SUB-D9; SUB-D9 2 × SUB-D9 (solder connection/socket)
20.90 10 32	SUB-D9; SUB-D9 1 × SUB-D9 (solder connection/socket); 1 × SUB-D9 (solder connection/pin)
20.90 10 33	SUB-D9 1 × SUB-D9 (solder connection/socket); 1 × blank cover for SUB-D9
20.90 10 34	SUB-D9 1 × SUB-D9 (socket/socket)
20.90 10 35	SUB-D9; SUB-D9 1 × SUB-D9 (socket/socket); 1 × SUB-D9 (pin/pin)
20.90 10 36	SUB-D9; SUB-D9 2 × SUB-D9 (socket/socket)
20.90 10 37	SUB-D9; SUB-D15 1 × SUB-D9 (socket/pin); 1 × SUB-D15 (socket/pin)
20.90 10 38	SUB-D9; SUB-D15 1 × SUB-D9 (solder connection/socket); 1 × SUB-D15 (solder connection/socket)
20.90 10 39	SUB-D9; SUB-D15 1 × SUB-D9 (socket/socket); 1 × SUB-D15 (socket/socket)
20.90 10 40	SUB-D9; SUB-D25 1 × SUB-D9 (socket/pin); 1 × SUB-D25 (socket/pin)
20.90 10 41	SUB-D9; SUB-D25 1 × SUB-D9 (solder connection/socket); 1 × SUB-D25 (solder connection/socket)
20.90 10 42	SUB-D9; SUB-D25 1 × SUB-D9 (solder connection/pin); 1 × SUB-D25 (solder connection/socket)
20.90 10 43	SUB-D15; SUB-D15 2 × SUB-D15 (socket/pin)
20.90 10 44	SUB-D15; SUB-D15 2 × SUB-D15 (solder connection/socket)
20.90 10 45	SUB-D15 1 × SUB-D15 (solder connection/socket); 1 × blank cover for SUB-D9
20.90 10 46	SUB-D15; SUB-D25 1 × SUB-D15 (socket/pin); 1 × SUB-D25 (socket/pin)
20.90 10 47	SUB-D15; SUB-D25 1 × SUB-D15 (solder connection/socket); 1 × SUB-D25 (solder connection/socket)
20.90 10 48	SUB-D25; SUB-D25 2 × SUB-D25 (socket/pin)
20.90 10 49	SUB-D25; SUB-D25 2 × SUB-D25 (solder connection/socket)
20.90 10 50	SUB-D25 1 × SUB-D25 (solder connection/socket); 1 × blank cover for SUB-D9
20.90 10 51	SUB-D25 1 × SUB-D25 (socket/pin); 1 × blank cover for SUB-D9
20.90 10 52	PS2; PS2; SUB-D15 HD 2 × PS2 (6-pole. solder connection); 1 × SUB-D15 HD (socket/pin)/VGA
20.90 10 53	PS2; SUB-D15 HD 1 × PS2 (6-pole. solder connection); 1 × SUB-D15 HD (solder connection/socket)(VGA)
20.90 10 54	SUB-D15 HD; RJ45; USB; USB (type A) 1 × SUB-D15 HD (socket/pin); 1 × RJ45, 8-pole. Metal, CAT5e (socket/socket); 2 × USB (socket/socket) type A
20.90 10 55	RJ45; RJ12; USB; USB (type A) 1 × RJ45, 8-pole. Metal, CAT5e (socket/socket); 1 × RJ12, 6-pole. Plastic; 2 × USB (socket/socket) type A
20.90 10 56	RJ45; RJ45; USB; USB (type A) 2 × RJ45, 8-pole. Metal, CAT5e (socket/socket); 2 × USB (socket/socket/0.7 m cable) type A
20.90 10 57	RJ45; USB (type A); DVI 1 × RJ45, 8-pole. metal, CAT5e (socket/socket); 1 × USB (socket/socket) Type A; 1 × DVI (socket/socket)



Order No.	Description
20.90 10 58	RJ45; RJ45; USB (type A) 2 × RJ45, 8-pole. metal, CAT5e (socket/socket); 1 × USB (socket/socket) Type A
20.90 10 59	RJ45; USB; USB (type A) 1 × RJ45, 8-pole. metal, CAT5e (socket/socket); 2 × USB (socket/socket) Type A
20.90 10 60	RJ45; RJ45; USB; USB (type A) 2 × RJ45, 8-pole. metal, CAT5e (socket/socket); 2 × USB (socket/socket) Type A
20.90 10 61	1 × RJ45, 8-pole. metal, CAT5e (socket/socket); 1 × RJ12, 6-pole. plastic; 1 × SUB-D25 (socket/pin)
20.90 10 62	1 × RJ45, 8-pole. metal, CAT5e (socket/socket); 1 × SUB-D9 (socket/socket); 1 × SUB-D9 (pin/pin)
20.90 10 63	RJ45; RJ12; SUB-D9 1 × RJ45, 8-pole. metal, CAT5e (socket/socket); 1 × RJ12, 6-pole. plastic; 1 × SUB-D9 (socket/socket)
20.90 10 64	RJ12; RJ12; SUB-D9 2 × RJ12, 6-pole. plastic; 1 × SUB-D9 (socket/socket)
20.90 10 65	RJ45; SUB-D9; SUB-D9 1 × RJ45, 8-pole. metal, CAT5e (socket/socket); 2 × SUB-D9 (socket/socket)
20.90 10 66	RJ45; USB; SUB-D9; SUB-D9 1 × RJ45, 8-pole. Metal, CAT5e (socket/socket); 1 × USB (socket/socket) Type A; 2 × SUB-D9 (socket/socket)
20.90 10 67	RJ45; USB; SUB-D9; SUB-D9 1 × RJ45, 8-pole. Metal, CAT5e (socket/socket); 1 × USB (socket/socket) Type A; 1 × SUB-D9 (socket/socket); 1 × SUB-D9 (pin/pin)
20.90 10 68	RJ45; SUB-D9; PS2; PS2 (UL) 1 × RJ45, 8-pole. Metal, CAT5e (socket/socket); 1 × SUB-D9 (pin/pin); 2 × PS2 (socket/socket)
20.90 10 69	RJ45; RJ45 2 × RJ45, 8-pole. Metal, CAT5e (socket/socket)
20.90 10 70	RJ45 1 × RJ45, 8-pole. Metal, CAT5e (socket/socket); 1 × blank cover for SUB-D9
20.90 10 71	RJ45; RJ45; RJ45; RJ45 4 × RJ45, 8-pole. Metal, CAT5e (socket/socket)
20.90 10 72	USB (type A); RJ45 1 × USB (socket/socket) Type A; 1 × RJ45, 8-pole. metal, CAT5e (socket/socket)
20.90 10 73	RJ45; SUB-D9 1 × RJ45, 8-pole. Metal, CAT5e (socket/socket); 1 × SUB-D9 (socket/socket)
20.90 10 74	1 × RJ45, 8-pole. metal, CAT5e (socket/socket); 1 × USB (socket/socket) Type A; 1 × SUB-D9 (socket/pin)
20.90 10 75	RJ45; USB (type A); SUB-D9 1 × RJ45, 8-pole. metal, CAT5e (socket/socket); 1 × USB (socket/socket) Type A; 1 × SUB-D9 (socket/socket)
20.90 10 76	RJ45; USB (type A); SUB-D9 1 × RJ45, 8-pole. Metal, CAT5e (socket/socket); 1 × USB (socket/socket) Type A; 1 × SUB-D9 (solder connection/socket)

Data Interfaces

Order No.	Description
20.90 10 77	PS2; PS2; RJ45 2 × PS2 (6-pole. solder connection); 1 × RJ45, 8-pole. metal, CAT5e (socket/socket)
20.90 10 78	RJ45; SUB-D9; PS2; PS2 1 × RJ45, 8-pole. Metal, CAT5e (socket/socket); 1 × SUB-D9 (pin/pin); 2 × PS2 (6-pole. solder connection)
20.90 10 79	RJ45; RJ45; SUB-D25 2 × RJ45, 8-pole. Metal, CAT5e (socket/socket); 1 × SUB-D25 (socket/pin)
20.90 10 80	RJ45; RJ45; SUB-D9 2 × RJ45, 8-pole. metal, CAT5e (socket/socket); 1 × SUB-D9 (socket/pin)
20.90 10 81	SUB-D25; SUB-D9; RJ45 1 × RJ45, 8-pole. metal, CAT5e (socket/socket); 1 × SUB-D9 (socket/pin); 1 × SUB-D25 (socket/pin)
20.90 10 82	BNC; SUB-D9; RJ45 1 × BNC (socket/socket); 1 × RJ45, 8-pole. metal, CAT5e (socket/socket); 1 × SUB-D9 (socket/pin)
20.90 10 83	BNC; RJ45; SUB-D9 1 × BNC (socket/socket); 1 × RJ45, 8-pole. metal, CAT5e (socket/socket); 1 × SUB-D9 (socket/socket)
20.90 10 85	USB (type A) 1 × USB (socket/socket) Type A
20.90 10 86	USB (type A); USB (type A) 2 × USB (socket/socket) Type A
20.90 10 88	USB; USB; USB; USB (type A) 4 × USB (socket/socket) Type A
20.90 10 89	RJ45; USB; USB (type A) 1 × RJ45, 8-pole. Metal, CAT5e (socket/socket); 2 × USB (socket/socket/0.7 m Kabel) Type A
20.90 10 91	USB (type A); SUB-D25 1 × USB (socket/socket/0.7 m Kabel) Type A; 1 × SUB-D25 (socket/pin)
20.90 10 92	USB (type A); SUB-D25 1 × USB (socket/socket) Type A; 1 × SUB-D25 (socket/pin)
20.90 10 93	USB (type A); SUB-D9 1 × USB (socket/socket) Type A; 1 × SUB-D9 (solder connection/socket)
20.90 10 94	SUB-D15 HD; RJ45; USB; USB (type A) 1 × SUB-D15 HD (socket/pin); 1 × RJ45, 8-pole. metal, CAT5e (socket/socket); 2 × USB (socket/socket) Bauf. A
20.90 10 95	USB (type A); RJ45 1 × USB (Buchse/Buchse/0.7 m Kabel) Type A; 1 × RJ45, 8-pole. metal, CAT5e (socket/socket)
20.90 10 96	USB (type A); SUB-D9; RJ45 1 × USB (socket/socket/0.7 m cable) Type A; 1 × SUB-D9 (socket/pin); 1 × RJ45, 8-pole. metal, CAT5e (socket/socket)
20.90 11 00	USB (type A); SUB-D25; RJ45 1 × USB (socket/socket) Type A; 1 × SUB-D25 (socket/pin); 1 × RJ45, 8-pole. metal, CAT5e (socket/socket)
20.90 11 01	USB (type A); SUB-D25; RJ45 1 × USB (socket/socket) Type A; 1 × SUB-D25 (socket/solder connection); 1 × RJ45, 8-pole. metal, CAT5e (socket/socket)
20.90 11 02	USB (type A); SUB-D9; RJ12 1 × USB (socket/socket) Type A; 1 × SUB-D9 (socket/socket); 1 × RJ12, 6-pole. plastic

Plug insert

Order No.	Description
20.90 10 24	Germany (VDE) grey, screw clamps, LED (yellow)
20.90 10 26	France (UTE), screw clamps
20.90 10 28	Italy (CEI 23-16), with electric shock protection, screw clamps
20.90 10 20	USA (NEMA 5-15), screw clamps
20.90 10 25	UK (BS), with electric shock protection, screw clamps
20.90 10 22	China (CCC), with electric shock protection, screw clamps
20.90 10 23	Denmark, spring clamps
20.90 10 29	Switzerland, spring clamps
20.90 10 21	Australia, screw clamps
20.90 10 27	India (IS 1293), with electric shock protection, screw clamps

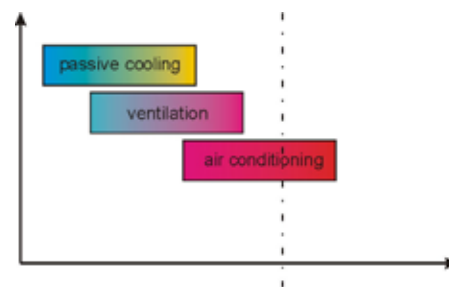
- Climatic systems for ROSE Commander systems, co-ordinated with the application
- Filter ventilators upto 25 m³/h discharge flow
- Compressor cooling systems upto 430 W cooling capacity
- Peltier cooling elements upto 150 W cooling capacity

Included in delivery:

Climatic system depending upon execution completely for Commander systems

Operating and control systems need an enclosure system, which makes an optimal handling possible for the accommodation at the machine in the production process. Rose offers for this special commander systems. These operating and control systems, usually realized on PC basis, produce a thermal power loss. For the avoidance of the loss of the devices or components and for the securing of the production process air conditioning is necessary. Rose offers here a complete aligned cooling system. With additional heat sinks up to the modern Peltier cooling systems - all options are possible.

For all our commander systems we offer particularly devised cooling systems to you:



$T_a < T_{imax}$

$T_a = T_{imax}$

$T_a > T_{imax}$

T_a : ambient temperature
 T_{imax} : max. permissible interior enclosure temperature



Passive cooling
with heat sink rear walls



Active cooling
with filter ventilator systems



Active cooling
with compressor cooling systems



Active cooling
with peltier cooling elements

Heat management

Filter ventilators with snatching assembly

Application and function
for the ventilation of cabinets, operating and controll enclosures.
2 versions: for the electrical connection at 24 V DC and to 230 V AC.
The simple assembly takes place by cutout in door, side wall, rear wall or roof of the enclosure.

Technical data

Material	Enclosure: plastic
Ingress protection	IP 54
Nominal voltage	24 V DC / 230 V AC



Product range

Order No.	Type	Version	Nominal voltage	Discharge flow
83.10 01 01	RLV 100 230 D	Filter ventilation	230 V AC	25 m³/h
83.10 01 02	RLV 100 24 D	Filter ventilation	24 V DC	25 m³/h
83.10 01 11	RGV 100 D	Exhaust filter		15 m³/h

Mini cooling systems in compressor technology

Application and function:
for the active cooling of cabinets, operating and controll enclosures.
The simple assembly takes place by cutout in rear wall of the enclosure.

Technical data

Material	Enclosure: sheet steel, powdered RAL 7035 optionally stainless steel
Ingress protection inside / outside	IP 54 / IP 24
Operating temperature	+20°C to +50°C
Compressor	Cattail compressor
Nominal voltage	230 V AC 50/60 Hz

Product range

Order No.	Type	Cooling capacity	Dimensions H x B x T (mm)	Nominal voltage	Nominal current
83.10 02 01	RKG-4266	320 W	520 x 270 x 110	230 V AC	1,4 A
83.10 02 02	RKG-4267	400 W	340 x 520 x 110	230 V AC	1,5 A
83.10 02 03	RKG-4268	400 W	520 x 320 x 110	230 V AC	1,5 A
83.10 02 04	RKG-4269	430 W	600 x 320 x 110	230 V AC	1,5 A



Mini cooling systems in Peltier technology

Application and function:
for the active cooling of cabinets, operating and controll enclosures, industrial PC's, monitor and flat screen monitor.
3 types in 50, 100 and 150 W cooling capacity are available.
For the electrical connection at 24 V DC. The simple assembly takes place by cutout in door, side wall, rear wall or roof of the enclosure.

Technical data

Operating temperature	-10°C to +60°C
Nominal voltage	24 V +6%/-10%
Ingress protection inside/outside	IP 54

Product range

Order No.	Type	Cooling capacity	Nominal voltage	Nominal current
83.10 03 01	RPK 50	50 W	24 V DC	2,5 A
83.10 03 02	RPK 100	100 W	24 V DC	4,8 A
83.10 03 03	RPK 150	150 W	24 V DC	6,5 A



Suspension system GT 25

Product group
49

- Suspension system for desktop enclosure and electronic components
- Modular construction
- Wall or table fixing

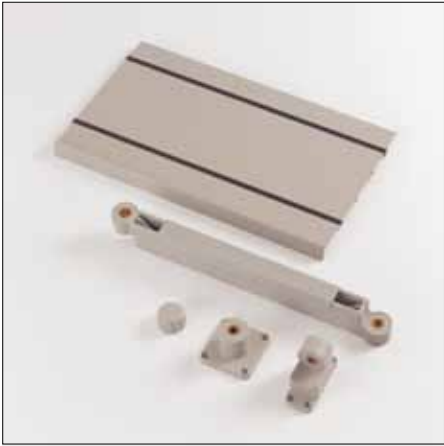
Included in delivery:

System individual components incl. assembly material



Technical data

Loading	maximum permanent load 10 kg for one suspension arm (500 mm) Caution! If several suspension arms are used larger deflections and lower loading must be observed!
Painting	powder coating
Colour	RAL 7038, agate grey



Product range

Wall flange / enclosure flange	49.25 01 00
Table / foot flange	49.25 02 00
Suspension arm	49.25 03 00
Clamping wheel (1 pc with screw and washers)	49.25 04 00
Equipment table (1 pc with mounting accessories)	49.25 05 00

Accessories

Mounting nuts (10 pcs in poly bag)	10.03 30 02
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- Industrial suspension system for control enclosures
- Modular construction with free accessible cable duct
- Wall, top-mounting or floor fixing

Included in delivery:

System individual components incl. cable duct covering and assembly material

Technical data

Material	connecting tube: DIN EN 573 EN AW-ALMgSi components: DIN EN 1706 EN AC-ALSi12 (Fe) cover profile TPE
Seal	CR and/or PE foam
Painting	powder coating
Colour	aluminium parts: RAL 7035, light grey cover profile: RAL 9005, jet black
Ingress protection	IP 54 to EN 60529
Free cable passage:	connecting tube: 18 mm opening system components: 53 mm

Product range

	Order No.
Top-mounted joint	49.45 66 00
Foot stand	49.45 72 00
Wall hinge W	49.45 70 00
Angle	49.45 71 00
Coupling	49.45 73 00
Flange coupling	49.45 77 00
Angle coupling	49.45 75 00
Angle flange coupling	49.45 78 00
Cover profile 2.5 m	49.45 69 00
Flat panel adapter	49.45 90 01
Adapter plate GTK e-PRO	49.45 00 01
Coupling GTK e-PRO	49.45 73 02
Angle coupling GTK e-PRO	49.45 75 02

Aluminium profile

Connecting tube	Order No.
Standard length: 0,5 m	49.45 10 01
Standard length: 1 m	49.45 10 02
Standard length: 2 m*	49.45 10 03
Variable length (please state)	49.45 10 00

* without threaded hole

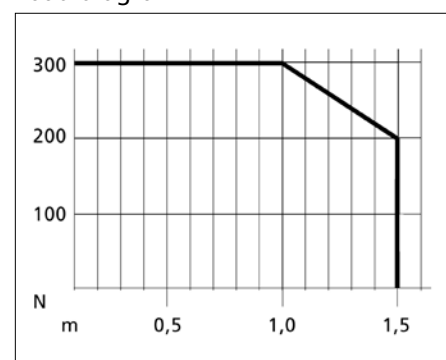
Can be adapted to elements from the GT 48/2 range*

Console flange 30°	49.49 76 00
Adapter flange	49.49 79 00
Inclining adapter GT48/2	49.49 80 00

* Special colour RAL 7035 please state when ordering.



Load diagram



- Aluminium profile suspension system for light/medium loads up to 30 kg
- Combined with all Commander systems
- Standardly adjustable solution for individual loads

Included delivery:

System individual components incl. cable duct cover and assembly material.

**Technical data**

Material	connecting tube: DIN EN 573 EN AW-ALMgSi Components: DIN EN 1706 EN AC-ALSi 12 (Fe)
Seal	CR- and/or PU-foam
Painting	powder coating
Colour	tube, components: RAL 7035, light grey
Ingress protection	IP 54 to EN 60529
Free cable passage	connecting tube: 53 x 19 mm system components: 53 x 19 mm

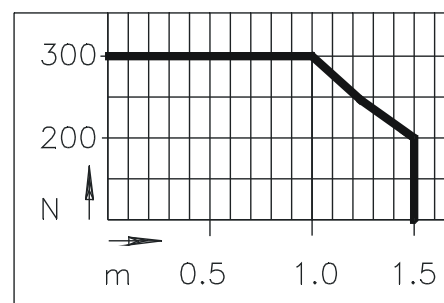
Product range

	Order No.
GTS Top mounted joint	49.44 66 00
GTS Foot stand	49.44 72 00
GTS Wall hinge W	49.44 70 00
GTS Angle	49.44 71 00
GTS Angle GTN II / GTS	49.47 71 44
GTS Coupling	49.44 73 00
GTS Flange coupling	49.44 77 00
GTS Angle coupling	49.44 75 00
GTS Flat panel adapter	49.44 90 01
GTS Foot stand turnable	49.44 72 21
GTS Inclining adapter	49.44 80 00
GTS Coupling Siemens PRO	49.44 73 02
GTS Angle coupling Siemens PRO	49.44 75 02
GTS Adaption plate Siemens Pro	49.44 00 01

Aluminium profile, max. length 1,5 m

Connecting tube	Order No.
Standard length: 0,5 m	49.44 10 01
Standard length: 1 m	49.44 10 02
Standard length: 2 m*	49.44 10 03
Variable length (please specify)	49.44 10 99
Eloxal	
Standard length: 0,5 m	49.44 11 01
Standard length: 1 m	49.44 11 02
Standard length: 2 m*	49.44 11 03
Variable length (please specify)	49.44 99 99

* without threaded hole

Load diagram

Note: the vertical length of the profile is responsible for the load of the complete suspension system (lever arm!).
Further information for this on request. The values in the above load diagram are guilty to an execution hanging or standing.
The declarations of weight are a summary from installation weight, Commander and all components and tubes between Commander and angle.

Suspension system GTN II

Product group
49

- Design aluminium suspension system
- Closed profile system / profile with free accessible cable duct
- Can be combined with all control enclosures

Technical data

Material	connecting tube: DIN EN 573 EN AW-ALMgSi components: DIN EN 1706 EN AC-ALSi 12 (Fe) cover profile: TPE
Seal	CR- and/or PU-foam
Painting	powder coating
Colour	tube, components: RAL 7035, light grey cover profile: RAL 9005, jet black
Ingress protection	IP 54 to EN 60529
Free cable passage	connecting tube: profile open 27 x 32 mm profile closed 51 mm diameter system components: 51 mm diameter

Product range

	Order No.
Top mounted joint	49.47 66 00
Top mounted joint light*	49.47 66 01
Top mounted joint (ceiling mounting)	49.47 66 20
Wall hinge	49.47 70 00
Wall hinge light*	49.47 70 01
Wall hinge (hanging)	49.47 70 20
Angle	49.47 71 00
Angle GTN II / GTS	49.47 71 44
Angle GTN II / GTK electronic	49.47 71 45
Coupling	49.47 73 00
Coupling GTN II-PRO	49.47 73 02
Angle coupling	49.47 75 00
Angle coupling GTN II-PRO	49.47 75 02
Intermediate joint "Z"	49.47 67 00
Intermediate joint light "Z"*	49.47 67 01
Intermediate joint "S"	49.47 67 02
Intermediate joint light "S"*	49.47 67 03
Foot stand fixed	49.47 72 00
Foot stand turnable with adapter plate	49.47 72 20
Foot stand turnable	49.47 72 21
Turnable foot stand light*	49.47 72 22
Console flange 15°	49.47 76 00
Column, length max. 2,0 m (please specify individual length)	49.47 00 04
Flat panel adapter	49.47 90 01
Spare cover profile 2.5 m	49.45 69 00
Adjustment unit	49.47 00 06
Inclining adapter	49.47 80 00
Adapter plate GTN II-PRO	49.47 00 01

* GTN II light: can be used for control units with low load (up to 30 kg/2 m) with lower swivel force

Aluminium profile	Profile open	Profile closed
Standard length: 0,5 m	49.47 10 01	49.47 20 01
Standard length: 1 m	49.47 10 02	49.47 20 02
Standard length: 2 m	49.47 10 03	49.47 20 03
Variable length (please state)	49.47 10 99	49.47 20 99
Eloxal		
Standard length: 0,5 m	49.47 11 01	49.47 21 01
Standard length: 1 m	49.47 11 02	49.47 21 02
Standard length: 2 m	49.47 11 03	49.47 21 03
Variable length (please state)	49.47 11 99	49.47 21 99

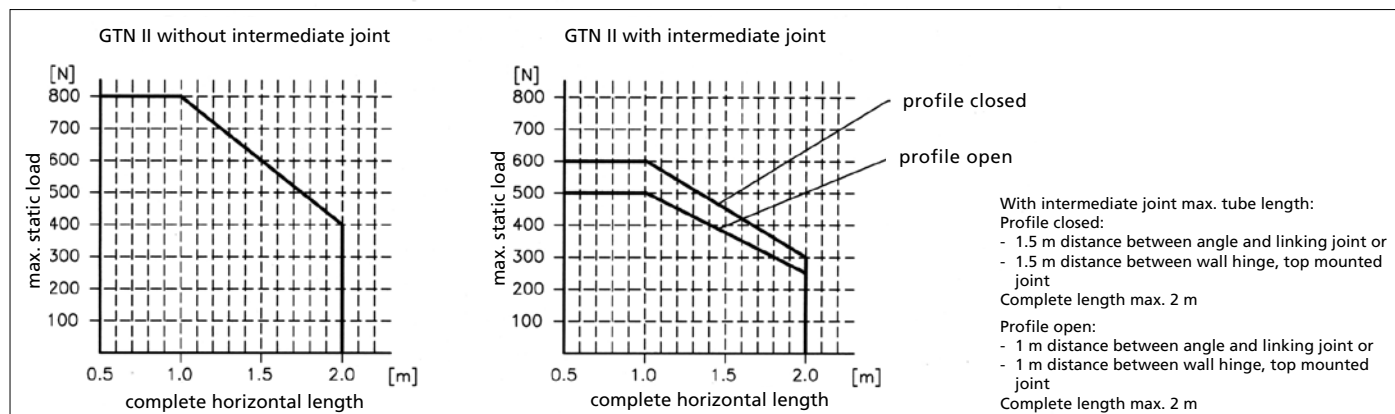


Included delivery:

System individual components incl. cable duct cover and assembly material.

Suspension system GTN II

Load diagram



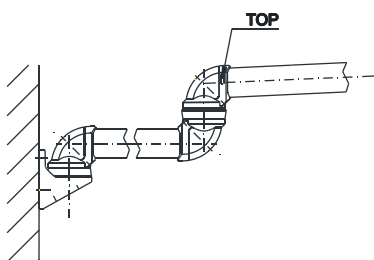
Note: the vertical length of the profile is responsible for the load of the complete suspension system (lever arm!). Further information for this on request. The values in the above load diagram are gulty to an execution hanging or standing. The declarations of weight are a summary from installation weight, Commander and all components and tubes from angle to Commander.

Two tube versions: open or closed

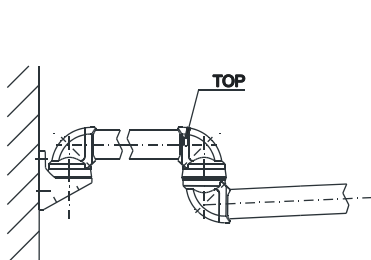


GTN II is alternatively available with a closed aluminium profile for use of higher loads or with a tube with freely accessible cable duct within plastic cover.

Intermediate joint S-type



Intermediate joint Z-type



Height adjustment

Product group
49

- Height adjustment for flexible work place design
- Supported by gas spring (GTN II lift and slide)
- Gas spring with locking and hydraulic release (GTN II lift)
- Can be combined with ROSE suspension systems (GTN II and GTK electronic)

Technical data

Material	Connecting tube: DIN EN 573 EN-AW-AlMgSi Components: DIN EN 1706 EN AC-AlSi12(Fe) Cover profile: TPE
Colour	Tube/components: RAL 7035, light grey Cover profile: RAL 9005, jet black
Ingress protection	IP 20 to EN 60529

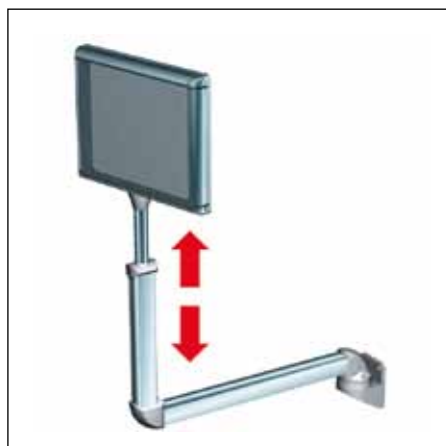


Product range

	Order No.
GTN II / GT 48/2	49.47 30 01
GTN II / slide, hanging	49.47 30 02
GTN II / slide, standing	49.47 30 03
GTN II lift standing	49.47 30 10
GTN II lift hanging	49.47 30 11
GTN II lift standing incl. turnable foot stand	49.47 30 12
GTN II lift hanging incl. angle coupling	49.47 30 13

Accessories

VESA-connection 80/100 incl. inclining and holder for release	49.47 30 20
Handle set with integrated release incl. VESA-connection 80/100 with inclining adjustment	49.47 30 21
Keyboard rack for handle set 49.47 30 21	49.47 30 22



GTN II / GT 48/2

Order No. **49.47 30 01**



GTN II / slide hanging

Order No. **49.47 30 02**



GTN II / slide standing

Order No. **49.47 30 03**

Height adjustment



GTN II lift standing

Height adjustment with gasspring, hydraulic release, dragchain, 150 mm GTK electronic arm for device connection, combinable with GTK electronic components 49.45 66 00; 49.45 70 00; 49.45 75 00; 49.45 78 00

Variable height: 1200 to 2000mm
Adjustable stroke: 270 mm

Order No. **49.47 30 10**



GTN II lift standing incl. turnable foot stand

Height adjustment with gasspring, hydraulic release, dragchain, turnable foot stand, 150 mm GTK electronic arm for device connection, combinable with GTK electronic components 49.45 66 00; 49.45 70 00; 49.45 72 00; 49.45 75 00; 49.45 78 00

Variable height: 1200 to 2000 mm
Adjustable stroke: 270 mm

Order No. **49.47 30 12**



GTN II lift hanging

Height adjustment with gasspring, hydraulic release, dragchain, foot stand, 150mm GTK electronic arm for device connection, combinable with GTK electronic components 49.45 66 00; 49.45 70 00; 49.45 72 00; 49.45 75 00; 49.45 78 00

Variable height: 1200 to 2000 mm
Adjustable stroke: 270 mm

Order No. **49.47 30 11**



GTN II lift hanging incl. angle coupling

Height adjustment with gasspring, hydraulic release, dragchain, angle coupling, 150 mm GTK electronic arm for device connection, combinable with GTK electronic components 49.45 66 00; 49.45 70 00; 49.45 72 00; 49.45 75 00; 49.45 78 00

Variable height: 1200 to 2000 mm
Adjustable stroke: 270 mm

Order No. **49.47 30 13**

Suspension system GT 48/2

Product group
49

- Industrial circular tube system for control enclosures
- Modular construction for individual components
- Protected internal cable routing

Included in delivery:

System individual components incl. assembly material



Technical data

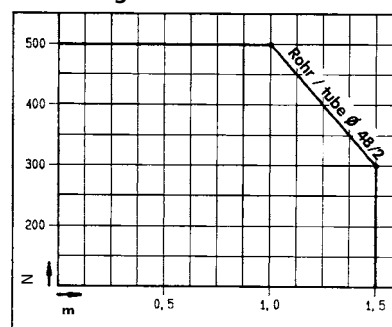
Material	connecting tube: steel 48 x 4 mm DIN 2393-St.37 components: DIN EN 1706 EN AC-AISI 12 (Fe)
Seal	CR and/or NBR
Painting	powder coating
Colour	tube: galvanized components: RAL 7043, traffic grey B special colour on request
Ingress protection	IP 54 to EN 60529
Free cable passage	connecting tube: Ø 40 mm system elements: Ø 40 mm



Product range

	Order No.
Top-mounted joint	49.49 66 00
Foot stand, fixed	49.49 72 00
Foot stand, turning	49.49 68 00
Wall hinge W	49.49 70 00
Wall hinge S	49.49 62 00
Angle	49.49 71 00
Coupling	49.49 73 00
Flange coupling	49.49 77 00
Flange coupling GT 48/2-PRO	49.49 77 02
Angle coupling	49.49 75 00
Angle flange coupling	49.49 78 00
Angle flange coupling GT 48/2-PRO	49.49 78 02
Console flange 30°	49.49 76 00
Adapter flange	49.49 79 00
Inclination adapter	49.49 80 00
Flat panel adapter	49.45 90 01
Adapter plate GT 48/2-PRO	49.49 00 01

Load diagram



Connecting tube	Order No.
Standard length: 0,5 m	10.09 42 16
Standard length: 1 m	10.09 42 17
Standard length: 2 m	10.09 42 18
Standard length: 3 m	10.09 42 19
Variable length (please state)	10.09 41 58

Suspension system

Product group
49

GT 50/2; GT 60/2; GT 80/2

- Robust industrial square suspension arm system for system components
- Modular construction for individual components
- High loading capacity, large extension

Included in delivery:

System individual components incl. assembly material

Technical data

Material	connecting tube: square steel tube similar to DIN EN 10305-5, wall thickness 5 mm components: DIN EN 1706 EN AC-AISI12 (Fe)
Seal	CR and/or NBR
Painting	powder coating
Colour	tube: galvanized components: RAL 7043, traffic grey B special colour on request
Ingress protection	IP 65 to EN 60529
Free cable passage	GT 50/2 16 cm ² (40 x 40 mm) GT 60/2 25 cm ² (50 x 50 mm) GT 80/2 49 cm ² (70 x 70 mm)

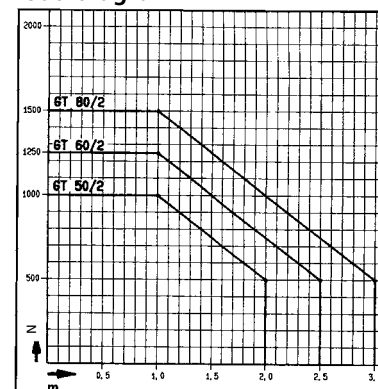


Product range

	GT 50/2	GT 60/2	GT 80/2
	Order No.	Order No.	Order No.
Top-mounted joint	49.51 66 00	49.61 66 00	49.81 66 00
Foot stand, cast steel	49.51 74 00	49.61 74 00	49.81 74 00
Wall hinge	49.51 70 00	49.61 70 00	49.81 70 00
Adapter flange	49.51 79 00	49.61 79 00	49.81 79 00
Intermediate joint	49.51 67 00	49.61 67 00	49.81 67 00
Angle, cast steel	49.51 80 00	49.61 80 00	49.81 80 00
Angle coupling	49.51 75 00	49.61 75 00	49.81 75 00
Flange angle coupling	49.51 78 00	49.61 78 00	49.81 78 00
Coupling	49.51 73 00	49.61 73 00	49.81 73 00
Flange coupling	49.51 77 00	49.61 77 00	49.81 77 00
Console coupling DN	49.51 62 00	49.61 62 00	49.81 62 00
Console adapter 30°	49.51 76 00	49.61 76 00	49.81 76 00
Signal top	49.51 80 10	49.61 80 10	49.81 80 10
Adapter GTK on GT 80/2, GT 60/2			49.81 10 00
Column	49.51 00 04	49.61 00 04	on request

Connecting tube	GT 50/2	GT 60/2	GT 80/2
	Order No.	Order No.	Order No.
Standard length: 0,5 m	10.09 42 20	10.09 42 23	10.09 42 27
Standard length: 1 m	10.09 42 21	10.09 42 24	10.09 42 28
Standard length: 2 m	10.09 42 22	10.09 42 25	10.09 42 29
Standard length: 3 m	10.09 42 42	10.09 42 26	10.09 42 30
Variable length (please state)	10.09 41 56	10.09 41 57	10.09 41 59

Load diagram



Suspension system GTK 80

Product group
49

- Industrial square suspension system with open cable duct for heavy loads
- Modular construction with free accessible cable duct
- Floor, top-mounting or wall mounting

Included in delivery:

System individual components incl. cable duct covering and assembly material



Technical data

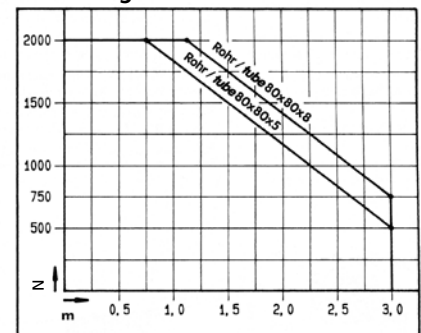
Material	connecting tube: square ST 37 to DIN EN 10305-5, wall thickness 5 mm and/or 8 mm components: spheroidal graphite cast iron and/or cast aluminium cable duct / cover: aluminium extruded profile bearing: ball bearing bellow: textile fabric
Seal	CR and/or NBR
Painting	powder coating
Colour	cable duct / cover: RAL 7035, light grey components: RAL 7043, traffic grey B special colour on request
Ingress protection	IP 65 to EN 60529 on with connection of top-mounting flange/enclosure
Free cable passage	57 cm ²



Product range

	Order No.
Top-mounted joint	49.90 66 01
Foot stand / wall flange	49.90 74 01
Wall hinge	49.90 70 01
Intermediate joint	49.90 67 01
Angle (FH) cast iron	49.90 71 11
Angle (AS) aluminium	49.90 71 20
Angle coupling	49.90 75 01
Coupling	49.90 73 01
Top-mounting flange type A	49.90 00 30
Top-mounting flange type B	49.90 00 20

Load diagram



	Cable duct (standard length to fit relevant suspension tube)	Suspension tube 80 x 80 x 5 mm	Suspension tube 80 x 80 x 8 mm
Standard length: 0,5 m	10.09 42 35	10.09 42 27	10.09 42 31
Standard length: 1 m	10.09 42 36	10.09 42 28	10.09 42 32
Standard length: 2 m	10.09 42 37	10.09 42 29	10.09 42 33
Standard length: 3 m	10.09 42 38	10.09 42 30	10.09 42 34
Variable length (please state)	10.09 41 65*	10.09 41 59	10.09 41 68

* The cable duct needs to be 175 mm shorter than the suspension tube length!

- Mobile stand system for control components
- Optional fixed or manual adjustable version
- Version with 2 or 4 roller systems

Included in delivery:

Moterm with mounted inclining adjuster and adapter plate for Commander systems (please order adapter plate separately)

Technical data

Material	foot: sheet steel profile: DIN EN 573 EN AW-ALMgSi
Painting	powder coating
Colour	profile: RAL 7035, light grey foot: RAL 7021, black grey
Max. load	35 kg (Moterm 1 and 2) 80 kg (Moterm 4 and 5)



Moterm 1 and 2



Moterm 4 and 5

Product range

	Order No.
Moterm 1, fix version, height 1000 mm, 2 rolls	50.01 01 01
Moterm 2, manual adjustable (750 - 1000 mm), 2 rolls	50.01 01 02
Moterm 4, fix version, height 980 mm, 4 rolls	50.01 01 04
Moterm 5, manual adjustable (730 - 1000 mm), 4 rolls	50.01 01 05

Accessories

Adapter plate SL 2000 profile 1	50.01 02 03
Adapter plate SL 2000 profile 2	50.01 02 04
Adapter plate SL 2000 profile 3	50.01 02 05
Adapter plate SL 3000 profile 1	50.01 02 06
Adapter plate SL 3000 profile 2 - 4	50.01 02 07
Adapter plate SL 3000 desktop version	50.01 02 08
Adapter plate universal (unmachined)	50.01 02 09
Adapter plate Beckhoff CP 7032	50.01 02 10
Adapter plate ComTronic	50.01 02 11
Adapter plate SL 3000 profile 4 (direct mounting)	50.01 02 12
Flat panel adapter	50.01 02 13

Inclining adapter

Product group
49 / 50

- Inclining adapter for individual connection between enclosure and ROSE suspension systems or for wall mounting
- Simply handling by open design
- Stepped adjuster allows inclination to suit your application

Including in delivery:

Inclining adapter, pre-assembled flange plates, sealings and mounting material



Technical Data

Material	sheet steel 2,5 mm bellow: PVC, RAL 9005 (jet black)
Painting	powder coating
Colour	RAL 9005, jet black
Temperature range	-40°C to +60°C

Product range

For Limanda and other small enclosures	Order No.
Inclining adapter for mounting to wall or machinery	50.02 00 01
Inclining adapter for suspension system GT 48/2 (tube)	50.02 00 02
Inclining adapter for suspension system GTK electronic	50.02 00 03
Inclining adapter for suspension system GT 48/2 or GTK electronic	50.02 00 04
Inclining adjustment	50.02 01 01
Inclining adapter stainless steel	50.02 10 01
For large Commander enclosures (Commander 1/1F, SL 3000)	
Coupling A-DN	49.85 03 01
Flange A-DN	49.85 05 00

- Complete customized units for maximum operator comfort in all areas of production
- Ingress protection IP 65
- Service friendly construction



Included in delivery:
Standard execution with steel workplate, front door, rear door, plinth, locking system, 2 fix shelves.
Customized execution according demand

Technical Data

Enclosure	Sheet steel base cabinet with front door and rear door, individual internal execution with shelves and removable shelf Dimensions (W x H x D): 600 x 1100 x 600 mm Door with 180° opening area hinged right, lockable
Colour	RAL 7035 / RAL 7043 other colours on request
Ingress protection	IP 65
Customized execution on demand	

Product range	
Standard version	38.03 01 01
Custom made solution acc. specification	38.03 99 99 8

Company _____

Telephone _____

Contact _____

Fax _____

Address _____

E-Mail _____

Base cabinet☐ Standard execution☐ Custom made execution**Colour**☐ Standard: center part RAL 7035, side stripes / work plate RAL 7043☐ Individual colours (please fill in)

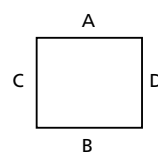
center part: RAL _____ side stripes: RAL _____ work plate: RAL _____

Door☐ front door, rear door☐ front door, rear wall screwed☐ front door with window, rear door☐ front door with window, rear wall screwed**Base**☐ plinth, 100 mm high☐ 4 steerable rolls**Locking system**☐ Triangular lock☐ Double ward☐ Square lock☐ lock cylinder with key☐ other _____**Accessories**☐ connection diagramm pocket A4☐ connection diagramm pocket A3☐ fix shelf☐ removable shelf☐ rack mounting☐ flange plate with seal membrane☐ interior lamp with door switch☐ filter fan☐ outlet filter

quantity _____

side C ☐ side D ☐

quantity _____

side C ☐ side D ☐**Commander systems**☐ ComTronic☐ SL 2000☐ SL 3000☐ SL 4000**Coupling**☐ GTS: foot stand, tube, coupling

tube length _____ mm

☐ GTK electronic: foot stand, tube, coupling

tube length _____ mm

☐ GT 48/2: foot stand, tube, flange coupling

tube length _____ mm

☐ GTN II: foot stand, tube, coupling

tube length _____ mm

☐ GTN II: foot stand turnable☐ GTN II: foot stand turnable with adapter plate☐ inclining adjustment Moterm☐ inclining adapter GTN II☐ inclining adapter GT 48/2 and GTK electronic

Stainless steel enclosure systems

Stainless steel enclosure systems can offer considerable advantages in some application areas in comparison with plastic enclosure solutions:

- Food industries
- Packaging industries
- Hazardous environments
- EMC areas
- All hygienic technical areas

ROSE stainless steel-enclosure systems are manufactured in materials 1.4404 and 1.4301 as standard. This stainless steel quality offers permanent resistance in both rough environments, in the chemical industry and is ideal for the cleaning demands of the food industry. ROSE stainless steel products offer consistent high surface finish quality as standard (longitudinal finish 240 grain), finishing (precise edging and welding) and ingress protection (IP 65 and IP 66 as standard or higher upon request).



Stainless steel industrial enclosures

- 27 enclosure variants with removable lid or hinged door, dimensions from 100 x 100 x 61 mm up to 600 x 380 x 217 mm
- applications: food and packaging industries and harsh environments.

Stainless steel cabinets KSS

- 7 enclosures variants with door and mounting plate, dimensions from 200 x 300 x 155 mm up to 600 x 760 x 210 mm
- applications: food and packaging industries and harsh environments

Commander 400

- 7 size variations in dimensions from 387 x 247 x 162 mm up to 737 x 447 x 362 mm
- applications: operating and display enclosures for food and packaging industries

Commander 410

- Hygienic design Commander
- 6 sizes from 380 x 250 x 150 mm to 500 x 450 x 220 mm

Commander 420

- Operating enclosure for industrial packaging technology
- 6 sizes from 380 x 250 x 150 mm to 500 x 450 x 220 mm

Commander KSSC

- 7 enclosures variants with door in dimensions 200 x 300 x 155 mm up to 600 x 760 x 210 mm
- applications: control enclosure in food and packaging industries

GTH 48 / GTH 60

- stainless steel suspension system in a round design to meet the highest requirements
- applications: hygienic areas, measuring and automation systems and controller constructions

Stainless steel CleanTouch keyboard

- keyboard for all hygienic areas

Stainless steel special versions

- individual enclosure systems customized
- special sizes from 25 pcs.

Stainless steel cable glands

- metric and PG cable glands in standard or Ex versions
- pressure balance element

For detailed information see our catalogue
"Stainless steel enclosure systems"

- Universal industrial enclosure for hygienic areas
- High surface quality 1.4301
- No gaps between lid / base
- Ingress protection up to IP 69K (on request)
- Special versions and sizes available from 25 pcs

Included in delivery:

Enclosure base with screw-down fin and threaded holes for DIN rail mounting, 4 floor break-outs with fixing openings or without fixing openings, sealing rings and mounting nuts, cover with internal threaded bolts and captive lid screws



Technical data

Material	stainless steel 1.25 mm or 1.5 mm; 1.4301/304 other materials on request
Ingress protection	IP 66 to EN 60529 high pressure cleaning-resistant (IP 69K) on request
Seal	VMQ (silicone) EMC on request
Surface	grinded, 240 grain other surface on request
Temperature range	-40°C to +80°C other temperature ranges on request

Product range

Order No.		Dimensions (mm)	
Enclosure with floor break-outs and fixing openings	Enclosure with floor break-outs without fixing openings	L x W x H	Mounting plate
37.10 10 06	37.10 10 96	100 x 100 x 61	10.01 10 53
37.15 10 06	37.15 10 96	150 x 100 x 61	10.01 10 54
37.15 15 08	37.15 15 98	150 x 150 x 81	10.01 10 38
37.20 10 06		200 x 100 x 61	10.01 10 55
37.20 20 08	37.20 20 98	200 x 200 x 81	10.01 10 40
37.20 20 12	37.20 20 92	200 x 200 x 121	10.01 10 40
37.30 15 08		300 x 150 x 81	10.01 10 39
37.30 20 08		300 x 200 x 81	10.01 10 41
37.30 20 12	37.30 20 92	300 x 200 x 121	10.01 10 41
37.30 30 12		300 x 300 x 121	10.01 10 44
37.30 30 16		300 x 300 x 161	10.01 10 44
37.38 38 16		380 x 380 x 161	10.01 10 45
37.40 15 08		400 x 150 x 81	10.01 10 56
37.40 20 12		400 x 200 x 121	10.01 10 43
37.40 30 16		400 x 300 x 161	10.01 10 48
37.50 30 16		500 x 300 x 161	10.01 10 57
37.50 40 16		500 x 400 x 161	10.01 10 49
37.60 20 12		600 x 200 x 121	10.01 10 58
37.99 99 99		Special dimension	

Accessories

Mounting set (gasket, nuts and screws)	37.99 00 01
External hinge set (2 pcs.)	37.00 00 02
External mounting bracket (4 pcs.)	37.10 50 00

Stainless steel industrial enclosures

Product group
37

with hinge IGS

- Universal enclosure with covered hinge and lock
- High quality surface 1.4301
- Optional individual sizes and versions e.g. with flange openings or window from 25 pcs.

Including in delivery:

Enclosure base with bracket clips and threaded bores for attachment of mounting rail, hinged cover, double ward lock, 4 floor break-outs with attachment holes and sealing plugs.



Technical Data

Material	stainless steel 1.25 mm or 1.5 mm 1.4301 / 304 other materials on request
Ingress protection	IP 66 to EN 60529
Seal	VMQ (silicone) EMC on request
Surface	grinded, 240 grain other surface on request
Temperature range	-40°C to +80°C other temperature ranges on request

Product range

Order No.	Dimensions (mm) L x W x H	Mounting plate
37.00 22 09	200 x 250 x 97	10.01 10 66
37.00 22 15	200 x 250 x 157	10.01 10 66
37.00 32 09	350 x 250 x 97	10.01 10 67
37.00 33 16	300 x 300 x 167	10.01 10 44
37.00 44 16	380 x 380 x 167	10.01 10 45
37.00 44 21	380 x 380 x 217	10.01 10 45
37.00 53 16	500 x 300 x 167	10.01 10 57
37.00 63 16	600 x 300 x 167	10.01 10 68
37.00 64 21	600 x 380 x 217	10.01 10 69
37.00 99 00	Special sizes (please state requested dimensions)	

Accessories

Mounting set (gasket, nuts and screws)	37.99 00 01
External mounting bracket (4 pcs.)	37.10 50 00

- Switch gear cabinets with hinged door
- Mounting plate attachment above stud bolts / threaded weld nuts
- Surface grinded all sides (240 grain)
- Optional individual sizes and versions from 25 pcs.

Including in delivery:

Enclosure system with door, double ward lock, 1 x M6 threaded stud bolts in cover and 4 x M6 threaded weld nuts in base.



Technical Data

Material	stainless steel 1.25 mm or 1.5 mm; 1.4301 / 304
Ingress protection	IP 66 to EN 60529
Seal	VMQ (silicone) EMC on request
Surface	grinded, 240 grain
Temperature range	-40°C to +80°C other temperature ranges on request

Product range

Order No.	Dimensions (mm) L x W x H	Mounting plates
37.01 23 15	200 x 300 x 155	37.01 99 01
37.01 34 21	300 x 380 x 210	37.01 99 02
37.01 43 15	400 x 300 x 155	37.01 99 03
37.01 46 21	380 x 600 x 210	37.01 99 04
37.01 55 21	500 x 500 x 210	37.01 99 05
37.01 64 15	600 x 400 x 155	37.01 99 06
37.01 68 21	600 x 760 x 210	37.01 99 07
37.01 99 00	Special dimensions	

- Stainless steel Commander with screwed rear wall for hygienic areas
- Droop acc. to hygienic design regulations
- High material quality

Including in delivery:

Enclosure with screwed rear wall, silicone seal - depending on version with closed or individual manufactured front, internal fixing and coupling hole for suspension system GTH 48



Technical data

Material	stainless steel 1.4404 / 316L
Seal	silicone
Surface	grinded, 240 grain
Ingress protection	IP 66 / IP 69K to EN 60529
Temperature range	-40°C to +80°C

Product range

Order No.	Dimensions (mm) W x H x D	Holes for suspension system (Side A)
56.10 02 01	380 x 250 x 150	GTH 48
56.10 02 02	380 x 250 x 220	GTH 48
56.10 02 03	500 x 350 x 150	GTH 48
56.10 02 04	500 x 350 x 220	GTH 48
56.10 02 05	500 x 450 x 150	GTH 48
56.10 02 06	500 x 450 x 220	GTH 48

Accessories

Order No.	Version
56.20 99 01	Mounting angle set for internal fitting of components



- Stainless steel Commander with door for industrial application
- Optional handle set
- High material quality

Including in delivery:

Enclosure with door, rect angle, silicone seal
- depending on version with closed or individual manufactured front, internal fixing and coupling hole for suspension system GTH 48



Technical data

Material	stainless steel 1.4301/304 other materials on request
Seal	silicone
Surface	grinded, 240 grain
Ingress protection	IP 65 to EN 60529
Temperature range	-40°C to +80°C

Product range

Order No.	Dimensions (mm) W x H x D	Holes for suspension system (Side A)
56.20 01 01	380 x 250 x 150	GTH 48
56.20 01 02	380 x 250 x 220	GTH 48
56.20 01 03	500 x 350 x 150	GTH 48
56.20 01 04	500 x 350 x 220	GTH 48
56.20 01 05	500 x 450 x 150	GTH 48
56.20 01 06	500 x 450 x 220	GTH 48

Accessories

Order No.	Version
56.20 01 90	Handle set for Commander 420, length 225 mm
56.20 01 91	Handle set for Commander 420, length 325 mm
56.20 01 92	Handle set for Commander 420, length 425 mm
56.20 01 99	Handle set for Commander 420, Sonderlänge
56.20 01 93	Handle set ECO for C 420, length 220 mm
56.20 01 94	Handle set ECO for C 420, length 320 mm
56.20 01 95	Handle set ECO for C 420, length 420 mm
56.20 99 01	Mounting angle set for internal fitting of components



- Stainless steel control enclosure, based on cabinet KSS
- Including amplifier plate and hole for ROSE GTH suspension system
- Optional individual sizes and versions from 25 pcs.

Included in delivery:

Enclosure system incl. amplifier plate and GTH coupling hole, with door, double ward lock



Technical data

Material	stainless steel 1.25 mm or 1.5 mm; 1.4301/304
Ingress protection	IP 65 to EN 60529
Seal	VMQ (silicone) EMC on request
Surface	grinded, 240 grain
Temperature range	-40°C to +80°C

Product range

Order No.	Holes for suspension system (side A)	Dimensions (mm) L x W x H	Mounting plates
37.02 23 15	GTH 48	200 x 300 x 155	37.01 99 01
37.02 34 21	GTH 48	300 x 380 x 210	37.01 99 02
37.02 43 15	GTH 48	400 x 300 x 155	37.01 99 03
37.02 46 21	GTH 60	380 x 600 x 210	37.01 99 04
37.02 55 21	GTH 60	500 x 500 x 210	37.01 99 05
37.02 64 15	GTH 60	600 x 400 x 155	37.01 99 06
37.02 68 21	GTH 60	600 x 760 x 210	37.01 99 07
37.02 99 00	please note	special dimensions	

Please state requested dimensions

Special size: from 25 pcs./order

Accessories

Handle set for KSSC (see version C420 p. 105)	on request
---	------------

Suspension system GTH 48 / GTH 60

Product group
57

- Stainless steel tube system with system components for hygienic applications
- Tube diameter 48 and 60 mm
- Tube versions S-, J- and I-shape
- Optional EMC version

Included in delivery:

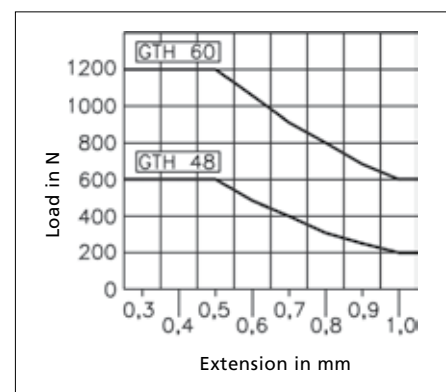
Components and tube mounted if ordered



Technical data

Material	tube: stainless steel 1.4301 system components: stainless steel 1.4305
Ingress protection	IP 65 to EN 60529,
Free cable passage	GTH 48: 41 mm GTH 60: 53 mm
Surface	tube: grinded, 240 grain
Temperature range	-25°C to +60°C

Load diagram



Product range

GTH 48	GTH 60	
Order No.	Order No.	
57.01 73 00	57.02 73 00	coupling
57.01 73 01	57.02 73 01	coupling EMC
57.01 73 02	57.02 73 02	coupling for external tube fitting
57.01 66 00	57.02 66 00	top-mounted joint
57.01 66 01	57.02 66 01	top-mounted joint EMC
57.01 66 02	57.02 66 02	top mounted joint for external tube fitting
57.01 74 00	57.02 74 00	foot stand (hanging / standing)
57.01 72 00	57.02 72 00	foot stand with cable outlet (hanging / standing)
57.01 76 00	57.02 76 00	console adapter
57.01 76 01	57.02 76 01	console adapter hygiene
57.01 79 00	57.02 79 00	wall console
57.01 00 05	57.02 00 05	tube I (500 mm)
57.01 00 10	57.02 00 10	tube I (1000 mm)
57.01 00 15	57.02 00 15	tube I (1500 mm)
57.01 00 99	57.02 00 99	tube I variable length
57.01 02 05	57.02 02 05	tube S (500 mm)
57.01 02 10	57.02 02 10	tube S (1000 mm)
57.01 02 99	57.02 02 99	tube S variable length
57.01 01 05	57.02 01 05	tube J (500 mm)
57.01 01 07	57.02 01 07	tube J (750 mm)
57.01 01 10	57.02 01 10	tube J (1000 mm)
57.01 01 99	57.02 01 99	tube J variable length
57.00 99 00	57.00 99 00	System mounting

Accessories

	GTH 48	GTH 60
Protective cap set (4 caps) for top-mounted joint and foot stand	57.00 99 01	57.00 99 01
Spare blind flange	57.01 99 02	57.02 99 00



Stainless steel special versions

Enquiry ☐

Order ☐

Please copy, complete and fax: +49 (0) 571/5041-6

Company _____

Telephone _____

Contact _____

Fax _____

Address _____

E-Mail _____

Material:

☐ Standard, 1.4301 (304)

optional: ☐ 1.4404 (316L)

☐ other _____

Material thickness:

☐ Standard, 1.25 mm
(up to 600 mm, enclosure length / width)

optional: ☐ 1.5 mm

☐ 2.0 mm

☐ 2.5 mm

☐ Standard, 1.5 mm
(from 600 mm, enclosure length / width)

☐ 3.0 mm

☐ other _____ mm

Enclosure size:

_____ x _____ x _____ mm
(L) (W) (H)

Surface finish:

☐ Standard: Lengthwise grinded, 240

grain optional: ☐ without finishing

☐ lacquered, colour (RAL) _____

☐ bead blasted

☐ brushed

☐ acid etched

☐ electro-polished

Enclosure version

☐ According to drawing

☐ Lid ☐ Hinge on the outside

☐ Door

☐ Hinge on the inside

☐ Lock

☐ screwed

Accessories:

☐ Fittings (seals, nuts, bolts)

☐ External mounting brackets

☐ screwed

☐ welded

Items per annum: _____ Total: _____ Standard offer sizes (batch sizes): _____ / _____ / _____ / _____ / _____ / _____

Documentation enclosed: _____

☐ dxf or dwg file

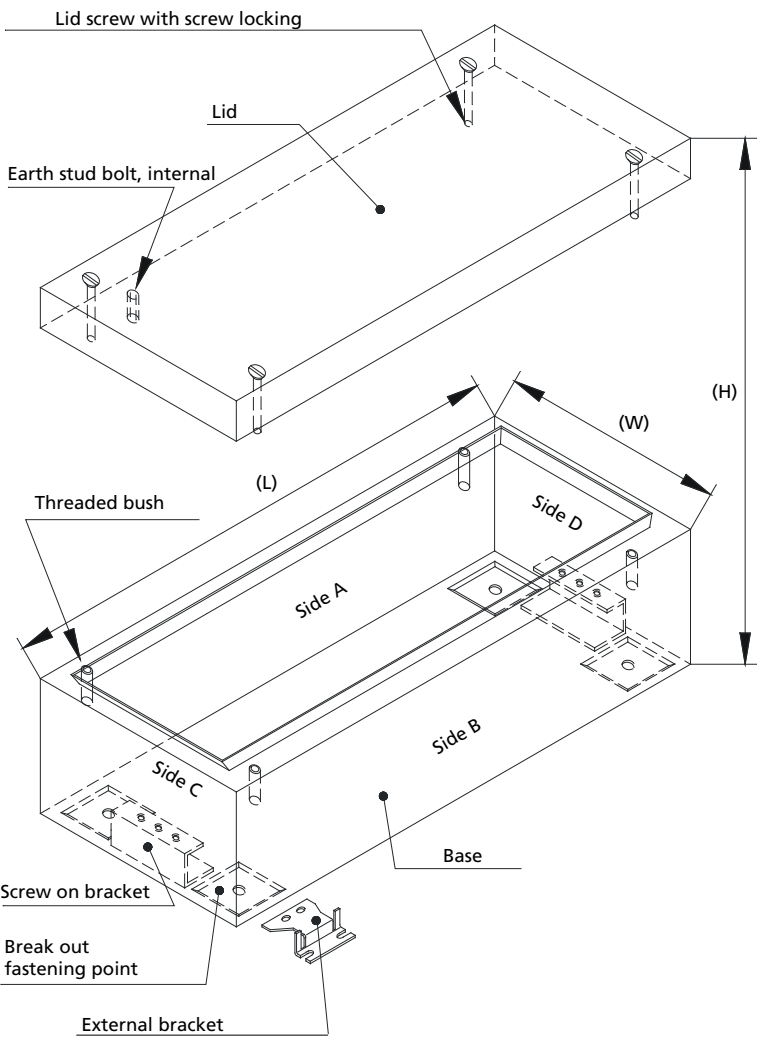
☐ Drawings

☐ Enclosure rating IP _____

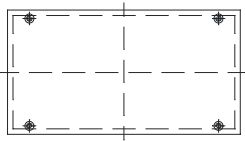
Desired delivery date: _____

Comments: _____

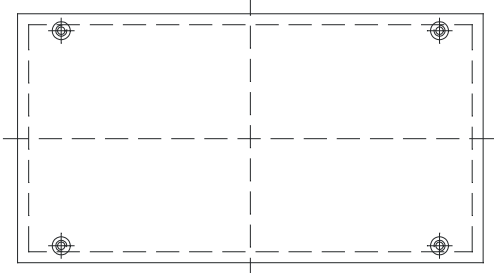
Stainless steel special versions



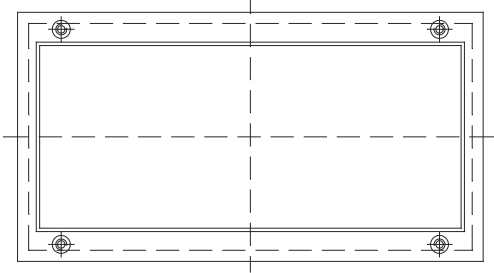
Plan view of side layout



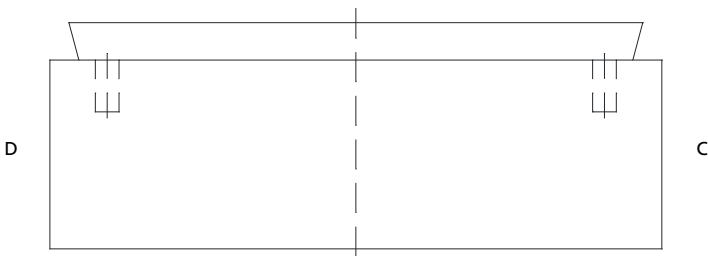
Plan view of lid



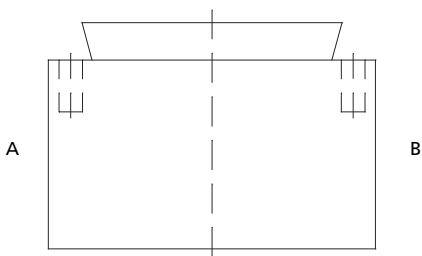
Inside view of base



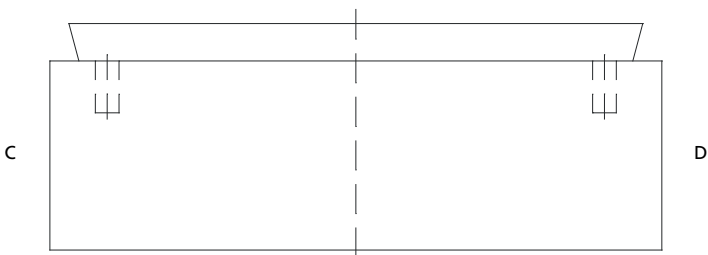
Side A



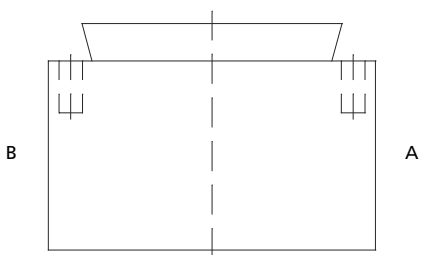
Side C



Side B



Side D



Stainless steel cable glands

Product group
08



Type	Cable gland
Material	stainless steel 1.4305
Sealing insert	NBR
Ingress protection	IP 68, EN 60529
Temperature range	-40°C to +100°C

Type	Cable Ø	AF*	TL*	Order No.
Metric				
M 12 x 1,5	3 - 6,5	14	6,5	08.04 14 12
M 16 x 1,5	5 - 10	22	6	08.04 14 16
M 20 x 1,5	10 - 14	24	6	08.04 14 20
M 25 x 1,5	13 - 18	30	7	08.04 14 25
M 32 x 1,5	20 - 25	41	8	08.04 14 32
M 40 x 1,5	22 - 32	50	8	08.04 14 40



Type	Ex Cable gland
Material	stainless steel 1.4301
Type of protection	Ex e
Equipment group	II
Category	2/3
Atmosphere	G/D
Zone	1, 2, 21, 22
Sealing insert	NBR
Temperature range	-20°C to +95°C
Ingress protection	IP 68, EN 60529
Certifications	ATEX, IECEx, GOST-R, Inmetro, UL

Type	Cable Ø	AF*	TL*	Order No.
Metric				
M 12 x 1,5	3 - 6,5	14	6,5	08.04 02 12
M 16 x 1,5	5 - 10	22	6	08.04 02 16
M 20 x 1,5	10 - 14	24	6	08.04 02 20
M 25 x 1,5	13 - 18	30	7	08.04 02 25
M 32 x 1,5	20 - 25	41	8	08.04 02 32
M 40 x 1,5	22 - 32	50	8	08.04 02 40



Type	Pressure balance element
Material	stainless steel 1.4305
Seal ring	NBR
Ingress protection	IP 66 / IP 69K
Air flow rate	0,4 l/min at 0,1 bar ΔP 5 l/min at 1 bar ΔP
Temperature range	-40°C to +105°C

Type	Cable Ø	AF*	TL*	Order No.
Metric				
M 12 x 1,5		17	10	08.50 10 12



Type	Ex Pressure balance element
Material	stainless steel 1.4305
Type of protection	Ex e
Equipment group	II
Category	2/3
Atmosphere	G/D
Zone	1, 2, 21, 22
Temperature range	-40°C to +105°C
Ingress protection	IP 66, EN 60529
Air flow rate	0,4 l/min at 0,1 bar ΔP 5 l/min at 1 bar ΔP
Certifications	ATEX

Type	Cable Ø	AF*	TL*	Order No.
Metric				
M 12 x 1,5		17	10	08.50 11 12



Type	Ex Drain plug
Material	stainless steel 1.4571
Type of protection	Ex e
Equipment group	II
Category	2/3
Atmosphere	G/D
Zone	1, 2, 21, 22
Temperature range	-50°C to +150°C
Ingress protection	IP 66, EN 60529
Certifications	ATEX, IECEx, GOST-R, Inmetro

Type	Cable Ø	AF*	TL*	Order No.
Metric				
M 20 x 1,5		25	10	08.51 10 20

* AF: width across flats
TL: thread length

Glands from other material see page 121ff

Keypads

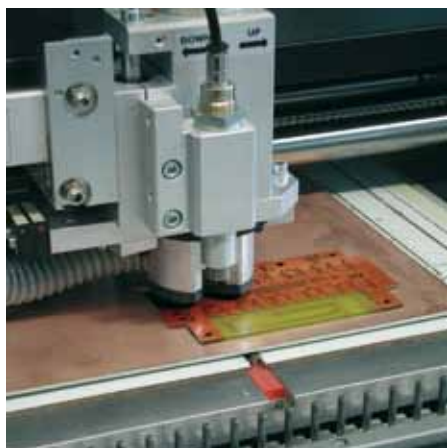
The requirements for dust and water-proof enclosures lead mostly to the use of keypads as operator interfaces.

Many of our enclosures in operating, display and electronic enclosure product ranges are already designed for the fitting of flat entry aids. For building up sets we can offer keypads in various designs adapted to the application case. We can also offer optimum problem solutions from the same supplier at short notice, which saves on the coordination of various enclosures and keypads at the development stage.

This means that we can offer the user a closed enclosure including function surface, in which all that remains is to fit any further modules required.

Prototyping

A special service is offered to customers who require a specimen of a short-stroke or touch sensitive keypad close to the original at short notice (for instance for a trade fair or to speed up the development of a new unit). Within a remarkably short time (48 hours to 1 week) we are capable of developing and producing a fully functional prototype of a keypad. This method also permits modifications routinely arising in the course of development of a device to be implemented without problem at a later date, without generating unnecessary additional costs. As a result, our customers are increasingly making use of the ROSE prototyping method.



Touch sensitive keypads in the conductive silver technology

The conductive silver technology is always used where economical aspects are in the foreground for small and medium quantities. Our touch sensitive keypads are entirely produced according to the screen printing method allowing any individual design to be realised without problem. Touch

sensitive keypads in conductive silver technology permit the integration of components, however, it is more complex than with other keypad types. The keyboard is usually connected to a PCB by means of a flexible membrane cable or using socket clinchers/plugs.



Touch sensitive keypads on FR 4 (gold plated)

This high-quality membrane type is almost predestined for a comprehensive integration of modules in input units. Due to the gold plated contact surfaces, a very good contact quality is achieved. Sealing to the enclosure is absolutely reliable. Protection classes of IP 65 and better can be easily reached with this type of keypad.

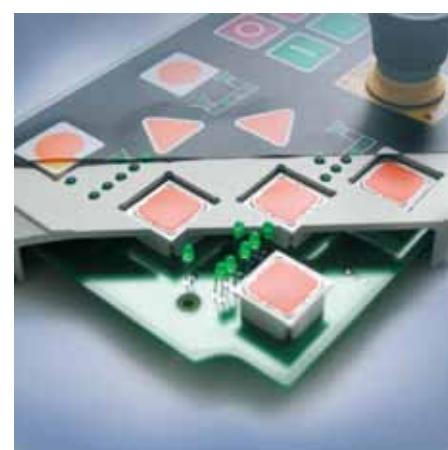
Keypad connection to the customer's electronic system can be optionally made using a ribbon cable or direct contacts (pin - socket). The front membranes of the FR 4 touch sensitive keypads can be produced with all printing techniques, e.g. screen or digital printing, thereby ensuring a high degree of design freedom.



Short stroke keypads

Short stroke keypads are predominantly used in industries placing very high requirements on the input units, e.g. in machine and production line construction and for military purposes. A big advantage of the short stroke keypad is the very good tactile key feedback, even when operating the keys while wearing working gloves or when the input unit is soiled. Also with this type of keypad,

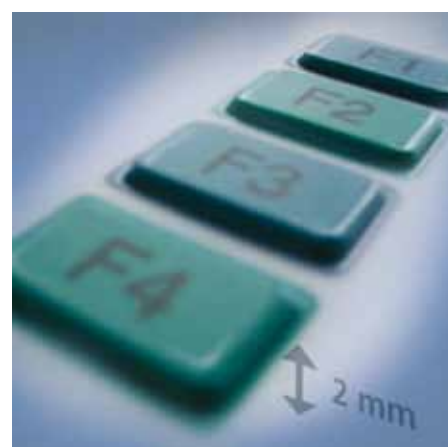
modules can be integrated easily. Further advantages of this quality keypad include the connection possibility using a terminal block or header (no capillary effect from membrane cables) and the possibility of surface lighting. Short stroke keypads are frequently combined with interfacing modules (fieldbus, PC interfaces).



Profiline keypads

The patented Profiline methods permit the production of touch sensitive keypads, the tactile behaviour of which is almost equivalent to that of short stroke keypads. A spacer inserted between the clip-on pane

and the front membrane creates an excellent feedback via the switching process, so that the Profiline technology can be used even under the most demanding environmental conditions.



For assembling of enclosures there is available a huge programme range of switches / push buttons:

- enabling switches
- emergency stop button
- accessories



2-step enabling switch (1NO), blue

Order No. **83.50 00 10**

2-step enabling switch (1NC/1NO), blue

Order No. **83.50 00 09**

Technical data

Contact loading	48 V (AC), 500 mA 250 V (AC), 200 mA 50 V (DC), 200 mA
Ingress protection	IP 67 front side
Temperature range	-40°C to +125°C (no condensation)
Volume resistance	max. 50 mW (initial value)
Service life	≥ 5 x 10 ⁵ switchings



Emergency stop button (2NC), Ø 25mm, red

Order No. **83.50 00 02**

Technical data

Contact system and fitting	2 NC
Ingress protection	IP 65 front side
Temperature range	-25°C to +70°C (no condensation)
Connections	galvanized, suitable to 4-pole multipoint socket connector
Switching voltage	0,02 to 25 V AC/DC
Switching current	0,1 to 1 A
Volumne resistance	< 100 mW
Duration of bounce	< 10 ms
Service life	> 1,5 x 10 ⁴ switchings



Emergency stop button with switch unit (2NC), Ø 28 mm, red

Order No. **83.50 00 03**

Technical data

Contact system and fitting	self cleaning bridge forming contact (Ag), 2 NC
Ingress protection	IP 65 front side
Temperature range	-25°C to +70°C (no condensation)
Connections	Flat plug 2.8 x 0.8
Switching voltage	AC: 250 V / DC: 24 V (further voltage on request)
Switching current	AC: 1,5 A / DC: 2,0 A
Volume resistance	max. 20 mW (initial value)
Service life	≥ 3 x 10 ⁴ switchings

Electro-mechanical components



PCB plug-socket for emergency stop button, Ø 25 mm
Order No. **83.90 00 01**



Ribbon cable
10 cm with multipoint socket connector and strip, AMP 4-pole for emergency stop button Ø 25 mm
Order No. **83.90 00 02**



Emergency stop button (3NC/1NO), Ø 29 mm, red
Order No. **83.50 00 04**

Stop push button (3NC/1NO), Ø 29 mm, grey
Order No. **83. 50 00 05**

Technical data	
Contact system and fitting	obligation-led contacts (3 NC / 1 NO)
Ingress protection	IP 65 front side
Temperature range	-25°C to +60°C (no condensation)
Connections	soldered connection
Switching voltage (direct contact)	AC(12): 250 V / DC(12): 30 V
Switching current (direct contact)	AC(12): 3,0 A / DC(12): 2,0 A
Switching voltage (indirect contact)	AC(12): 250 V / DC(12): 30 V
Switching current (indirect contact)	AC(12): 0,6 A / DC(12): 2,0 A
Volume resistance	max. 50 mW (initial value)
Service life	≥ 1 x 10 ⁵ switchings

Electro-mechanical components



3-step enabling switch (2 changer), 80 x 22, black

Order No. **83.50 00 06**

Technical data	
Contact system and fitting	2 main switches (changer)
Contact rating	30 V DC, max. 0,5 A
Ingress protection	IP 65
Temperature range	0°C to +50°C
Fulfilled standards	89/392/EWG; IEC 204-1: EN 60204/DIN VDE 0113; DIN VDE 0110: EN292



3-step enabling switch (2 changer), 55 x 25, yellow

Order No. **83.50 00 07**

Technical data	
Contact system and fitting	2 main switches (changer)
Ingress protection	IP 65 (with rubber cap)
Temperature range	-25°C to +60°C (no condensation)
Connections	soldered connection
Switching voltage	AC(12): 125 V / DC(12): 30 V
Switching current	AC(12): 1,0 A / DC(12): 1,0 A
Volume resistance	max. 50 mW (initial value)
Service life	≥ 1 x 10 ⁵ switchings



3-step enabling switch (2 changer), Ø 20 mm, yellow

Order No. **83.50 00 08**

Technical data	
Contact system and fitting	2 main switches (changer)
Ingress protection	IP 65 (with rubber cap)
Temperature range	-10°C bis +60°C (no condensation)
Connections	soldered connection
Switch voltage	AC(12): 125 V / DC(12): 30 V
Switch current	AC(12): 0,5 A / DC(12): 1,0 A
Volume resistance	max. 50 mW (initial value)
Service life	≥ 1 x 10 ⁵ switchings

Emergency stop label for command element, 16 mm, yellow, 4 speeches, 40 x 40 mm

Order No. **83.90 00 07**

Electro-mechanical components

Product allocation

Products	2-step enabling switch (1NO), blue	2-steps enabling switch (1NO/1NC), blue	Emergency stop button (2NC), Ø 25 mm, red	PCB-plug-socket for emergency stop button Ø 25 mm	Ribbon cable 10 cm with multipoint socket connector and strip, AMP 4-pole for emergency stop button, Ø 25 mm	Emergency stop button with contact block (2NC), Ø 28 mm, red
Order No.	83.50 00 10	83.50 00 09	83.50 00 02	83.90 00 01	83.90 00 02	83.50 00 03
Taguan 130			•	•	•	
Taguan 180			•	•	•	
Taguan 230			•	•	•	
Beluga 180	•	•	•	•	•	•
Beluga 220	•	•	•	•	•	•
Beluga 380	•	•	•	•	•	•
Pilot 250	•	•	•	•	•	•
Pilot 50			•	•	•	•
Pilot 10			•	•	•	•
Pilot 20			•	•	•	•
Pilot 30			•	•	•	•
Pilot 110			•	•	•	•
Pilot 120			•	•	•	•
Pilot 130			•	•	•	•
Pilot 140			•	•	•	•
Limanda I Handle set	•	•				
Limanda I	•	•	•	•	•	•
Limanda II	•	•	•	•	•	•
Norvent	•	•	•	•	•	•

Products	Emergency stop button (3NC/1NO), Ø 29 mm, red	Stop button (3NC/1NO), Ø 29 mm, grey	3-step enabling switch (2 changer), 80 x 22, black	3-step enabling switch (2 changer), 55 x 25, yellow	3-step enabling switch (2 changer), Ø 20 mm, yellow
Order No.	83.50 00 04	83.50 00 05	83.50 00 06	83.50 00 07	83.50 00 08
Taguan 130					
Taguan 180					
Taguan 230					
Beluga 180	•	•			
Beluga 220	•	•			•
Beluga 380	•	•			
Pilot 250	•	•	•	•	•
Pilot 50	•	•			
Pilot 10	•	•			•
Pilot 20	•	•			
Pilot 30	•	•			
Pilot 110	•	•			•
Pilot 120	•	•			
Pilot 130	•	•			
Pilot 140	•	•			
Limanda I Handle set			•		•
Limanda I	•	•	•		•
Limanda II	•	•	•	•	•
Norvent	•	•	•	•	•

Cable glands

Cable entries and cable glands must be tightly sealed in accordance with the requirements. ROSE offers a wide range of cable gland products for this purpose:

- versions in plastic, aluminium, brass and stainless steel
- for Standard, Ex and EMC applications
- for ingress protection to IP 68

Note: Other cable glands on request.



Plastic cable glands

- Product range in polyamide and polyester version (PG and metric thread) as standard or Ex cable gland
- accessories: stopping plugs, lock nuts, self-sealing grommets and PE seals

Brass cable glands

- Product range in 9 versions (PG and metric thread) as standard, Ex or EMC cable glands
- accessories: stopping plugs and lock nuts

Stainless steel cable glands

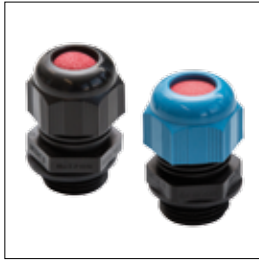
- Product range in 2 versions (PG and metric thread) as standard or Ex cable gland (s. page 112)

Pressure balance elements

- Stainless steel (s. page 113) and plastic (s. page 120) as standard or Ex version

Cable glands Ex version

Product group
08



Type	Ex Cable gland
Material	polyamide 6
Colour	jet black, RAL 9005 light blue, RAL 5012
Type of protection	Ex e
Equipment group	II
Category	2/3
Atmosphere	G/D
Zone	1, 2, 21, 22
Temperature range	-20°C to +80°C
Ingress protection	IP 66, EN 60529 IP 68 with additional sealing insert
Certificates	ATEX

Type	Cable Ø	AF*	TL*	Order No.
PG				black
13,5	6 - 12	24	9	08.02 12 13
16	10 - 14	27	10	08.02 12 16
21	13 - 18	33	11	08.02 12 21
29	18 - 25	42	11	08.02 12 29
36	22 - 32	53	13	08.02 12 36
42	30 - 38	60	13	08.02 12 42
48	34 - 44	65	14	08.02 12 48
				blue
13,5	6 - 12	24	9	08.02 11 13
16	10 - 14	27	10	08.02 11 16
21	13 - 18	33	11	08.02 11 21
29	18 - 25	42	11	08.02 11 29
36	22 - 32	53	13	08.02 11 36
42	30 - 38	60	13	08.02 11 42
48	34 - 44	65	14	08.02 11 48



Type	Ex Cable gland
Material	polyamide 6
Sealing insert	neoprene
Colour	jet black, RAL 9005 light blue, RAL 5012
Type of protection	Ex e
Equipment group	II
Category	2/3
Atmosphere	G/D
Zone	1, 2, 21, 22
Temperature range	M12: -20°C to +80°C M16 - M63: -35°C to +95°C
Ingress protection	IP 68
Certificates	ATEX, IECEx, GOST-R, Inmetro, UL

Type	Cable Ø	AF*	TL*	Order No.
Metric				black
M 12 x 1,5	4 - 6,5	15	8	08.02 03 12
M 16 x 1,5	5 - 8	19	10	08.02 03 16
M 20 x 1,5	7 - 12	24	10	08.02 03 20
M 25 x 1,5	12 - 18	33	10	08.02 03 25
M 32 x 1,5	16 - 25	42	10	08.02 03 32
M 40 x 1,5	22 - 32	53	10	08.02 03 40
M 50 x 1,5	28 - 38,5	60	12	08.02 03 50
M 63 x 1,5	40 - 48	70	12	08.02 03 63
				blue
M 12 x 1,5	4 - 6,5	15	8	08.02 04 12
M 16 x 1,5	5 - 8	19	10	08.02 04 16
M 20 x 1,5	7 - 12	24	10	08.02 04 20
M 25 x 1,5	12 - 18	33	10	08.02 04 25
M 32 x 1,5	16 - 25	42	10	08.02 04 32
M 40 x 1,5	22 - 32	53	10	08.02 04 40
M 50 x 1,5	28 - 38,5	60	12	08.02 04 50
M 63 x 1,5	40 - 48	70	12	08.02 04 63

* AF: width across flats
TL: thread length

Cable gland Ex version

Product group
08



Type	Ex Cable gland for cable with steel wire armour (SWA)
Material	brass nickel-plated
Type of protection	Ex d, Ex e
Equipment group	II
Category	2/3
Atmosphere	G/D
Zone	1, 2, 21, 22
Temperature range	-60°C to +130°C
Ingress protection	IP 66, EN 60529 IP 68 with additional sealing insert
Certificates	ATEX, IECEx, GOST-R, GOST-K, Inmetro

Type	Clamping range		Clamping range				Order No.
	cable sheath external		cable sheath internal		with across flats	thread length	
	≥	≤	≥	≤			
M20	6,1	13,2	3,1	8,6	24,0	15,0	08.03 06 20
M20	9,5	15,9	6,1	11,6	24,0	15,0	08.03 06 21
M20	12,5	20,9	6,5	13,9	30,5	15,0	08.03 06 22
M25	14	22	11,1	19,9	37,5	15,0	08.03 06 25
M25	18,2	26,2	11,1	19,9	37,5	15,0	08.03 06 26
M32	23,7	33,9	17	26,2	46,0	15,0	08.03 06 32
M40	27,9	40,4	22	32,1	55,0	15,0	08.03 06 40
M50	35,2	46,7	29,5	38,1	60,0	15,0	08.03 06 50
M50	40,4	53,1	35,6	44,0	70,0	15,0	08.03 06 51
M63	45,6	59,4	40,1	49,9	75,0	15,0	08.03 06 63
M63	54,6	65,9	47,2	55,9	80,0	15,0	08.03 06 64



Type	Ex Cable gland for cable with steel tape armour and steel wired braid (STA, SWB)
Material	brass nickel-plated
Type of protection	Ex d, Ex e
Equipment group	II
Category	2/3
Atmosphere	G/D
Zone	1, 2, 21, 22
Temperature range	-60°C to +130°C
Ingress protection	IP 66, EN 60529 IP 68 with additional sealing insert
Certificates	ATEX, IECEx, GOST-R, GOST-K, Inmetro

Type	Clamping range		Clamping range				Order No.
	cable sheath external		cable sheath internal		with across flats	thread length	
	≥	≤	≥	≤			
M20	6,1	13,2	3,1	8,6	24,0	15,0	08.03 07 20
M20	9,5	15,9	6,1	11,6	24,0	15,0	08.03 07 21
M20	12,5	20,9	6,5	13,9	30,5	15,0	08.03 07 22
M25	14	22	11,1	19,9	37,5	15,0	08.03 07 25
M25	18,2	26,2	11,1	19,9	37,5	15,0	08.03 07 26
M32	23,7	33,9	17	26,2	46,0	15,0	08.03 07 32
M40	27,9	40,4	22	32,1	55,0	15,0	08.03 07 40
M50	35,2	46,7	29,5	38,1	60,0	15,0	08.03 07 50
M50	40,4	53,1	35,6	44,0	70,0	15,0	08.03 07 51
M63	45,6	59,4	40,1	49,9	75,0	15,0	08.03 07 63
M63	54.6	65.9	47,2	55.9	80,0	15,0	08.03 07 64



Type	Ex Cable gland
Material	brass nickel-plated
Type of protection	Ex d, Ex e
Equipment group	II
Category	2/3
Atmosphere	G/D
Zone	1, 2, 21, 22
Temperature range	-60°C to +130°C
Ingress protection	IP 66, EN 60529 IP 68 with additional sealing insert
Certificates	ATEX, IECEx, GOST-R, GOST-K, Inmetro

Type	Clamping range		Width across flats	Thread length	Order No.
	≥	≤			
M20	3,2	8,7	24,0	15,0	08.03 05 20
M20	6,1	11,7	24,0	15,0	08.03 05 21
M20	6,5	14	27,0	15,0	08.03 05 22
M25	11,1	20	36,0	15,0	08.03 05 25
M32	17	26,3	41,0	15,0	08.03 05 32
M40	23,5	32,2	50,0	15,0	08.03 05 40
M50	31	38,2	55,0	15,0	08.03 05 50
M50	35,6	44,1	60,0	15,0	08.03 05 51
M63	41,5	50	70,0	15,0	08.03 05 63
M63	47,2	56	75,0	15,0	08.03 05 64



Type	Ex Blind plug
Material	brass nickel-plated
Type of protection	Ex d, Ex e
Equipment group	II
Category	2/3
Atmosphere	G/D
Zone	1, 2, 21, 22
Temperature range	-60°C to +130°C
Sealing insert	viton
Ingress protection	IP 68
Certificates	ATEX, IECEx, GOST-R, GOST-K, Inmetro

Type	Width across flats	Thread length	Order No.
M16	24,0	15,0	08.03 04 16
M20	27,0	15,0	08.03 04 20
M25	36,0	15,0	08.03 04 25
M32	41,0	15,0	08.03 04 32
M40	50,0	15,0	08.03 04 40
M50	60,0	15,0	08.03 04 50
M63	75,0	15,0	08.03 04 63

Cable glands Ex version

Product group
08



Type	Ex Cable gland
Material	brass nickel-plated
Type of protection	Ex e
Equipment group	II
Category	2/3
Atmosphere	G/D
Zone	1, 2, 21, 22
Temperature range	-40°C to +100°C
Ingress protection	IP 66, EN 60529 IP 68 with additional sealing insert
Certificates	ATEX, GOST-R, Inmetro

Type	Cable Ø	AF*	TL*	Order No.
PG				
7	4,5 - 6,5	14	5	08.03 01 07
9	5 - 9,5	17	6	08.03 01 09
11	7 - 11,5	20	6	08.03 01 11
13,5	8 - 13	22	6,5	08.03 01 13
16	9 - 15	24	6,5	08.03 01 16
21	12 - 19	30	7	08.03 01 21
29	17 - 26	40	8	08.03 01 29
36	23 - 34,5	50	9	08.03 01 36
42	28 - 40	58	10	08.03 01 42
48	36 - 48	65	10	08.03 01 48



Type	Ex Cable gland
Material	brass nickel-plated
Type of protection	Ex e
Equipment group	II
Category	2/3
Atmosphere	G/D
Zone	1, 2, 21, 22
Temperature range	-40°C bis +100°C
Ingress protection	IP 66, EN 60529 IP 68 with additional sealing insert
Certificates	ATEX, GOST-R, Inmetro

Type	Cable Ø	AF*	TL*	Order No.
Metric				
M 12 x 1,5	4,5 - 6,5	14	5	08.02 05 12
M 16 x 1,5	5 - 9,5	17	5	08.02 05 16
M 20 x 1,5	8 - 13	22	6	08.02 05 20
M 25 x 1,5	9 - 16	27	7	08.02 05 25
M 32 x 1,5	12 - 21	34	8	08.02 05 32
M 40 x 1,5	16 - 27	42	8	08.02 05 40
M 50 x 1,5	23 - 35	55	9	08.02 05 50
M 63 x 1,5	36 - 48	65	10	08.02 05 63



Type	Ex Blind plug
Material	brass nickel-plated
Type of protection	Ex e
Equipment group	II
Category	2/3
Atmosphere	G/D
Zone	1, 2, 21, 22
Temperature range	-20°C bis +80°C
Ingress protection	IP 66, EN 60529 IP 68 with additional flat seal
Certificates	ATEX, GOST-R, Inmetro

Type	Cable Ø	AF*	TL*	Order No.
PG				
7		14	10	08.03 03 07
9		19	10	08.03 03 09
11		22	10	08.03 03 11
13,5		24	10	08.03 03 13
16		27	10	08.03 03 16
21		32	12	08.03 03 21
29		41	12	08.03 03 29
36		55	14	08.03 03 36



Type	Ex Blind plug
Material	brass nickel-plated
Type of protection	Ex e/d
Equipment group	II
Category	2/3
Atmosphere	G/D
Zone	1, 2, 21, 22
Temperature range	-40°C to +100°C
Ingress protection	IP 66, EN 60529 IP 68 with additional sealing insert
Certificates	ATEX, GOST-R

Type	Cable Ø	AF*	TL*	Order No.
Metric				
M 12 x 1,5		14	12	08.02 08 12
M 16 x 1,5		18	12	08.02 08 16
M 20 x 1,5		23	12	08.02 08 20
M 25 x 1,5		29	12	08.02 08 25
M 32 x 1,5		39	12	08.02 08 32
M 40 x 1,5		45	15	08.02 08 40
M 50 x 1,5		58	15	08.02 08 50
M 63 x 1,5		70	19	08.02 08 63

* AF: width across flats
TL: thread length



Type	Ex Blind plug
Material	polycarbonate
Colour	jet black, RAL 9005
Type of protection	Ex e
Equipment group	II
Category	2/3
Atmosphere	G/D
Zone	1, 2, 21, 22
Sealing insert	neoprene
Temperature range	-35°C to +95°C
Ingress protection	IP 68
Certificates	ATEX, IECEx, GOST-R, Inmetro

Type	Cable Ø	AF*	TL*	Order No.
PG				
9		19	10	08.03 02 09
11		22	10	08.03 02 11
13,5		24	10	08.03 02 13
16		27	10	08.03 02 16
21		32	12	08.03 02 21
29		41	12	08.03 02 29
36		55	14	08.03 02 36
42		60	16	08.03 02 42
48		65	16	08.03 02 48



Type	Ex Blind plug
Material	polyamide PA6 Gf
Colour	jet black, RAL 9005
Type of protection	Ex e
Equipment group	II
Category	2/3
Atmosphere	G/D
Zone	1, 2, 21, 22
Sealing insert	neoprene
Temperature range	-35°C to +90°C
Ingress protection	IP 68
Certificates	ATEX, IECEx, GOST-R, Inmetro

Type	Cable Ø	AF*	TL*	Order No.
Metric				
M 12 x 1,5		16	8	08.02 07 12
M 16 x 1,5		20	8	08.02 07 16
M 20 x 1,5		26	9	08.02 07 20
M 25 x 1,5		32	10	08.02 07 25
M 32 x 1,5		40	11	08.02 07 32
M 40 x 1,5		48	12	08.02 07 40
M 50 x 1,5		55	13	08.02 07 50
M 63 x 1,5		70	15	08.02 07 63



Type	Drain plug
Material	polyamide
Type of protection	Ex e
Equipment group	II
Category	2/3
Atmosphere	G/D
Zone	1, 2, 21, 22
Temperature range	-50°C to +85°C
Ingress protection	IP66, EN 60529
Certificates	ATEX, IECEx, GOST-R

Type	Cable Ø	AF*	TL*	Order No.
Metric				
M 25 x 1,5		35	10	08.51 01 25

* AF: width across flats
TL: thread length



Type	Cable gland
Material	polyamide 6 V2
Colour	light grey, RAL 7035
Ingress protection	IP 68 - 5 bar
Temperature range	-20°C to +100°C

Type	Cable Ø	AF*	TL*	Order No.
PG				
7	3 - 6,5	15	8	08.02 02 07
9	4 - 8	19	8	08.02 02 09
11	5 - 10	22	8	08.02 02 11
13,5	6 - 12	24	9	08.02 02 13
16	10 - 14	27	10	08.02 02 16
21	13 - 18	33	11	08.02 02 21
29	18 - 25	42	11	08.02 02 29
36	22 - 32	53	13	08.02 02 36
42	30 - 38	60	13	08.02 02 42
48	34 - 44	65	14	08.02 02 48
Metric				
M 12 x 1,5	3 - 6	15	8	08.08 05 12
M 16 x 1,5	5 - 10	20	8	08.08 05 16
M 20 x 1,5	8 - 13	24	8	08.08 05 20
M 25 x 1,5	11 - 17	29	8	08.08 05 25
M 32 x 1,5	15 - 21	36	10	08.08 05 32
M 40 x 1,5	19 - 28	46	10	08.08 05 40
M 50 x 1,5	27 - 35	55	12	08.08 05 50
M 63 x 1,5	32 - 42	68	12	08.08 05 63



Type	Blind plug
Material	polyamide 6
Colour	light grey, RAL 7035
Ingress protection	IP 54 IP 66 with additional sealing insert
Temperature range	-40°C to +100°C

Type	Cable Ø	AF*	TL*	Order No.
PG				
7			6	08.02 06 07
9			6,5	08.02 06 09
11			6,5	08.02 06 11
13,5			6,5	08.02 06 13
16			6,5	08.02 06 16
21			8	08.02 06 21
29			8	08.02 06 29
Metrisch				
M 12 x 1,5			6	08.09 05 12
M 16 x 1,5			6	08.09 05 16
M 20 x 1,5			6	08.09 05 20
M 25 x 1,5			8	08.09 05 25
M 32 x 1,5			8	08.09 05 32
M 40 x 1,5			8	08.09 05 40

* AF: width across flats
TL: thread length



Type	Counter nut
Material	polyamide 6
Colour	light grey, RAL 7035
Temperature range	-20°C to +80°C

Type	Cable Ø	AF*	TL*	Order No.
PG				
7		19		08.02 09 07
9		22		08.02 09 09
11		24		08.02 09 11
13,5		27		08.02 09 13
16		30		08.02 09 16
21		36		08.02 09 21
29		46		08.02 09 29
36		60		08.02 09 36
42		65		08.02 09 42
48		70		08.02 09 48
Metric				
M 12 x 1,5		18		08.09 07 12
M 16 x 1,5		22		08.09 07 16
M 20 x 1,5		26		08.09 07 20
M 25 x 1,5		32		08.09 07 25
M 32 x 1,5		41		08.09 07 32
M 40 x 1,5		50		08.09 07 40
M 50 x 1,5		60		08.09 07 50
M 63 x 1,5		75		08.09 07 63



Type	Seal
Material	HD-Polyethylene
Colour	transparent
Temperature range	-30°C to +70°C
metric on request	

Type	Cable Ø	AF*	TL*	Order No.
PG				
7				08.00 08 07
9				08.00 08 09
11				08.00 08 11
13,5				08.00 08 13
16				08.00 08 16
21				08.00 08 21
29				08.00 08 29
36				08.00 08 36



Type	Blending protection
Material	polyamide 6 V2
Colour	jet black, RAL 9005
Ingress protection	IP 68 - 5 bar
Temperature range	-20°C to +100°C

Type	Cable Ø	AF*	TL*	Order No.
Metric				
M 12 x 1,5	3 - 6,5	15	8	08.10 01 12
M 16 x 1,5	5 - 10	22	15	08.10 01 16
M 20 x 1,5	6 - 12	24	11	08.10 01 20
M 25 x 1,5	13 - 18	33	15	08.10 01 25



Type	Pressure balance element
Material	polyamide 6
Colour	jet black RAL 9005 light grey RAL 7035
Ingress protection	IP 68 / IP 69K
Air flow rate	0,8 l/min at 0,1 bar ΔP 7,6 l/min at 1 bar ΔP
Temperature range	-40°C to +105°C

Type	Colour	AF*	TL*	Order No.
Metric				
M 12 x 1,5	jet black	17	6,5	08.50 01 12
M 12 x 1,5	light grey	17	6,5	08.50 02 12
M 12 x 1,5	light grey	17	10	08.50 04 12

* AF: width across flats
TL: thread length

Brass Cable glands and accessories

Product group
08



Type	Cable gland
Material	brass nickel-plated
Sealing insert	NBR
Ingress protection	IP 68
Temperature range	-40°C to +100°C

Type	Cable Ø	AF*	TL*	Order No.
PG				
7	3 - 6,5	14	6	08.04 03 07
9	4 - 8	17	6	08.04 03 09
11	5 - 10	20	6	08.04 03 11
13,5	6 - 12	22	6,5	08.04 03 13
16	10 - 14	24	6,5	08.04 03 16
21	13 - 18	30	7	08.04 03 21
29	18 - 25	40	8	08.04 03 29
36	22 - 32	50	10	08.04 03 36
42	30 - 38	58	12	08.04 03 42
48	34 - 44	64	14	08.04 03 48
Metrisch				
M 12 x 1,5	3 - 6,5	14	6	08.08 04 12
M 16 x 1,5	4 - 8	20	7	08.08 04 16
M 20 x 1,5	6 - 12	22	8	08.08 04 20
M 25 x 1,5	10 - 14	27	8	08.08 04 25
M 32 x 1,5	13 - 18	30	9	08.08 04 32
M 40 x 1,5	18 - 25	40	9	08.08 04 40
M 50 x 1,5	22 - 32	50	9	08.08 04 50
M 63 x 1,5	34 - 44	64	14	08.08 04 63



Type	Blind plug
Material	brass nickel-plated
Sealing insert	NBR
Ingress protection	IP 68
Temperature range	-40°C to +100°C

Type	Cable Ø	AF*	TL*	Order No.
PG				
7		15	5	08.04 06 07
9		18	5	08.04 06 09
11		22	5	08.04 06 11
13,5		24	6	08.04 06 13
16		26	6	08.04 06 16
21		32	6	08.04 06 21
29		40	8	08.04 06 29
36		50	9	08.04 06 36
42		57	10	08.04 06 42
Metrisch				
M 12 x 1,5		14	5	08.09 04 12
M 16 x 1,5		18	5	08.09 04 16
M 20 x 1,5		22	6	08.09 04 20
M 25 x 1,5		28	7	08.09 04 25
M 32 x 1,5		35	8	08.09 04 32
M 40 x 1,5		44	8	08.09 04 40
M 50 x 1,5		54	9	08.09 04 50
M 63 x 1,5		67	10	08.09 04 63



Type	Counter nut
Material	brass nickel-plated

Type	Cable Ø	AF*	TL*	Order No.
PG				
7		15		08.04 09 07
9		18		08.04 09 09
11		21		08.04 09 11
13,5		23		08.04 09 13
16		26		08.04 09 16
21		32		08.04 09 21
29		41		08.04 09 29
Metrisch				
M 12 x 1,5		15		08.09 09 12
M 16 x 1,5		19		08.09 09 16
M 20 x 1,5		23		08.09 09 20
M 25 x 1,5		29		08.09 09 25
M 32 x 1,5		36		08.09 09 32
M 40 x 1,5		45		08.09 09 40
M 50 x 1,5		55		08.09 09 50
M 63 x 1,5		70		08.09 09 63



Type	Cable gland EMC
Material	brass nickel-plated
Sealing insert	PG: NBR Metric: neoprene
Ingress protection	IP 68 - 10 bar
Temperature range	PG: -40°C to +100°C Metric: -30°C to +100°C

Type	Cable Ø	AF*	TL*	Order No.
PG				
7	3 - 6,5	14	5	08.07 00 07
9	4 - 8	17	6	08.07 00 09
11	5 - 10	20	6	08.07 00 11
13.5	6 - 12	22	6,5	08.07 00 13
16	10 - 14	24	6,5	08.07 00 16
21	13 - 18	30	7	08.07 00 21
29	18 - 25	40	8	08.07 00 29
36	22 - 32	50	8	08.07 00 36
42	32 - 38	57	9	08.07 00 42
48	37 - 44	64	10	08.07 00 48
Metric				
M 12 x 1,5	3,5 - 7	16	6,5	08.07 01 12
M 16 x 1,5	4,5 - 9	20	7	08.07 01 16
M 20 x 1,5	7 - 12,5	24	8	08.07 01 20
M 25 x 1,5	9 - 16,5	29	8	08.07 01 25
M 32 x 1,5	11 - 21	36	9	08.07 01 32
M 40 x 1,5	19 - 28	45	9	08.07 01 40



Type	Counter nut EMC
Material	brass nickel-plated

Type	Cable Ø	AF*	TL*	Order No.
PG				
7		15		08.07 09 07
9		18		08.07 09 09
11		21		08.07 09 11
13.5		23		08.07 09 13
16		26		08.07 09 16
21		32		08.07 09 21
29		41		08.07 09 29
36		51		08.07 09 36
42		60		08.07 09 42
48		64		08.07 09 48
Metric				
M 12 x 1,5		15		08.07 08 12
M 16 x 1,5		19		08.07 08 16
M 20 x 1,5		24		08.07 08 20
M 25 x 1,5		30		08.07 08 25
M 32 x 1,5		36		08.07 08 32
M 40 x 1,5		46		08.07 08 40
M 50 x 1,5		60		08.07 08 50
M 63 x 1,5		70		08.07 08 63

* AF: width across flats
TL: thread length

ROSE Product configurator

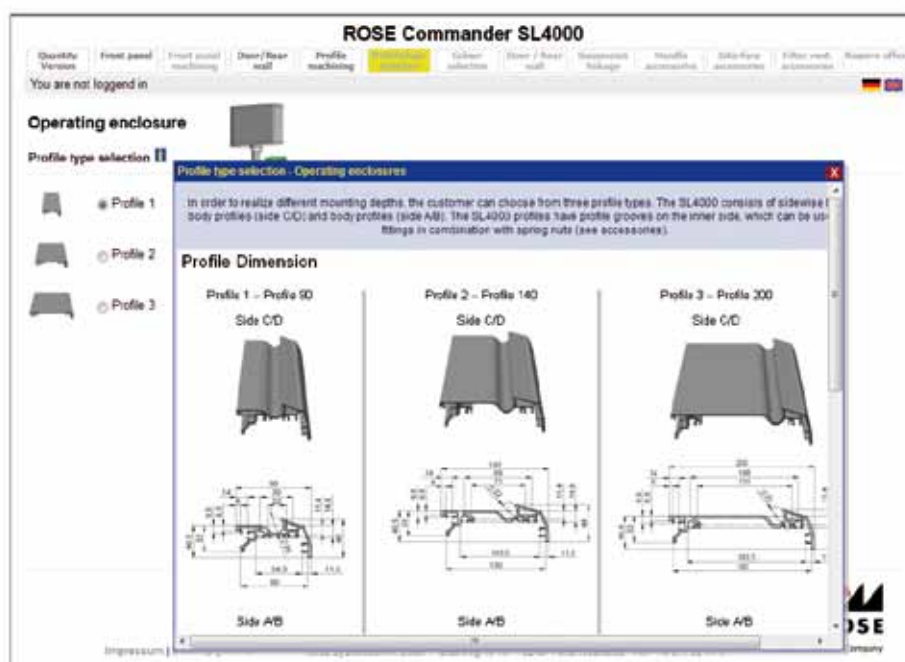
The new SL product configurator helps users to configure their required control enclosure. The new application software in the languages German and English is available via ROSE website and is characterized by easy entry requirement.

Due to a comfortable ease of use the user is able to configure, document and sent request for quotation very quickly.

There is also the opportunity to get a preview of the configured control enclosure in 3-D format and to request the file for further processing into its CAD system.



Specific information button on each page explain the user machining possibilities or detail insights of the Commander.



ROSE Product configurator

Once configured, the user can decide whether

- the documentation can be printed for hand out,
- he will request for an offer
- he will have a 3 D preview of the control enclosure
- or he would like to have the 3-D data file for transmittance

The screenshot displays the 'ROSE Commander SL4000' web application. At the top, a navigation bar includes links for Quantity, Version, Front panel, Front panel mounting, Base/Rear wall, Available machining, Studio type selection, Colour selection, Door / Rear wall, Suspension linkage, Handle accessories, Interface accessories, and Filter vent accessories. A status bar indicates 'You are not logged in' with German and English flags.

The main content area is titled 'Require offer' and features a 3D model of a control enclosure. Below this, the interface is divided into two columns:

- Left Column:** Contains a section 'Append file (log in required)' with a 'File' input field, a 'Durchsuchen...' (Browse...) button, and an 'Upload file' button. Below this is an 'Uploaded files:' section with a list area.
- Right Column:** Contains a 'Login' section with a 'No access data ? - Go Registry' link, 'E-Mail Address:' and 'Password:' input fields, and a 'Log in' button. Below the login section is an 'Actions' area with buttons for 'Print view', 'Require PDF', 'Preview', and 'Require offer'. A note states 'For the next functions you must be logged in!'. At the bottom of this column are buttons for 'Request 3D data' (labeled '3D-data') and 'Require offer'.

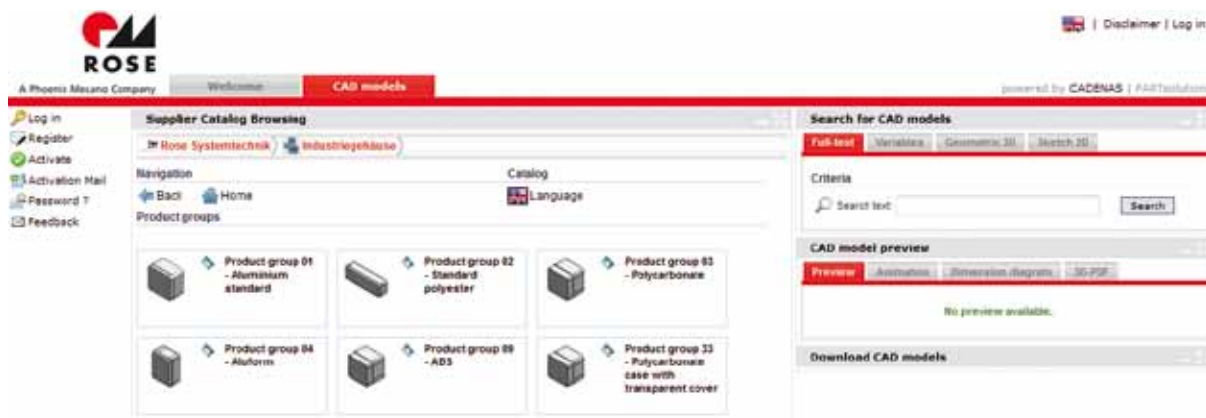
At the bottom of the interface, there is a 'back' button, a 'continue' button, and a footer containing the following information: 'Impressum | Sitemap | Home', 'ROSE Systemtechnik GmbH', 'Erlweg 15-16 · 32457 Porta Westfalica · Fon +49 571 50 41-0', and the ROSE logo with the tagline 'A Phoenix Mecano Company'.

ROSE 3D Data manager

The new 3 D ROSE database offers potential interested designers a quick download feature of the ROSE industrial enclosure data.



Call button „ROSE 3 D data“ on the website and the selection mask for the industrial enclosures will appear.



ROSE 3D Data manager



A Phoenix Mecano Company

Log in

Register

Activate

Activation Mail

Password ?

Feedback

Home

CAD models

powered by CADENAS | PAST solutions

Supplier Catalog Browsing

Rose Systemtechnik

Industrial enclosures

Product group 01 - Aluminium standard

Navigation

Back

Home

Catalog

Language

You must be logged in to perform any actions

Step 1: Generate preview (optional if required)

Step 2: Generate CAD model

Step 3: Download generated CAD models

CAD models

Search for geometrically similar parts in this catalog

Search

		BESTNR Order number	W Width [mm]	L Length [mm]	H Height [mm]
1		01.05.05.03	45	50	30
2		01.05.06.03	64	50	34
3		01.05.10.03	64	90	34
4		01.05.18.03	64	150	34
5		01.05.19.03	64	180	34
6		01.05.08.06	80	75	57

Search for CAD models

Full text

Variables

Geometric 3D

Sketch 3D

Criteria

Search text

Search

CAD model preview

Preview

Annotation

Dimension diagram

3D-PDF

This is a pregenerated default preview. It may differ from your current selection.



Download CAD models

By using the menu-driven software the selected enclosure will be shown and can be downloaded after registration of the user.



A Phoenix Mecano Company

Log in

Register

Activate

Activation Mail

Password ?

Feedback

Home

CAD models

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Supplier Catalog Browsing

Rose Systemtechnik

Industrial enclosures

Product group 01 - Aluminium standard

Catalog Part

Navigation

Back

Home

Catalog

Language

Step 1: Generate preview (optional if required)

Step 2: Generate CAD model

Step 3: Download generated CAD models

Variables

ROSE 01.05.05.03

Name	Description	Value
BESTNR	Order number	01.05.05.03
TYP	Enclosure type	Standard enclosure
W	Width	45 mm
L	Length	50 mm
H	Height	30 mm
GEV	Weight	81 g
CATALOG	Technical data	Technical data
INFO	Catalog info	Catalog info

Actions

Step 1: Generate preview (optional if required)

Step 2: Generate CAD model

Step 3: Download generated CAD models

Search for CAD models

Full text

Variables

Geometric 3D

Sketch 3D

Criteria

Search text

Search

CAD model preview

Preview

Annotation

Dimension diagram

3D-PDF

This is a pregenerated default preview. It may differ from your current selection.



Download CAD models

137

General technical information

The way to the right enclosure

Various criteria must be taken into account when selecting an enclosure:

- the fitting location (internal or external use, explosion zone, sea-water use etc.)
- the size (depends on the contents)
- the protective functions (ingress protection, EMC toughness, Ex)

The listings below should help you to select the right enclosure to match your special requirements.

I. Enclosure material specifications

Aluminium enclosures

- Light, robust metal enclosures
- good chemical resistance (see table)
- can be used in large temperature range
- EMC basic screening (complete screening optional)
- good finishing options
- application areas: suitable for internal and external use, special version or Ex version for use in aggressive or sea-water environments

Stainless steel enclosures

- corrosion-proof metal enclosure
- good chemical resistance
- can be used in large temperature range
- EMC basic screening
- application areas: suitable for internal and external use, food industry and chemical industry (Ex version)

Polyester enclosures

- plastic enclosure for rough environments
- good chemical resistance (see table)
- can be used in large temperature range
- good insulation properties
- V-0 version (in accordance with UL)
- application areas: suitable for internal and external use industrial standard enclosures

Polycarbonate enclosures

- light plastic enclosure
- good chemical resistance (see table)
- can be used in large temperature range
- good insulation properties
- good finishing options
- transparent version possible (cover)
- application areas: suitable for internal and external use

ABS enclosures

- low-weight plastic enclosure
- good chemical resistance (see table)
- deployment in standard temperature range

Polyamide enclosures (mobile operating enclosures)

- light plastic enclosure
- good insulation properties
- high impact resistance
- application areas: manual operation enclosure for control and operation of machines in internal areas

II. Temperature resistance

The definition of temperature resistance for enclosures is based on the maximum continuous temperature at which the enclosure remains dimensionally stable and the ingress protection remains guaranteed. Admissible short term peak temperatures are often considerably higher.

The definition of temperature resistance in the case of the components of the process automation is based to the maximum continuous temperature, provided that the factory-installed (electronic) components are functioning correctly and the enclosure rating is maintained.

Further classifications apply to storage and transport, and are listed in the respective product descriptions.

General technical information

III. Ingress protection

ROSE enclosures are classified in ingress protection to the generally applicable guidelines contained in EN 60529 and IEC 144. The ingress protection is indicated by an abbreviation, which is always composed of the two letters IP and two digits relating to the protection level.

Protection class for contact and foreign body protection

First digit	Designation
0	No protection
1	Protection against large foreign bodies
2	Protection against medium-sized foreign bodies
3	Protection against small foreign bodies
4	Protection against grain-shaped foreign bodies
5	Protection against dust deposits
6	Protection against dust entry

Protection class for water protection

Second digit	Designation
0	No protection
1	Protection against vertical falling drip water
2	Protection against obliquely falling drip water
3	Protection against water spray
4	Protection against splashing water
5	Protection against water jets
6	Protection when flooded
7	Protection when immersed
8	Protection when submerged

Note: The ingress protection indicated for the enclosures is based on non-processed enclosures as supplied. Aging and temperature fluctuations can lead to a diminution of the ingress protection.

General technical information

IV. Chemical resistance

When deciding whether an enclosure is resistant to the effects of chemical substances, you must consider both the enclosure material and the type of seals.

The table below shows the most important basic materials used in ROSE enclosures and the most frequently encountered chemical substances. This table provides information only on the extent to which materials are essentially resistant to certain chemicals. However, you must also take into account the concentrations and ambient temperatures.

In cases where several chemicals occur together, we recommend that you carry out a precise investigation in order to evaluate the chemical resistance of a particular material.

Enclosure material chemical resistance

Chemicals	Aluminium	Stainless steel	Polycarbonate	Polyester	Polystyrene	Polyamide
Acetone	+	+	-	-	-	•
Formic acid	•	+	30 %	10 %	•	-
Ammonia	+	+	-	-	+	20 %
Petrol	+	+	•	+	•	+
Benzene	+	+	-	+	-	-
Brake fluid	/	/	-	+	/	60°
Butane	+	/	+	/	-	+
Butanol	/	/	/	+	/	+
Calcium chloride	+	+	+	+	+	+
Chloral benzene	+	/	-	+	-	•
Diesel oil	/	/	•	+	•	/
Acetic acid	+	+	10 %	40 %	+ max. 50 %	-
Formaldehyde	+	+	/	30 %	+ max. 40 %	+
Freon 113	/	/	+	+	/	/
Fruit juice	/	+	+	+	/	+
Glycerine	+	+	•	+	+	+
Fuel oil	+	+	•	+	•	+
Hydraulic oil	/	/	+	+	•	+
Caustic potash solution	/	+	-	-	+ max. 50 %	-
Potassium chloride	•	+	+	+	+	+
Potassium hydroxide	-	+	/	-	+	/
Linseed oil	+	+	+	+	+	+
Methane	+	+	-	-	+	•
Methylene chloride	+	+	-	-	-	-
Lactic acid	+	+	10 %	+	+ max. 80 %	10 %
Mineral oils	/	/	+	+	+	+
Motor oils	/	/	+	+	+	+
Sodium carbonate	•	+	+	+	+	+
Sodium chloride	•	•	+	+	+	10 %
Sodium hydroxide	+	+	/	-	/	/
Soda lye	/	+	-	40 %	+ max. 50 %	10 %
Nitric acid	+	+	10 %	10 %	+ max. 25 %	-
Hydrochloric acid	/	+	20 %	+	+ max. 10 %	-
Lubricating oil	+	+	+	+	/	+
Carbon bisulphide	+	+	-	-	-	•
Sulphuric acid	•	+	50 %	70 %	+ max. 50 %	-
Suds	/	+	•	+	/	+
Cleansing agent	/	+	+	/	/	/
Terpentine oil	/	/	/	+	-	+
Carbon tetrachloride	+	/	/	+	-	•
Toluene	+	/	-	+	-	+
Trichlorethylene	+	/	/	-	-	-
Water (dest. water, river, tap or seawater)	/	+	+	+	+	+
Tartaric acid	/	/	10 %	+	+	+
Xylene	+	/	-	+	-	+
Zinc sulfate	•	/	+	+	+	/
Citric acid	+	/	10 %	+	+	10 %

Explanation of symbols

- + resistant against all concentrations
- % resistant against maximum % concentration
- C° resistant to maximum C°
- limited resistance
- not resistant
- / no information

General technical information

Enclosure seal and accessory chemical resistance

Chemicals	Chloroprene	EPDM	NBR	Pocane	Polyurethane	PVC	Silicone
Acetone	+	+	-	+	-	-	•
Formic acid	+	+	-	10 %	/	< 50 %	•
Ammonia	+	+	+	10 %	/	•	+
Petrol	+	•	+	+	+	+	+
Benzene	-	-	-	+	+	-	-
Brake fluid	•	-	/	+	/	/	+
Butane	+	/	+	+	/	50 %	-
Butanol	+	/	-	+	/	•	-
Calcium chloride	/	/	/	10 %	/	+	/
Chloral benzene	-	-	-	-	-	-	-
Diesel oil	•	•	/	+	+	•	•
Acetic acid	-	/	-	10 %	/	25 %	-
Formaldehyde	-	/	+	/	/	40 %	+
Freon 113	+	/	+	+	/	/	/
Fruit juice	+	+	/	+	+	+	+
Glycerine	+	+	+	+	+	+	+
Fuel oil	•	•	+	+	+	•	•
Hydraulic oil	+	/	/	+	/	/	•
Caustic potash solution	+	/	/	10 %	/	+	/
Potassium chloride	+	+	+	10 %	+	+	+
Potassium hydroxide	+	+	+	-	-	/	•
Linseed oil	+	+	+	+	+	+	•
Methane	+	/	•	+	/	/	+
Methylene chloride	-	/	-	-	-	-	-
Lactic acid	+	+	+	/	/	10 %	/
Mineral oils	•	•	+	+	+	+	+
Motor oils	•	•	+	+	+	/	+
Sodium carbonate	/	/	/	10 %	/	/	/
Sodium chloride	+	+	+	10 %	+	+	+
Sodium hydroxide	+	+	•	-	-	•	•
Soda lye	50 %	/	-	/	/	60 %	-
Nitric acid	•	+	•	10 %	-	30 %	-
Hydrochloric acid	+	+	< 65 % •	10 %	-	30 %	/
Lubricating oil	•	•	+	+	+	+	+
Carbon bisulphide	-	/	-	+	/	•	-
Sulphuric acid	50 %	/	25 %	10 %	/	80 %	25 %
Suds	+	/	+	10 %	•	•	+
Cleansing agent	+	•	/	+	•	/	+
Terpentine oil	-	/	+	+	/	+	-
Carbon tetrachloride	-	-	-	+	-	•	-
Toluene	-	-	-	•	-	-	-
Trichlorethylene	-	-	-	•	-	-	-
Water (dest. water, river, tap or seawater)	+	+	80 C°	+	+	40 C°	+
Tartaric acid	+	+	+	/	+	10 %	+
Xylene	-	-	-	•	-	-	-
Zinc sulfate	+	+	+	/	/	40 %	+
Citric acid	+	+	+	10 %	/	10 %	+

Explanation of symbols

- + resistant against all concentrations
- % resistant against maximum % concentration
- C° resistant to maximum C°
- limited resistance
- not resistant
- / no information

V. Corrosion resistance

We offer the following for critical external areas:

SWB version (seawater-resistant):

Purified - chromated - powder-coated

Standard colour RAL 5009, other colours on request.

For application areas with extreme UV radiation we recommend coating with a special Polyester powder.

SBG/SBGL version only for wet painting processes.

SBG = washed - chromated primer

SBGL = washed - chromated primer - painting

Stainless steel socket inserts available on request.

Finish service



drilling



tapping





chromating



painting





punching



embossing





printing



engraving



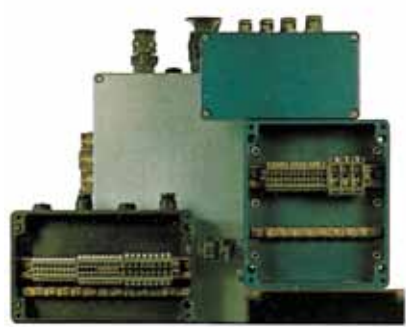


milling





attachments





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