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# STAINLESS STEEL ENCLOSURES

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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 informations please visit our homepage

[www.rose-pw.de](http://www.rose-pw.de) [www.rose-ex-enclosures.com](http://www.rose-ex-enclosures.com)



A Phoenix Mecano Company











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Technical modifications reserve!

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# Stainless steel Ex enclosures



Gost  
Russland

Gost  
Kasachstan



Stainless steel Ex enclosures - junction boxes and empty enclosures - for use in hazardous areas

For detailed information see our catalogue „Ex Equipment“



## Stainless steel enclosure systems

Stainless steel is an increasingly important material in many application areas. In comparison with other enclosure materials, stainless steel is characterised by individual finishing options, robustness, high quality surface and much more.

It is typically used in the

- food industries
- packaging industries
- areas with harsh or aggressive environments
- areas subject to EMC
- all hygienic technical areas

ROSE stainless steel enclosure systems are manufactured in materials 1.4404 and 1.4301 as standard. These stainless steel qualities offer permanent resistance both in harsh environments of the chemical industry and are also easy to clean and ideal for use in food preparation environments. ROSE stainless steel products are supplied with a permanent high-quality surface finish (grinding, grain 240), and build (precise edges and welding) as standard and comply with enclosure ratings IP 65 and IP 66 as standard (optionally higher).



### Stainless steel industrial enclosures

- 27 enclosure variants for applications: food- and packaging industries and harsh environments

### Stainless steel switch gear cabinets KSS

- 7 enclosure variants with door and mounting plate for applications: food- and packaging industries and harsh environments

### Commander KSSC

- Industrial commander in 7 enclosure variants with door for food- and packaging industries

### Commander 410

- Operating enclosures for hygienic areas for food- and packaging industries

### Commander 420

- Industrial commander in 6 sizes for packaging industries

### GTH 48 / GTH 60 Suspension systems

- Stainless steel suspension system, round design, for best requirements
- Applications: hygienic areas, measuring and automation systems and controller constructions

### Stainless steel cable glands

- Metric and PG cable glands in standard or Ex-version
- Pressure balance element

### Stainless steel special enclosures

- Specified enclosure systems customized
- Special sizes from 25 off



- Universal industrial enclosures for hygienic areas
- High quality surface 1.4301
- No gaps between lid/base
- Enclosure rating up to IP 69K (on request)
- Optional individual sizes and versions from 25 off (see p. 35/36)

### Included in delivery:

Enclosure base with bracket clips and threaded hole for attachment of DIN rails, 4 mounting bosses with attachment holes and sealing plugs, alternatively available without fastening holes, lid with stud bolts inside and permanently attached 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 cleaner-resistant version (IP 69K)  
on request

#### Seal:

VMQ (silicone)  
EMC on request

#### Surface:

grinded, grain 240  
other surface on request

#### Temperature range:

-40°C to +80°C  
other temperature ranges on request

# Stainless steel industrial enclosures

## Product range

Order No.				
Enclosure with mounting bosses and holes	Enclosure with mounting bosses without holes	Mounting plate	Weight (g)	Dimensions (mm) L x B x H
<b>37.10 10 06</b>	<b>37.10 10 96</b>	<b>10.01 10 53</b>	561	100 x 100 x 61
<b>37.15 10 06</b>	<b>37.15 10 96</b>	<b>10.01 10 54</b>	717	150 x 100 x 61
<b>37.15 15 08</b>	<b>37.15 15 98</b>	<b>10.01 10 38</b>	1175	150 x 150 x 81
<b>37.20 10 06</b>		<b>10.01 10 55</b>	914	200 x 100 x 61
<b>37.20 20 08</b>	<b>37.20 20 98</b>	<b>10.01 10 40</b>	1792	200 x 200 x 81
<b>37.20 20 12</b>	<b>37.20 20 92</b>	<b>10.01 10 40</b>	2106	200 x 200 x 121
<b>37.30 15 08</b>		<b>10.01 10 39</b>	1893	300 x 150 x 81
<b>37.30 20 08</b>		<b>10.01 10 41</b>	2367	300 x 200 x 81
<b>37.30 20 12</b>	<b>37.30 20 92</b>	<b>10.01 10 41</b>	2770	300 x 200 x 121
<b>37.30 30 12</b>		<b>10.01 10 44</b>	3792	300 x 300 x 121
<b>37.30 30 16</b>		<b>10.01 10 44</b>	4101	300 x 300 x 161
<b>37.38 38 16</b>		<b>10.01 10 45</b>	5838	380 x 380 x 161
<b>37.40 15 08</b>		<b>10.01 10 56</b>	2370	400 x 150 x 81
<b>37.40 20 12</b>		<b>10.01 10 43</b>	3383	400 x 200 x 121
<b>37.40 30 16</b>		<b>10.01 10 48</b>	5268	400 x 300 x 161
<b>37.50 30 16</b>		<b>10.01 10 57</b>	6237	500 x 300 x 161
<b>37.50 40 16</b>		<b>10.01 10 49</b>	7333	500 x 400 x 161
<b>37.60 20 12</b>		<b>10.01 10 58</b>	5798	600 x 200 x 121
<b>37.99 99 99</b>				Special size acc. specification

## Accessories

Mounting set (gaskets, nuts and screws)	<b>37.99 00 01</b>
External hinge set (2 pcs.)	<b>37.00 00 02</b>
External mounting bracket (4 pcs.)	<b>37.10 50 00</b>



# Stainless steel industrial enclosures

## Terminal mounting

Make	Phoenix																PE bar 1,5 to 6 mm <sup>2</sup>
DIN rail TS 15				X	X			X									
DIN rail TS 32																	
DIN rail TS 35	X	X	X			X	X		X	X	X	X	X	X	X		
Voltage (V)	352	550	690	275	420	690	690	275	690	690	690	690	880	1100	1100		
Current (A)	17	22	23	22,5	27	32,5	43,5	37	57	74	118,5	137	216	256	350		
Nominal cross section (mm <sup>2</sup> )	1,5	2,5	2,5	2,5	4	4	6	6	10	16	35	50	95	150	240		
Terminal width (mm)	4,2	5,2	5,2	5,2	6,2	6,2	8,2	8,2	10,2	12,2	16	20	25	31	36		
Terminal Type																	
Enclosure Type	UK 1,5 N	UK 2,5 N	UK 3 N	MKB 3/E-Z	MXK 4	UK 5 N	UK 6 N	MBK 6/E	UK 10 N	UK 16 N	UK 35	UKH 50	UKH 95	UKH 150	UKH 240		
<b>37.10 10 06</b>				11	7			7								3	
<b>37.15 10 06</b>				20	16			12								6	
<b>37.15 15 08</b>	24	20	20	20	16	16	12	12	10	8						6	
<b>37.20 10 06</b>				30	24			18								8	
<b>37.20 20 08</b>	76	60	60	60	50	50	38	38	30	13						8	
<b>37.20 20 12</b>	76	60	60	60	50	50	38	38	30	13	10					8	
<b>37.30 15 08</b>	61	50	50	50	41	41	31	31	25	21						13	
<b>37.30 20 08</b>	120	96	96	96	80	80	60	60	24	20						13	
<b>37.30 20 12</b>	120	96	96	96	80	80	60	60	24	20	16					13	
<b>37.30 30 12</b>	120	96	96	96	80	80	60	60	48	20	16	12				13	
<b>37.30 30 16</b>	126	102	102	102	87	87	63	63	51	40	16	12				13	
<b>37.38 38 16</b>	240	195	195	195	162	162	123	123	99	81	44	17	13			18	
<b>37.40 15 08</b>	85	69	69	69	58	58	43	43	35	29						19	
<b>37.40 20 12</b>	172	138	138	138	116	116	88	88	70	29	23	18				19	
<b>37.40 30 16</b>	172	138	138	138	116	116	88	88	70	29	23	18	14			19	
<b>37.50 30 16</b>	214	172	172	172	144	144	108	108	88	72	29	26	18			24	
<b>37.50 40 16</b>	425	345	345	345	290	290	215	215	140	87	46	36	14	11		24	
<b>37.60 20 12</b>	262	212	212	212	178	178	134	134	54	45	36	27				29	

# Stainless steel industrial enclosures

## Terminal mounting

Make	Weidmüller																								
DIN rail TS 15	X	X	X	X																					
DIN rail TS 32							X	X		X		X		X			X								
DIN rail TS 35					X	X			X		X		X		X	X		X	X	X	X	X	X		
Voltage (V)	275	176	176	275	440	550	550	550	690	550	550	550	550	690	690	690	550	690	690	690	880	1100	1100		
Current (A)	14	10	15	21	21	21	21	28	28	36	36	50	50	66	66	109	109	126	167	202	243	234	300		
Nominal cross section (mm²)	1,5	1,5	2,5	4	2,5	2,5	2,5	4	4	6	6	10	10	16	16	35	35	50	70	95	120	150	240		
Terminal width (mm)	3,5	5,1	5,1	6,1	5,1	5,1	6	6,5	6,1	8	7,9	10	9,9	12	11,9	16	18	18,5	20,5	27	27	32	36		
Terminal Type																									
Enclosure Type	WDU 1,5 / R 3,5/E	AKZ 1,5	AKZ 2,5	AKZ 4	WDU 2,5 N	WDU 2,5	SAK 2,5	SAK 4	WDU 4	SAK 6N	WDU 6	SAK 10	WDU 10	SAK 16	WDU 16	WDU 35	SAK 35	WDU 50N	WDU 70N	WDU 70/95	WDU 95N/120N	WDU 120/150	WDU 240	PE bar 1,5 to 6 mm²	
<b>37.10 10 06</b>	14	9	9	8																				3	
<b>37.15 10 06</b>	28	19	19	16																				6	
<b>37.15 15 08</b>	28	19	19	16	19	19	16	16	16	12	12	10	10											6	
<b>37.20 10 06</b>	42	29	29	24																				8	
<b>37.20 20 08</b>	84	58	58	48	58	58	48	48	48	36	36	30	30											8	
<b>37.20 20 12</b>	84	58	58	48	58	58	48	48	48	36	36	30	30	24	24									8	
<b>37.30 15 08</b>	71	48	48	40	49	49	41	41	41	31	31	25	25											13	
<b>37.30 20 08</b>	142	96	96	80	98	98	80	80	80	60	60	25	25											13	
<b>37.30 20 12</b>	142	96	96	80	98	98	80	80	80	60	60	25	25	20	20	15	13							13	
<b>37.30 30 12</b>	142	96	96	80	98	98	80	80	80	60	60	48	48	20	20	15	13	13	13					13	
<b>37.30 30 16</b>	142	96	96	80	98	98	80	80	80	60	60	48	48	20	20	15	13	13	13					13	
<b>37.38 38 16</b>	282	192	192	162	195	195	162	162	162	123	123	66	66	54	54	40	36	17	17	12	9			18	
<b>37.40 15 08</b>	99	68	68	57	69	69	58	58	58	43	43	35	35											19	
<b>37.40 20 12</b>	198	136	136	114	138	138	116	116	116	86	86	70	70	29	29	21	19	18	18					19	
<b>37.40 30 16</b>	198	136	136	114	138	138	116	116	116	86	86	70	70	56	56	21	19	18	18		13			19	
<b>37.50 30 16</b>	256	172	172	144	172	172	144	144	144	108	108	88	88	72	72	28	24	24	24		16			24	
<b>37.50 40 16</b>	512	352	348	292	356	356	296	296	296	224	224	135	135	87	87	46	36	36	36	11	16	14		24	
<b>37.60 20 12</b>	314	214	214	180	218	218	182	182	182	136	136	55	55	45	45	34	30	28	28					29	

PE terminal as required

## Accessories



**Mounting set**  
(gaskets, nuts and screws)

Order No. **37.99 00 01**



**External hinge set**

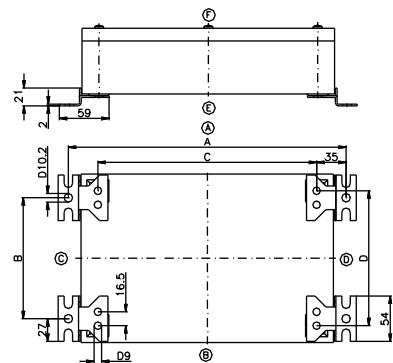
Order No. **37.00 00 02**



**External mounting brackets**

Order No. **37.10 50 00**

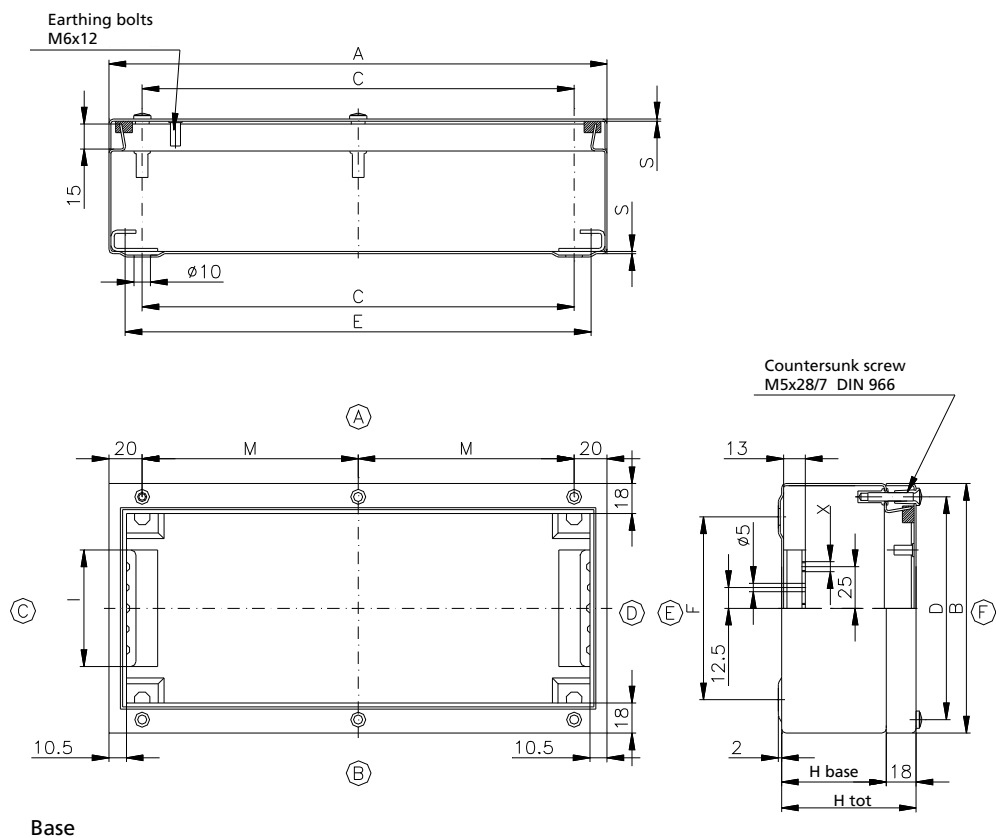
for enclosure type	A	B	C	D
37.10 10 06	130	44	60	60
37.15 10 06	180	44	110	60
37.15 15 08	180	94	110	110
37.20 10 06	230	43	160	60
37.20 20 08	230	144	160	160
37.20 20 12	230	144	160	160
37.30 15 08	330	94	260	110
37.30 20 08	330	144	260	160
37.30 20 12	330	144	260	160
37.30 30 12	330	244	260	260
37.30 30 16	330	244	260	260
37.38 38 16	410	324	340	340
37.40 15 08	430	94	360	110
37.40 20 12	430	144	360	160
37.40 30 16	430	244	360	260
37.50 30 16	530	244	460	260
37.50 40 16	530	344	460	360
37.60 20 12	630	144	560	160



# Stainless steel industrial enclosures

## Dimensions

Order No.		Dimensions (mm)														
Enclosure with mounting bosses and holes	Enclosure with mounting bosses without holes	Weight (g)	A	B	C	D	E	F	I	K	S	M	X	H <sub>base</sub>	H <sub>tot</sub>	H <sub>b</sub>
<b>37.10 10 06</b>	<b>37.10 10 96</b>	561	100	100	60	84	81	60	20	11,25	1,25	-	M4	46	61	15
<b>37.15 10 06</b>	<b>37.15 10 96</b>	717	150	100	110	84	131	60	20	11,25	1,25	-	M4	46	61	15
<b>37.15 15 08</b>	<b>37.15 15 98</b>	1175	150	150	110	134	131	110	70	14,25	1,25	-	M6	63	81	18
<b>37.20 10 06</b>		914	200	100	160	84	181	60	20	11,25	1,25	-	M4	46	61	15
<b>37.20 20 08</b>	<b>37.20 20 98</b>	1792	200	200	160	184	181	160	120	14,25	1,25	-	M6	63	81	18
<b>37.20 20 12</b>	<b>37.20 20 92</b>	2106	200	200	160	184	181	160	120	14,25	1,25	-	M6	103	121	18
<b>37.30 15 08</b>		1893	300	150	260	134	281	110	70	14,25	1,25	-	M6	63	81	18
<b>37.30 20 08</b>		2367	300	200	260	184	281	160	120	14,25	1,25	-	M6	63	81	18
<b>37.30 20 12</b>	<b>37.30 20 92</b>	2770	300	200	260	184	281	160	120	14,25	1,25	-	M6	103	121	18
<b>37.30 30 12</b>		3792	300	300	260	284	281	260	220	14,25	1,25	-	M6	103	121	18
<b>37.30 30 16</b>		4101	300	300	260	284	281	260	220	14,25	1,25	-	M6	143	161	18
<b>37.38 38 16</b>		5838	380	380	340	364	361	340	300	14,25	1,25	-	M6	143	161	18
<b>37.40 15 08</b>		2370	400	150	360	134	381	110	70	14,25	1,25	-	M6	63	81	18
<b>37.40 20 12</b>		3383	400	200	360	184	381	160	120	14,25	1,25	-	M6	103	121	18
<b>37.40 30 16</b>		5268	400	300	360	284	381	260	220	14,25	1,25	-	M6	143	161	18
<b>37.50 30 16</b>		6237	500	300	460	284	481	260	220	14,25	1,25	230	M6	143	161	18
<b>37.50 40 16</b>		7333	500	400	460	384	481	360	320	14,25	1,25	230	M6	143	161	18
<b>37.60 20 12</b>		5798	600	200	560	184	581	160	120	14,25	1,5	280	M6	103	121	18
<b>37.99 99 99</b>			Special size acc. specification													



## Stainless steel industrial enclosures with hinge IGS



- Universal enclosure with covered hinge and lock
- High quality surface 1.4301
- Optional individual sizes and versions e.g. with flange opening or window from 25 pcs. (see p. 35/36)

### Included in delivery:

Enclosure with hinged lid, double ward lock, 4 floor mounting bosses with fastening 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, grain 240  
other surface on request

#### Temperature range:

-40°C to +80°C  
other temperature ranges on request

# Stainless steel industrial enclosures with hinge IGS

## Product range

Order No.	Weight (g)	Mounting plate	Dimensions (mm) L x W x H
<b>37.00 22 09</b>	2350	<b>10.01 10 66</b>	200 x 250 x 97
<b>37.00 22 15</b>	2880	<b>10.01 10 66</b>	200 x 250 x 157
<b>37.00 32 09</b>	3490	<b>10.01 10 67</b>	350 x 250 x 97
<b>37.00 33 16</b>	4360	<b>10.01 10 44</b>	300 x 300 x 167
<b>37.00 44 16</b>	6080	<b>10.01 10 45</b>	380 x 380 x 167
<b>37.00 44 21</b>	6820	<b>10.01 10 45</b>	380 x 380 x 217
<b>37.00 53 16</b>	6350	<b>10.01 10 57</b>	500 x 300 x 167
<b>37.00 63 16</b>	8750	<b>10.01 10 68</b>	600 x 300 x 167
<b>37.00 64 21</b>	11420	<b>10.01 10 69</b>	600 x 380 x 217
<b>37.00 99 00</b>			Special size (acc. specification)

## Accessories

Mounting set (gaskets, nuts and screws)	<b>37.99 00 01</b>
External mounting bracket (4 pcs)	<b>37.10 50 00</b>

## Terminal mounting

Make	Phoenix																PE bar 1,5 to 6 mm <sup>2</sup>
DIN rail TS 15				X	X			X									
DIN rail TS 32																	
DIN rail TS 35	X	X	X			X	X		X	X	X	X	X	X	X		
Voltage (V)	352	550	690	275	420	690	690	275	690	690	690	690	880	1100	1100		
Current (A)	17	22	23	22,5	27	32,5	43,5	37	57	74	118,5	137	216	256	350		
Nominal cross section (mm <sup>2</sup> )	1,5	2,5	2,5	2,5	4	4	6	6	10	16	35	50	95	150	240		
Terminal width (mm)	4,2	5,2	5,2	5,2	6,2	6,2	8,2	8,2	10,2	12,2	16	20	25	31	36		
Terminal Type																	
Enclosure Type	UK 1,5 N	UK 2,5 N	UK 3 N	MKB 3/E-Z	MXK 4	UK 5 N	UK 6 N	MBK 6/E	UK 10 N	UK 16 N	UK 35	UKH 50	UKH 95	UKH 150	UKH 240		
<b>37.00 22 09</b>	76	60	60	60	50	50	38	38	24	13	10					8	
<b>37.00 22 15</b>	76	60	60	60	50	50	38	38	24	13	10					8	
<b>37.00 32 09</b>	150	125	125	125	100	100	74	74	36	30	20					16	
<b>37.00 33 16</b>	126	102	102	102	87	87	63	63	51	40	16	12				13	
<b>37.00 44 16</b>	240	195	195	195	162	162	123	123	99	81	44	17	13			18	
<b>37.00 44 21</b>	240	195	195	195	162	162	123	123	99	81	44	17	13			18	
<b>37.00 53 16</b>	214	172	172	172	144	144	108	108	88	72	29	26	18			24	
<b>37.00 63 16</b>	260	210	210	210	176	176	134	134	106	90	36	27	22			29	
<b>37.00 64 21</b>	393	318	318	318	267	267	201	201	162	135	72	27	22			29	

PE terminal as required

# Stainless steel industrial enclosures with hinge IGS

## Terminal mounting

Make	Weidmüller																						
DIN rail TS 15	X	X	X	X																			
DIN rail TS 32							X	X		X		X					X						
DIN rail TS 35					X	X			X		X		X	X		X	X	X	X	X	X		
Voltage (V)	275	176	176	275	440	550	550	550	690	550	550	550	690	690	690	550	690	690	690	880	1100	1100	
Current (A)	14	10	15	21	21	21	21	28	28	36	36	50	50	66	66	109	109	126	167	202	243	234	300
Nominal cross section (mm²)	1,5	1,5	2,5	4	2,5	2,5	2,5	4	4	6	6	10	10	16	16	35	35	50	70	95	120	150	240
Terminal width (mm)	3,5	5,1	5,1	6,1	5,1	5,1	6	6,5	6,1	8	7,9	10	9,9	12	11,9	16	18	18,5	20,5	27	27	32	36
Terminal Type																							
Enclosure Type	WDU 1,5 / R 3,5/E	AKZ 1,5	AKZ 2,5	AKZ 4	WDU 2,5 N	WDU 2,5	SAK 2,5	SAK 4	WDU 4	SAK 6N	WDU 6	SAK 10	WDU 10	SAK 16	WDU 16	WDU 35	SAK 35	WDU 50N	WDU 70N	WDU 70/95	WDU 95N/120N	WDU 120/150	WDU 240
37.00 22 09	84	58	58	48	58	58	48	48	48	36	36	30	30	12	12	9	8						8
37.00 22 15	84	58	58	48	58	58	48	48	48	36	36	30	30	12	12	9	8						8
37.00 32 09	170	116	116	98	118	118	98	98	98	74	74	30	30	25	25	18	16						16
37.00 33 16	142	96	96	80	98	98	82	82	82	62	62	50	50	40	40	15	13	13					13
37.00 44 16	282	192	192	162	195	195	162	162	162	123	123	99	99	81	81	40	36	17	16	12	12		18
37.00 44 21	282	192	192	162	195	195	162	162	162	123	123	99	99	81	81	40	36	17	16	12	12		18
37.00 53 16	256	176	174	146	178	178	148	148	148	112	112	90	90	74	74	56	48	25	22	16	16		24
37.00 63 16	314	214	214	180	218	218	182	182	182	136	136	110	110	90	90	34	30	27	26	20	20		29
37.00 64 21	471	321	321	270	327	327	273	273	273	204	204	165	165	135	135	68	60	27	26	20	20		29

PE terminal as required

## Accessories



### Mounting set

(gaskets, nuts and screws)

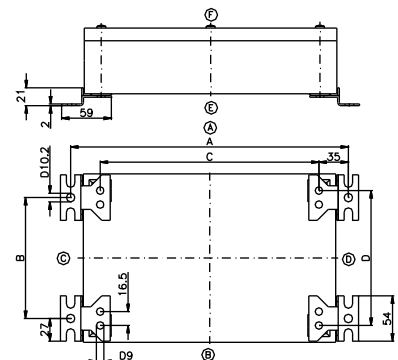
Order No. **37.99 00 01**



### External mounting brackets

Order No. **37.10 50 00**

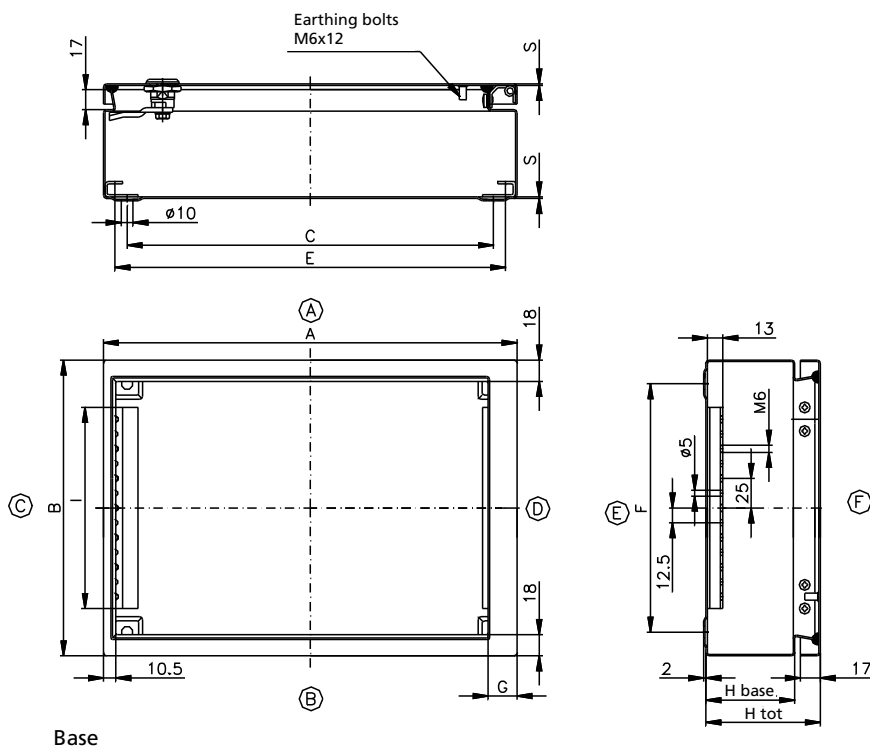
for enclosure type	A	B	C	D
37.00 22 09	230	194	160	210
37.00 32 09	380	194	310	210
37.00 22 15	230	194	160	210
37.00 33 16	330	244	260	260
37.00 44 16	410	324	340	340
37.00 53 16	530	244	460	260
37.00 63 16	630	244	560	260
37.00 44 21	410	324	340	340
37.00 64 21	630	324	560	340



# Stainless steel industrial enclosures with hinge IGS

## Dimensions

Order No.	Weight (g)	Dimensions (mm)									
		A	B	C	E	F	I	G	S	H <sub>base</sub>	H <sub>tot</sub>
<b>37.00 22 09</b>	2350	200	250	160	181	210	170	25	1,25	75	97
<b>37.00 22 15</b>	2880	200	250	160	181	210	170	25	1,25	135	157
<b>37.00 32 09</b>	3490	350	250	310	331	210	170	25	1,25	75	97
<b>37.00 33 16</b>	4360	300	300	260	281	260	220	25	1,25	145	167
<b>37.00 44 16</b>	6080	380	380	340	361	340	300	25	1,25	145	167
<b>37.00 44 21</b>	6820	380	380	340	361	340	300	25	1,25	195	217
<b>37.00 53 16</b>	6350	500	300	460	481	260	220	25	1,25	145	167
<b>37.00 63 16</b>	8750	600	300	560	580	260	220	25	1,5	145	167
<b>37.00 64 21</b>	11420	600	380	560	580	340	300	25	1,5	195	217
<b>37.00 99 00</b>		Special size (acc. specification)									





## Stainless steel switch gear cabinets KSS



- 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 (see p. 35/36)

### 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, grain 240

**Temperature range:**

-40°C to +80°C

other temperature ranges on request

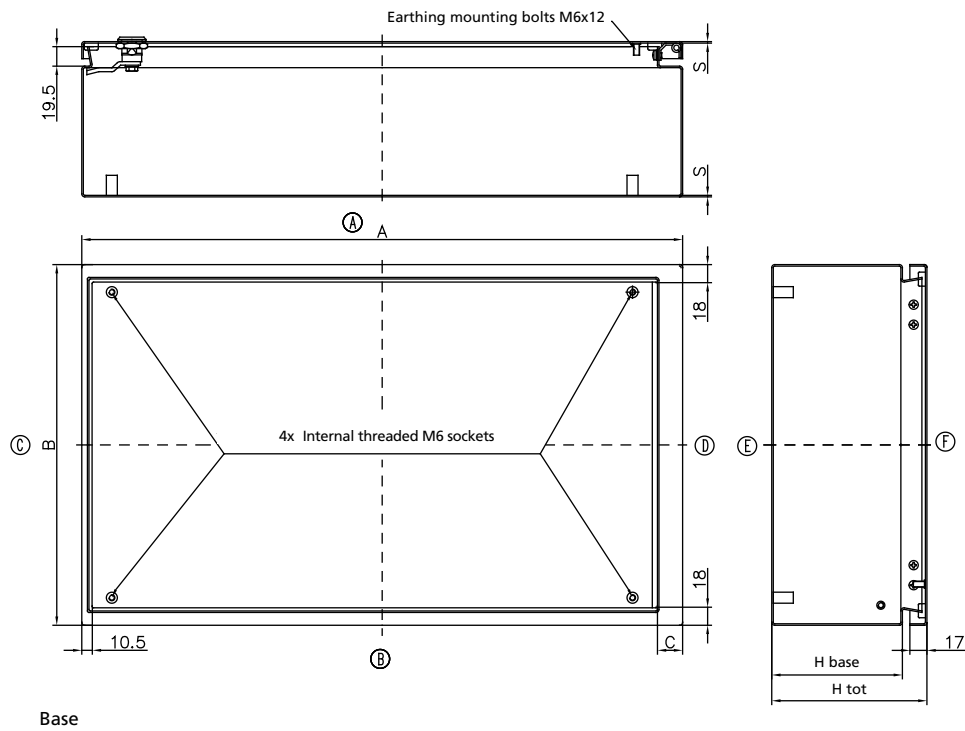
#### Included in delivery:

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

# Stainless steel switch gear cabinets KSS

## Product range

Order No.	Weight (g)	Mounting plates	Dimensions (mm)					
			A	B	C	S	H <sub>b</sub>	H <sub>tot</sub>
<b>37.01 23 15</b>	3500	<b>37.01 99 01</b>	200	300	25	1,25	133	155
<b>37.01 34 21</b>	6000	<b>37.01 99 02</b>	300	380	25	1,25	188	210
<b>37.01 43 15</b>	5500	<b>37.01 99 03</b>	400	300	25	1,25	133	155
<b>37.01 46 21</b>	11500	<b>37.01 99 04</b>	380	600	25	1,5	188	210
<b>37.01 55 21</b>	10500	<b>37.01 99 05</b>	500	500	25	1,25	188	210
<b>37.01 64 15</b>	10500	<b>37.01 99 06</b>	600	400	25	1,5	133	155
<b>37.01 68 21</b>	19500	<b>37.01 99 07</b>	600	760	25	1,5	188	210
<b>37.01 99 00</b>		Special size (acc. specification)						





- Stainless steel control enclosure based on switch gear cabinet KSS
- Including amplifier plate and drill hole for ROSE GTH suspension system
- Optional individual sizes and versions from 25 off (see p. 35/36)

### 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, grain 240

**Temperature range:**

-40°C to +80°C

**Included in delivery:**

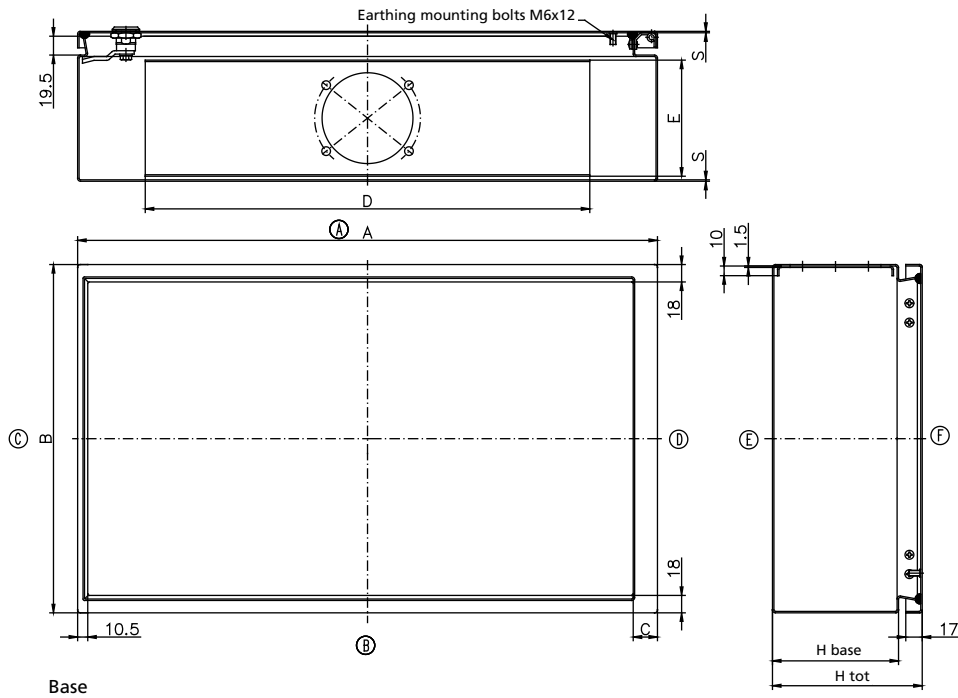
Enclosure system including amplifier plate and GTH coupling hole with door, double ward lock.

# Commander KSSC

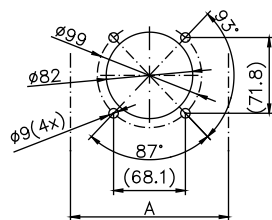
## Product range

Order No.	Weight (g)	Mounting plates	Dimensions (mm)								Drillings for suspension system (side A)
			A	B	C	D	E	S	H <sub>b</sub>	H <sub>tot</sub>	
<b>37.02 23 15</b>	3500	<b>37.01 99 01</b>	200	300	24,6	160	100	1.25	130,7	155	GTH 48 (picture 1)
<b>37.02 34 21</b>	6000	<b>37.01 99 02</b>	300	380	24,6	260	175	1.25	185,7	210	GTH 48 (picture 1)
<b>37.02 43 15</b>	5500	<b>37.01 99 03</b>	400	300	24,6	360	100	1.25	130,7	155	GTH 48 (picture 1)
<b>37.02 46 21</b>	11500	<b>37.01 99 04</b>	380	600	25,1	340	175	1.5	185,7	210	GTH 60 (picture 2)
<b>37.02 55 21</b>	10500	<b>37.01 99 05</b>	500	500	24,6	460	175	1.25	185,7	210	GTH 60 (picture 2)
<b>37.02 64 15</b>	10500	<b>37.01 99 06</b>	600	400	25,1	460	120	1.5	130,7	155	GTH 60 (picture 2)
<b>37.02 68 21</b>	19500	<b>37.01 99 07</b>	600	760	25,1	560	175	1.5	185,7	210	GTH 60 (picture 2)
<b>37.02 99 00</b>			Special size (acc. specification)								

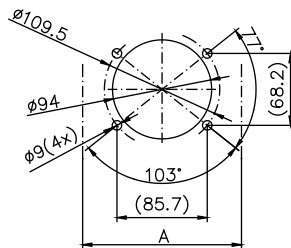
Cutout of size, state by order  
Special size: from 25 pcs/order



Picture 1:  
Coupling drill hole (GTH 48)



Picture 2:  
Coupling drill hole (GTH 60)



## Accessories

Handle for KSSC (see version C420, page 20) on request



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

### Technical data

**Material:**

stainless steel 1.4404/316L

**Ingress protection:**

IP 66 / IP 69K to EN 60529

**Seal:**

silicone

**Surface:**

grinded, grain 240

**Temperature range:**

-40°C to +80°C

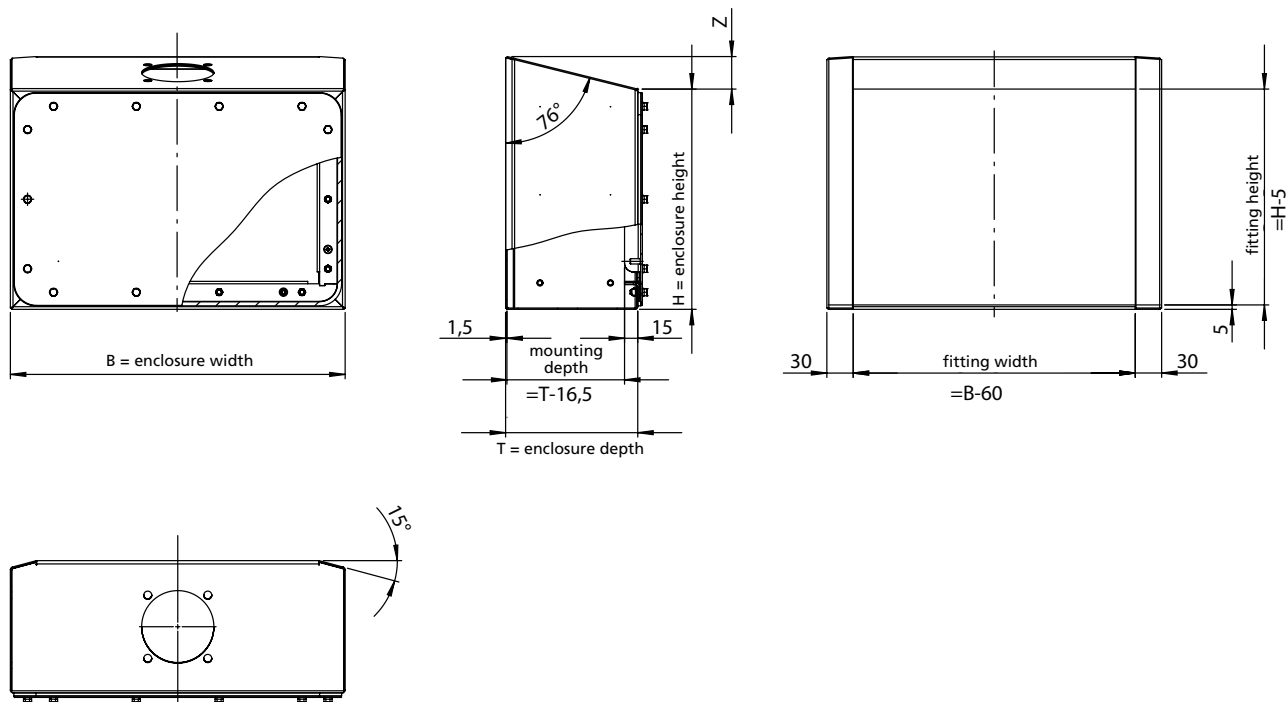
**Included in delivery:**

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

# Commander 410

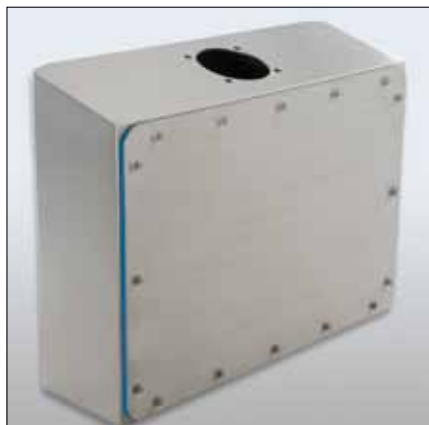
## Product range

Order No.	Dimensions (mm) W x H x D	Z	Fitting width	Fitting height	Drillings for suspension system (side A)	Weight (g)
<b>56.10 02 01</b>	380 x 250 x 150	37	320	245	GTH 48	9000
<b>56.10 02 02</b>	380 x 250 x 220	55	320	245	GTH 48	9000
<b>56.10 02 03</b>	500 x 350 x 150	37	440	345	GTH 48	11000
<b>56.10 02 04</b>	500 x 350 x 220	55	440	345	GTH 48	11500
<b>56.10 02 05</b>	500 x 450 x 150	37	440	445	GTH 48	12000
<b>56.10 02 06</b>	500 x 450 x 220	55	440	445	GTH 48	12500



## Accessories

Mounting angle set for internal fitting of components **56.20 99 01**





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

### Technical data

**Material:**

Stainless steel 1.4301/304  
other materials on request

**Ingress protection:**

IP 65 to EN 60529

**Seal:**

Silicone

**Surface:**

grinded, grain 240

**Temperature range:**

-40°C to +80°C

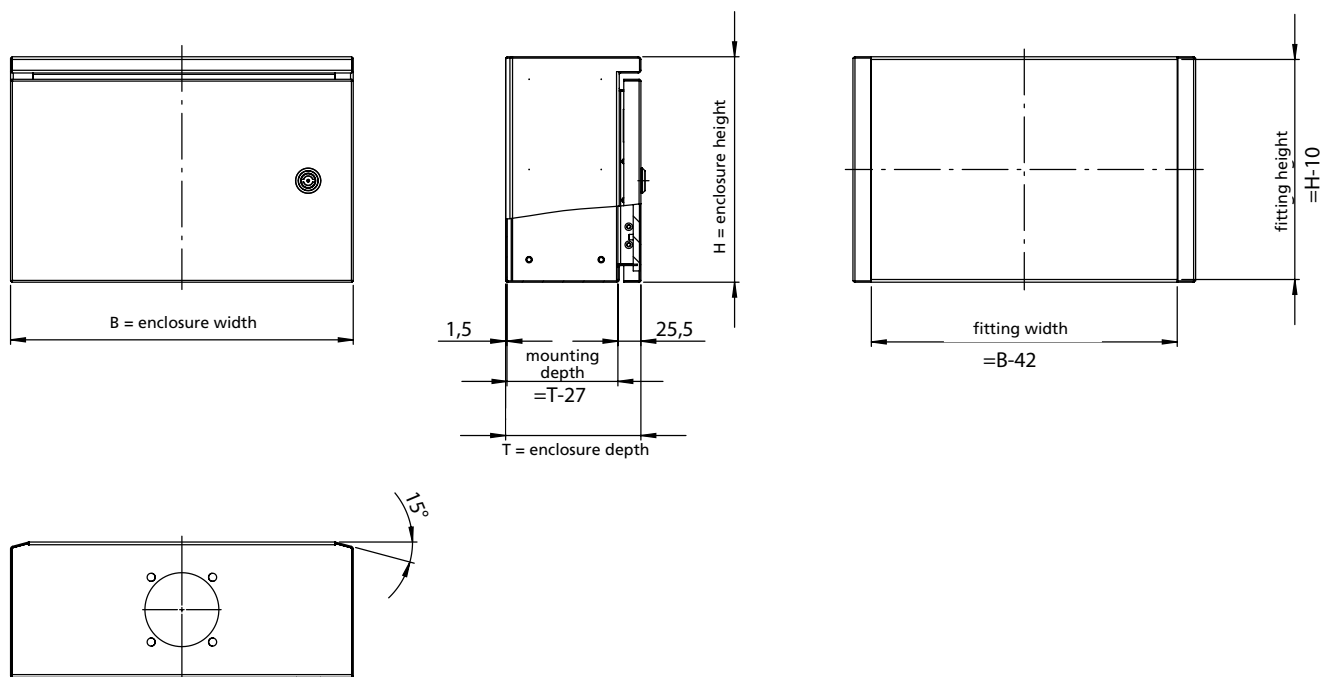
**Included in delivery:**

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

# Commander 420

## Product range

Order No.	Dimensions (mm) W x H x D	Fitting width	Fitting height	Drillings for suspension system (side A)	Weight (g)
<b>56.20 01 01</b>	380 x 250 x 150	338	240	GTH 48	9000
<b>56.20 01 02</b>	380 x 250 x 220	338	240	GTH 48	9000
<b>56.20 01 03</b>	500 x 350 x 150	458	340	GTH 48	10000
<b>56.20 01 04</b>	500 x 350 x 220	458	340	GTH 48	11000
<b>56.20 01 05</b>	500 x 450 x 150	458	440	GTH 48	12000
<b>56.20 01 06</b>	500 x 450 x 220	458	440	GTH 48	12000



## Accessories

Handle set ECO for Commander 420, L = 220 mm	<b>56.20 01 93</b>
Handle set ECO for Commander 420, L = 320 mm	<b>56.20 01 94</b>
Handle set ECO for Commander 420, L = 420 mm	<b>56.20 01 95</b>
Mounting angle set for internal fitting of components	<b>56.20 99 01</b>







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

### 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, grain 240

**Temperature range:**

-25°C to +60°C

**Included in delivery:**

System components and tube mounted if ordered

# GTH 48 / GTH 60 suspension systems

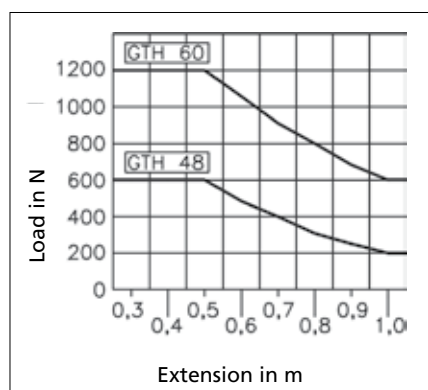
## Product range

GTH 48		GTH 60		
Order No.	Weight (g)	Order No.	Weight (g)	
<b>57.01 73 00</b>	2560	<b>57.02 73 00</b>	3440	Coupling
<b>57.01 73 01</b>	2560	<b>57.02 73 01</b>	3440	EMC coupling
<b>57.01 73 02</b>	2710	<b>57.02 73 02</b>	3600	Coupling for external tube fitting
<b>57.01 66 00</b>	2450	<b>57.02 66 00</b>	3360	Top-mounted joint
<b>57.01 66 01</b>	2450	<b>57.02 66 01</b>	3360	EMC top-mounted joint
<b>57.01 66 02</b>	2700	<b>57.02 66 02</b>	3550	Top mounted joint for external tube fitting
<b>57.01 74 00</b>	1390	<b>57.02 74 00</b>	2490	Foot stand (hanging / standing)
<b>57.01 72 00</b>	3080	<b>57.02 72 00</b>	3720	Foot stand with cable outlet (hanging / standing)
<b>57.01 76 00</b>	1120	<b>57.02 76 00</b>	1220	Console adapter
<b>57.01 76 01</b>	1120	<b>57.02 76 01</b>		Console adapter hygiene
<b>57.01 79 00</b>	2680	<b>57.02 79 00</b>	3190	Wall console
<b>57.01 00 05</b>	1800	<b>57.02 00 05</b>	2300	Tube I (500 mm)
<b>57.01 00 10</b>	3450	<b>57.02 00 10</b>	4650	Tube I (1000 mm)
<b>57.01 00 15</b>	5100	<b>57.02 00 15</b>	6900	Tube I (1500 mm)
<b>57.01 00 99</b>		<b>57.02 00 99</b>		Tube I special length
<b>57.01 02 05</b>	3250	<b>57.02 02 05</b>	4300	Tube S (500 mm)
<b>57.01 02 10</b>	4800	<b>57.02 02 10</b>	6850	Tube S (1000 mm)
<b>57.01 02 99</b>		<b>57.02 02 99</b>		Tube S special length
<b>57.01 01 05</b>	3300	<b>57.02 01 05</b>	4380	Tube J (500 mm)
<b>57.01 01 07</b>	5700	<b>57.02 01 07</b>	6350	Tube J (750 mm)
<b>57.01 01 10</b>	9500	<b>57.02 01 10</b>	9300	Tube J (1000 mm)
<b>57.01 01 99</b>		<b>57.02 01 99</b>		Tube J special length
<b>57.00 99 00</b>		<b>57.00 99 00</b>		System mounting

## Accessories

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

## Load diagram



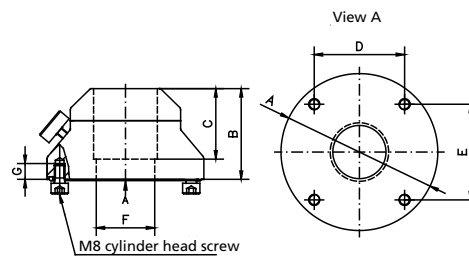
## GTH 48 / GTH 60 suspension systems



### Coupling

for attachment of stainless steel tubes 48 or 60 mm.  
Pivot, can be locked at any point using clamping screw.  
Swivel range: up to 350°, can be adjusted in 60° steps.  
Included in delivery: Coupling includes mounting screws

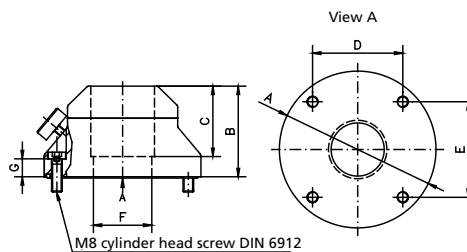
Order No.	Version	for tube	A	B	C	D	E	F	G
GTH 48									
<b>57.01 73 00</b>	Standard	Ø 48	Ø 118	70	53	68	72	Ø 44	13
<b>57.01 73 01</b>	EMC	Ø 48	Ø 118	70	53	68	72	Ø 44	13
<b>57.01 73 02</b>	for external fitting	Ø 48	Ø 118	82	65	68	72	Ø 44	13
GTH 60									
<b>57.02 73 00</b>	Standard	Ø 60	Ø 130	81	64	85,8	68	Ø 53	13
<b>57.02 73 01</b>	EMC	Ø 60	Ø 130	81	64	85,8	68	Ø 53	13
<b>57.02 73 02</b>	for external fitting	Ø 60	Ø 130	92	75	85,8	68	Ø 53	13



### Top-mounted joint

for attachment of stainless steel tube, 48 or 60 mm.  
Pivot can be locked at any point using clamping screw.  
Swivel range: up to 350°, can be adjusted in 60° steps.  
Included in delivery: top-mounted joint without M8 cylinder head screw

Order No.	Version	for tube	A	B	C	D	E	F	G
GTH 48									
<b>57.01 66 00</b>	Standard	Ø 48	Ø 118	70	53	68	72	Ø 44	13
<b>57.01 66 01</b>	EMC	Ø 48	Ø 118	70	53	68	72	Ø 44	13
<b>57.01 66 02</b>	for external fitting	Ø 48	Ø 118	82	65	68	72	Ø 44	13
GTH 60									
<b>57.02 66 00</b>	Standard	Ø 60	Ø 130	81	64	85,8	68	Ø 53	14
<b>57.02 66 01</b>	EMC	Ø 60	Ø 130	81	64	85,8	68	Ø 53	14
<b>57.02 66 02</b>	for external fitting	Ø 60	Ø 130	92	75	85,8	68	Ø 53	14



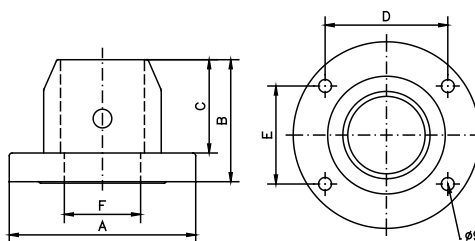
# GTH 48 / GTH 60 suspension systems



### Foot stand

for base- or ceiling mounting. Ceiling mounting version - additional safety bore for tube.  
Included in delivery: foot stand

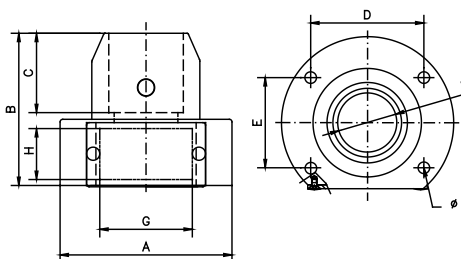
Order No.	Version	for tube	A	B	C	D	E	F
GTH 48								
<b>57.01 74 00</b>	Foot stand (hanging / standing)	Ø 48	Ø 118	80	60	68	72	Ø 41,9
GTH 60								
<b>57.02 74 00</b>	Foot stand (hanging / standing)	Ø 60	Ø 130	85	60	85,8	68	Ø 53,9



### Foot stand with cable outlet

for external cable outlet on side. Ceiling mounting version - additional safety bore for tube.  
Included in delivery: foot stand with flange plate and 2 screws

Order No.	Version	for tube	A	B	C	D	E	F	G	H
GTH 48										
<b>57.01 72 00</b>	Foot stand (hanging / standing)	Ø 48	Ø 118	110	60	68	72	Ø 41,9	45	38,5
GTH 60										
<b>57.02 72 00</b>	Foot stand (hanging / standing)	Ø 60	Ø 130	115	60	85,8	68	Ø 53,9	70	38,5



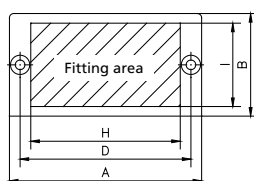
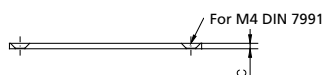
### Spare blind flange

for foot stand with cable outlet

Material: 1.4301

Included in delivery: blind flange without M4 countersunk screw

Order No.	A	B	C	D	H	I
GTH 48						
<b>57.01 99 02</b>	73	47,5	2,5	55	45	38,5
GTH 60						
<b>57.02 99 00</b>	90	48	2,5	80	70	38,5



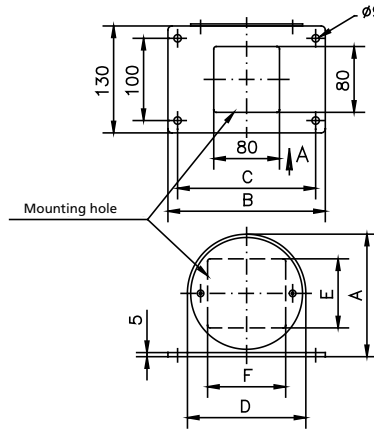
Max. number of cable glands/ blind flange:  
57.01 99 02: 1 x 25 or 1 x 20 or 4 x M12  
57.02 99 00: 1 x 25 or 2 x 20 or 6 x M12

# GTH 48 / GTH 60 suspension systems

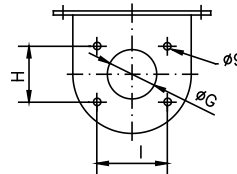


**Wall bracket**  
for adaption top mounted joint or coupling

Order No.	for tube	A	B	C	D	E	F	G	H	I
GTH 48										
<b>57.01 79 00</b>	Ø 48	138	178	155	132	88	84	50	72	68
GTH 60										
<b>57.02 79 00</b>	Ø 60	149	191,5	168	144	84	102	60	68	85,8

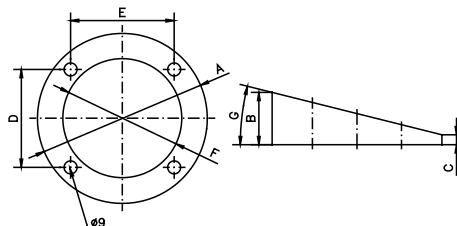


View A



**Console adapter**  
Angle of inclination 14°  
Included in delivery: console adapter with 4 fastening screws

Order No.	for tube	A	B	C	D	E	F	G
GTH 48								
<b>57.01 76 00</b>	Ø 48,3	Ø 118	40	10,6	68	72	Ø 79	14°
GTH 60								
<b>57.02 76 00</b>	Ø 60,3	Ø 130	40	7,6	85,8	68	Ø 91	14°



# Geräteträgersysteme GTH 48 / GTH 60



## Connecting tube I

Order No.	L1 (mm)	A (outside Ø)	B (inside Ø)	Weight (g)
<b>GTH 48</b>				
<b>57.01 00 05</b>	500	48,3	41	1800
<b>57.01 00 10</b>	1000	48,3	41	3450
<b>57.01 00 15</b>	1500	48,3	41	5100
<b>57.01 00 99</b>	special length	48,3	41	-
<b>GTH 60</b>				
<b>57.02 00 05</b>	500	60,3	53	2300
<b>57.02 00 10</b>	1000	60,3	53	4650
<b>57.02 00 15</b>	1500	60,3	53	6900
<b>57.02 00 99</b>	special length	60,3	53	-

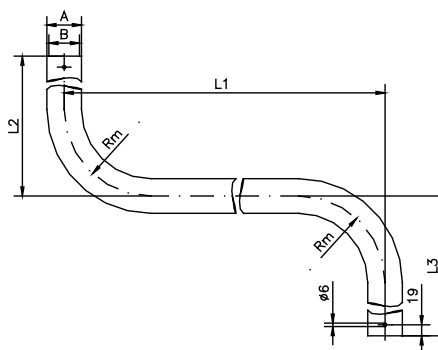
max. length L1 = 1000 mm



## Connecting tube S

Order No.	L1 (mm)	L2 (mm)	L3 (mm)	A (outside Ø)	B (inside Ø)	Weight (g)
<b>GTH 48</b>						
<b>57.01 02 05</b>	500	300	300	48,3	41	3250
<b>57.01 02 10</b>	1000	300	300	48,3	41	4800
<b>57.01 02 99</b>	special length			48,3	41	-
<b>GTH 60</b>						
<b>57.02 02 05</b>	500	300	300	60,3	53	4300
<b>57.02 02 10</b>	1000	300	300	60,3	53	6850
<b>57.02 02 99</b>	special length			60,3	53	-

max. length L1 = 1000 mm



# Geräteträgersysteme GTH 48 / GTH 60

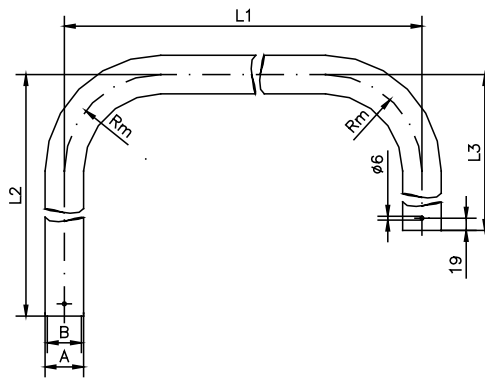


Connecting tube J

Order No.	L1 (mm)	L2 (mm)	L3 (mm)	A (outside Ø)	B (inside Ø)	Weight (g)
GTH 48						
<b>57.01 01 05</b>	500	300	300	48,3	41	3300
<b>57.01 01 07</b>	750	750	300	48,3	41	5700
<b>57.01 01 10</b>	1000	750	300	48,3	41	9500
<b>57.01 01 99</b>	special length			48,3	41	-
GTH 60						
<b>57.02 01 05</b>	500	300	300	60,3	53	4380
<b>57.02 01 07</b>	750	750	300	60,3	53	6350
<b>57.02 01 10</b>	1000	750	300	60,3	53	9300
<b>57.02 01 99</b>	special length			60,3	53	-

max. length L1 = 1000 mm

**Product info:**  
Individual lengths and versions on request.



# GTH 48 / GTH 60 suspension systems

Enquiry

Order

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

Company \_\_\_\_\_

Telephone \_\_\_\_\_

Contact \_\_\_\_\_

Fax \_\_\_\_\_

Address \_\_\_\_\_

E-Mail \_\_\_\_\_

Suspension system

GTH 48

GTH 60

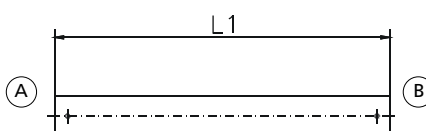
Quantity \_\_\_\_\_

System consisting of the following components:

## Components, side A

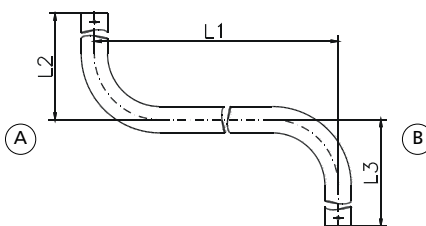
- Coupling
- EMC coupling
- Coupling for external tube fitting
- Top-mounted joint
- EMC top-mounted joint
- Top-mounted joint for external tube fitting
- Foot stand
- Foot stand for ceiling mounting
- Foot stand with cable outlet
- Foot stand (ceiling mounting) with cable outlet
- Console adapter
- Wall console

## Connecting tube



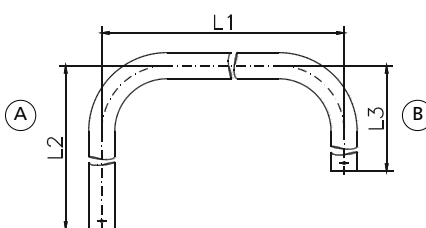
I-tube (L1)

- 500 mm
- 1000 mm
- 1500 mm
- Special length \_\_\_\_\_ mm



S-tube (L1/L2/L3)

- 500/300/300 mm
- 1000/300/300 mm
- Special length\* \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ mm



J-tube (L1/L2/L3)

- 500/300/300 mm
- 750/750/300 mm
- 1000/750/300 mm
- Special length\* \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ mm

\* Attention: measure dimension tube center  
min. lengths L2 and L3: 280 mm  
max. lengths L1 = 1000 mm

## Components, side B

- Coupling
- EMC coupling
- Coupling for external tube fitting
- Top-mounted joint
- EMC top-mounted joint
- Top-mounted joint for external tube fitting
- Foot stand
- Foot stand for ceiling mounting
- Foot stand with cable outlet
- Foot stand (ceiling mounting) with cable outlet
- Console adapter
- Wall console

## Accessories

- Protective cap set
- Spare blind flange untreated
- Spare blind flange treated \_\_\_\_\_



## Stainless steel cable glands



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.
<b>Metric</b>				
M 12 x 1,5	3 - 6,5	14	6,5	<b>08.04 14 12</b>
M 16 x 1,5	5 - 10	22	6	<b>08.04 14 16</b>
M 20 x 1,5	10 - 14	24	6	<b>08.04 14 20</b>
M 25 x 1,5	13 - 18	30	7	<b>08.04 14 25</b>
M 32 x 1,5	20 - 25	41	8	<b>08.04 14 32</b>
M 40 x 1,5	22 - 32	50	8	<b>08.04 14 40</b>



Type	Pressure balance element
Material	Stainless steel 1.4305
Sealing insert	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.
<b>Metric</b>				
M 12 x 1,5		17	10	<b>08.50 10 12</b>

\* AF: width across flats  
TL: thread length

Ex stainless steel cable glands see catalogue „Ex-Equipment“

Stainless steel / special version



# Stainless steel / special version

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 \_\_\_\_\_

## Wall 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: grinded, grain 240

optional:  untreated

painted, colour (RAL) \_\_\_\_\_

glass bead pearled

brushed

pickled

electro-polished

lengthwise grinded

## Enclosure version

acc. drawing

Lid  Hinge, outside

Hinge, inside

screwed

Door

Lock

## Accessories:

Mounting set (gasket, nuts, screws)

External mounting brackets

screwed

welded

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

Documentation enclosed: \_\_\_\_\_

dxf or dwg file

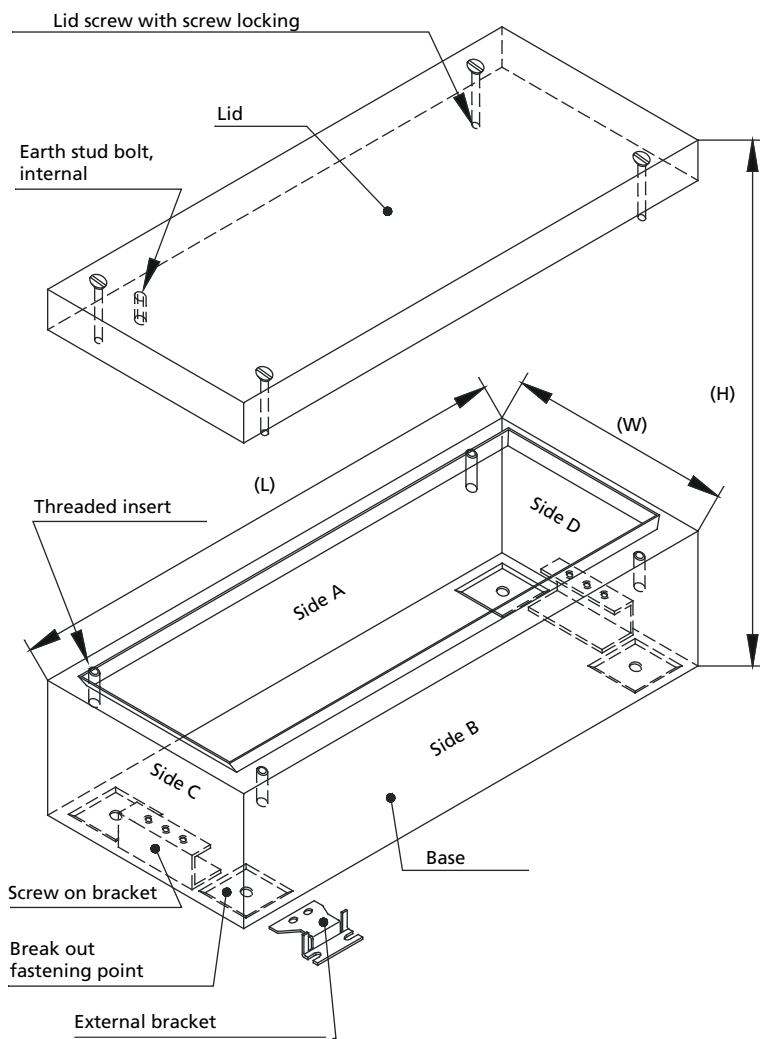
Drawings

IP \_\_\_\_\_

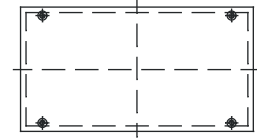
Desired delivery date: \_\_\_\_\_

Comments: \_\_\_\_\_

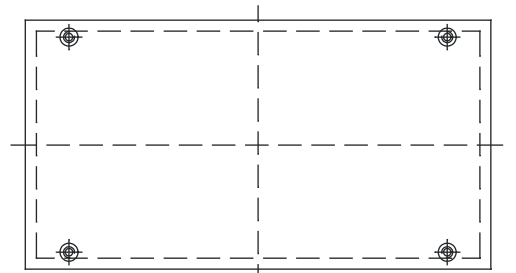
# Stainless steel / special version



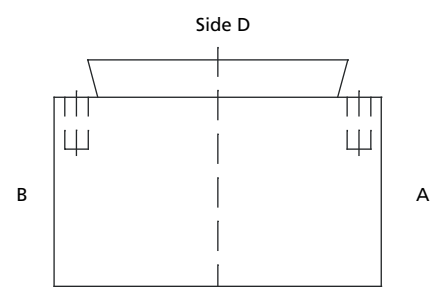
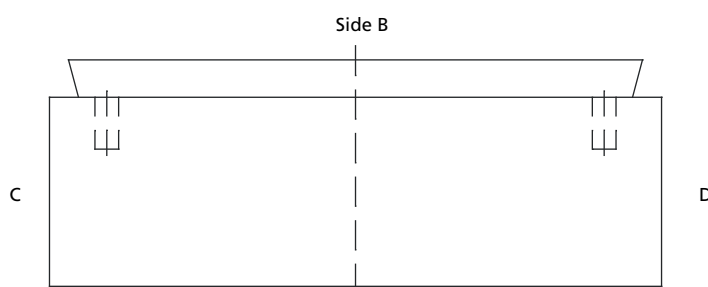
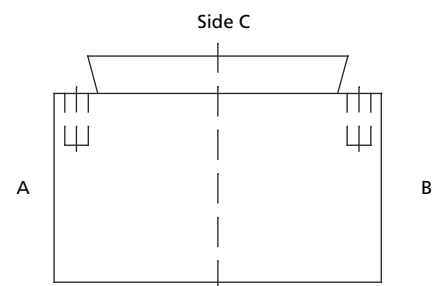
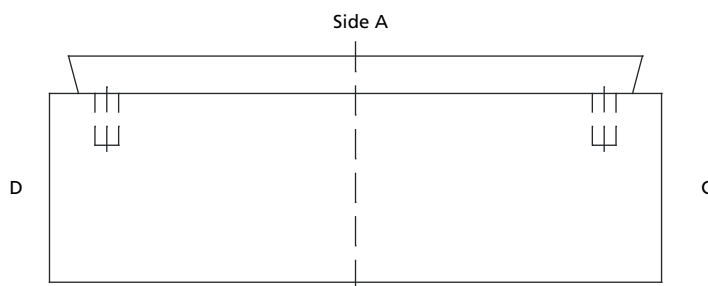
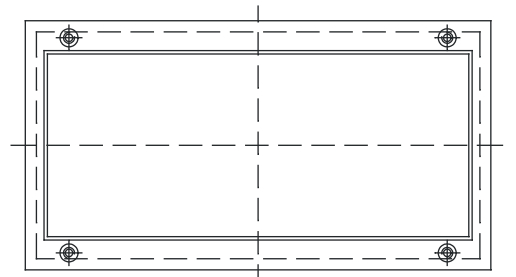
Plan view of side layout



Plan view of lid



Inside view of base



## 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.

### Chemical resistance of enclosure materials and seals

Chemicals	Stainless steel	EPDM	Polyurethane	Silicone
Acetone	+	+	-	•
Formic acid	+	/	/	•
Ammonia	+	•	/	+
Petrol	+	/	+	+
Benzene	+	•	+	-
Brake fluid	/	up to 150°C	/	+
Butane	/	/	/	-
Butanol	/	+	/	-
Calcium chloride	+	•	/	/
Chloral benzene	/	/	-	-
Diesel oil	/	/	+	•
Acetic acid	+	+	/	-
Formaldehyde	+	up to 30%	/	+
Freon 113	/	/	/	/
Fruit juice	+	+	+	+
Glycerine	+	+	+	+
Fuel oil	+	/	+	•
Hydraulic oil	/	•	/	•
Caustic potash solution	+	•	/	/
Potassium chloride	+	•	+	+
Potassium hydroxide	+	•	-	•
Linseed oil	+	/	+	•
Methane	+	+	/	+
Methylene chloride	+	/	-	-
Lactic acid	+	•	/	/
Mineral oils	/	/	+	+
Motor oils	/	/	+	+
Sodium carbonate	+	•	/	/
Sodium chloride	•	•	+	+
Sodium hydroxide	+	•	-	•
Soda lye	+	•	/	-
Nitric acid	+	up to 10%	-	-
Hydrochloric acid	+	up to 10%	-	/
Lubricating oil	+	/	+	+
Carbon bisulphide	+	/	/	-
Sulphuric acid	+	/	/	25 %
Suds	+	•	•	+
Cleansing agent	+	/	•	+
Terpentine oil	/	/	/	-
Carbon tetrachloride	/	/	-	-
Toluene	/	/	-	-
Trichlorethylene	/	/	-	-
Water (dest. Water, river-, mains-, sea)	+	+	+	+
Tartaric acid	/	•	+	+
Xylene	/	/	-	-
Zinc sulphate	/	•	/	+
Citric acid	/	•	/	+

The investigations, unless stated otherwise, were carried out at room temperature. Resistances can vary when two different materials come into contact with one another. We cannot therefore accept liability for this data.

#### Explanation of symbols

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

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# General technical information

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## Ingress protection

ROSE enclosure 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
9	Protection against high-pressure jets*

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.

\* Ingress protection EN 60529

## Surface

State of the art sanding and polishing techniques are used to give ROSE stainless steel enclosures a high quality surface finish. All enclosures are guaranteed gradient and warp-free. In the final process the stainless steel surfaces are grinded with grain 240 emery. All ROSE enclosures are naturally supplied free from grease and dust.

Enclosures are optionally available with a bead-blasted finish.

## 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.



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