

## Solutions Ex d IIC based on GUB Enclosures, Aluminum

### GUB\*

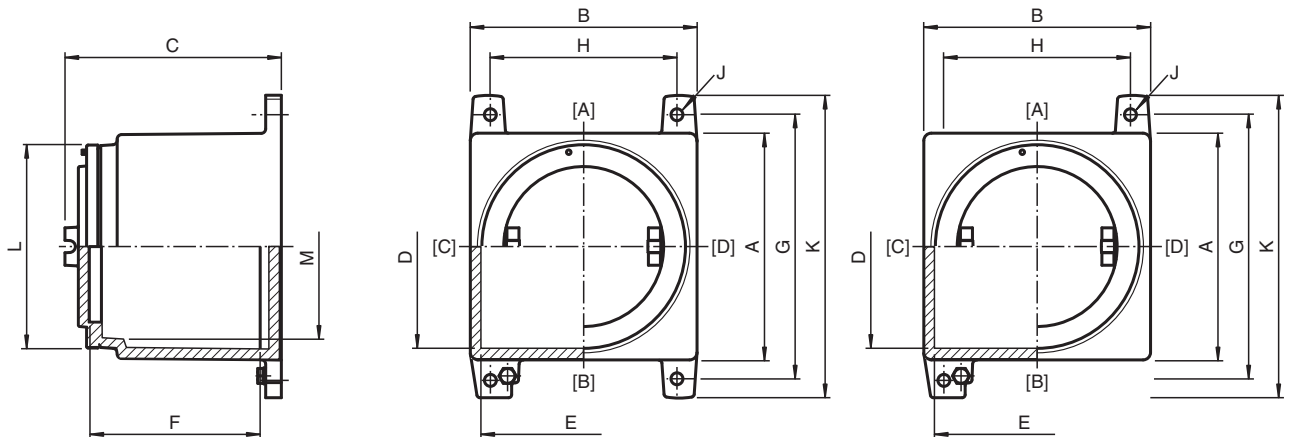
- Aluminum alloy
- Installation in Zone 1, Zone 2, Zone 21 and Zone 22
- Ex d and Ex tb certified
- Gas group IIC
- Various enclosure size and design variants
- Integration of electrical components and operating elements as per customer specification
- Customizable configuration of operators, cable entry quantities and cable gland types as per specification
- Thermo-resistant tempered glass window
- Degree of protection IP66 or IP66 / IP67



### Function

The GUB enclosures series forms the optimal basis for the application-specific configuration of terminal boxes as well as control and distribution panels. A wide range of components and control functions can be integrated in one of many size and design options of Ex d IIC and Ex tb certified flameproof enclosures. They are manufactured from copper-free aluminum. This durability and the comprehensive enclosure sizes cover the requirements of many industries including offshore and marine applications. A choice of windows allows viewing of integrated monitoring functions. Electrical components can be integrated as per customer specification.

### Dimensions



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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## Dimensions

Dimension values see data table.

Real values might differ slightly due to manufacturing tolerances.

Dimensions are valid for standard enclosures and IP66 variants only.

Image and drawing are generic for this device type and may deviate from the specific variant.

Legend	
A	Height
B	Width
C	Depth
D	Internal height
E	Internal width
F	Internal depth to surface mounting plate
G	Mounting holes distance, vertical
H	Mounting holes distance, horizontal
J	Mounting holes diameter
K	Maximum external dimension of mounting brackets
L	Diameter threaded cover
L	Diameter circular window (window variants only)
M	Diameter mounting aperture
[A] ... [D]	Cable entry faces

## Technical Data

Electrical specifications	
Operating voltage	1500 V DC / 1000 V AC max.
Operating current	recommended: 1600 A max.
Mechanical specifications	
Thread type	metric ISO pitch 1.5 mm or NPT ANSI ASME B1.20.1
Enclosure cover	threaded round cover
Cover fixing	flamepath thread
Cover seal	none, O-ring for IP66/67
Degree of protection	IP66 (IP66/67 with O-ring)
Cable entry	see data table
Material	
Enclosure	aluminum alloy
Glass	thermo-resistant tempered glass
Finish	epoxy coated RAL 7005 (grey)
O-Ring	silicone
Mass	see data table valid for empty enclosure, will increase according to integrated components
Dimensions	see data table values might differ slightly due to casting and manufacturing tolerances
Mounting	see data table
Grounding	M6 external grounding points
Ambient conditions	
Ambient temperature	-60 ... 60 °C (-76 ... 140 °F) depending on integrated components
Data for application in connection with hazardous areas	
EU-type examination certificate	INERIS 14 ATEX 0035X INERIS 16 ATEX 9005U

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## Technical Data

Marking	Ⓜ II 2 GD Ex db IIC T* Gb Ex tb IIIC T** °C Db T6/T85 °C T5/T100 °C T4/T135 °C T3/T200 °C depending on configuration, ambient temperature and built-in power loss
Maximum power dissipation	see data table maximum power dissipation at T4/+40 °C
<b>International approvals</b>	
IECEX approval	IECEX INE 14.0042X IECEX INE 16.0051U
UKCA approval	CML 21 UKEX 21304X CML 21 UKEX 2976U
ECAS approval	22-09-51658/E22-09-051730/NB0002
CCoE approval	PESO A/P/HQ/KA/104/6018 (P558877)
CCC approval	2023122303116246
Further approvals	available on request
<b>Conformity</b>	
Degree of protection	EN 60529
CE marking	0080 or 0102, see type label
<b>General information</b>	
Ordering information	This solution will be delivered completely configured and assembled ready for use. For configuration details please contact Customer Service.
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

## Type Code

1	2	3	4	5	6	7	8
GUB	*	*	*	**	.	*	**
GUB		W	E	3	.	D	CP
							-
							Y0001

Example: GUBWE3.D.CP-Y0001

Control panel GUB size 3 in aluminum, with extension and window, without intrinsically safe circuits

<b>1</b>	<b>Enclosure type</b>
GUB	enclosure Ex d IIC
<b>2</b>	<b>Material</b>
	copper-free aluminum
<b>3</b>	<b>Window</b>
	no window
W	window
<b>4</b>	<b>Enclosure variant</b>
	standard variant
E	variant with extension
<b>5</b>	<b>Enclosure size</b>
00 ... 5	see dimensions data table
<b>6</b>	<b>Electrical circuits</b>
D	without intrinsically safe circuits
I	intrinsically safe circuits integrated
<b>7</b>	<b>Type of application</b>
U	empty enclosure
T	terminal box
CP	control panel
CS	control station
DB	distribution board
DMT	electronic earthing system

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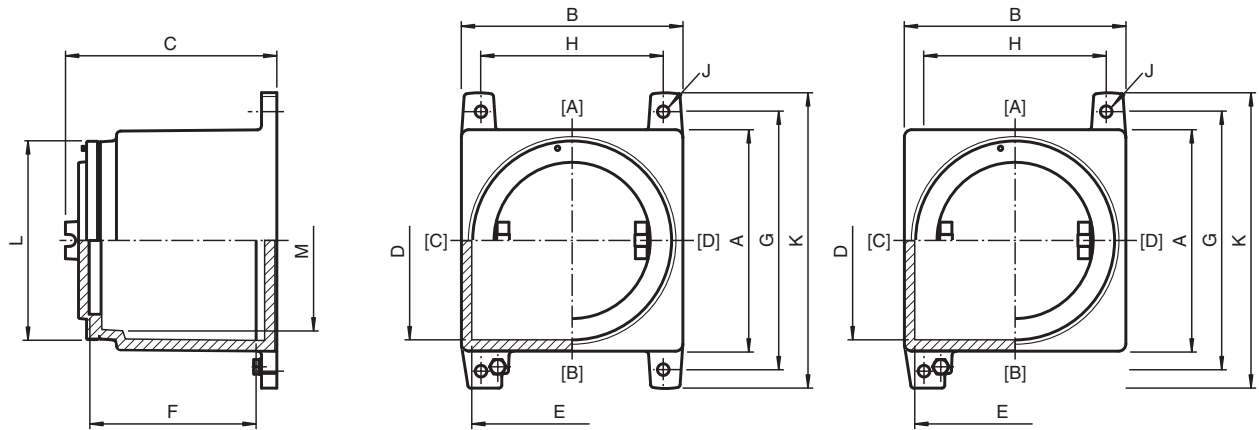
## Type Code

7	Type of application
MS	motor starter
PS	power switching
RIO	remote I/O field unit
IFS	interface solution
FJB	fieldbus solution
OS	optical solution
Q40	engineered solution per customer specification (Q40)

8	Variant number
Yxxxx	consecutive number

## Dimensions and Enclosure Details GUB\*



Type	External dimensions [mm]				Internal dimensions [mm]			Mounting [mm]			Diameter [mm]		Mounting brackets quantity	Mass [kg]	Max. power dissipation at T4/+40 °C [W]
	A	B	C	K	D	E	F	G	H	J	L	M			
GUB00*	119	119	137	166	92	92	102	145	95	8	112	97	2	2	48
GUB0*	150	150	145	200	125	125	117	178	125	8	136	114	2	3.5	78
GUB0H*	150	150	185	200	125	125	150	178	125	8	136	114	2	4.5	91
GUB1*	202	202	155	255	170	170	110	228	178	10	189	163	2	6.4	122
GUB1H*	202	202	200	255	170	170	150	228	178	10	189	163	2	7.6	143
GUB1PF*	176	176	139	220	150	150	105	196	154	10	170	147	2	6.4	95
GUB2*	250	250	160	305	225	225	112	275	232	10	231	206	4	8.5	181
GUB3*	260	260	215	310	228	228	169	285	228	10	231	206	4	11.5	222
GUB3L*	360	360	238	430	325	325	183	395	318	10	348	320	4	21	293
GUB4* (-20 °C)	450	450	305	525	410	410	227	485	410	10	437	406	4	43.5	466
GUB4*	450	450	305	525	410	410	215	485	410	10	437	406	4	53.5	466
GUB4A* (-20 °C)	450	450	235	525	410	410	157	485	410	10	437	406	4	38	400
GUB4A*	450	450	235	525	410	410	145	485	410	10	437	406	4	48	400
GUB5*	555	555	400	647	514	514	266	595	500	14	546	504	4	80	749

Mass is valid for empty enclosure, it will increase according to integrated components and cable glands

Values might differ slightly due to manufacturing tolerances

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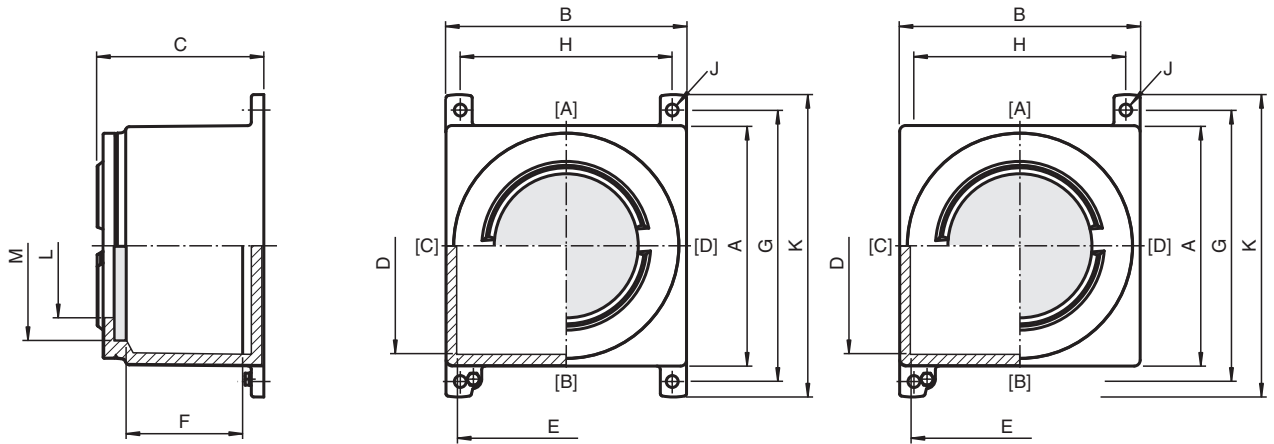
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**Dimensions and Enclosure Details GUBW\***



Type	External dimensions [mm]				Internal dimensions [mm]			Mounting [mm]			Diameter [mm]		Mounting brackets quantity	Mass [kg]	Max. power dissipation at T4/+40 °C [W]
	A	B	C	K	D	E	F	G	H	J	L	M			
GUBW00*	119	119	121	166	92	92	85	145	95	8	64	97	2	2.1	48
GUBW0*	150	150	135	200	125	125	105	178	125	8	79	114	2	3.6	78
GUBW0H*	150	150	171	200	125	125	137	178	125	8	79	114	2	4.6	91
GUBW1*	202	202	134	255	170	170	95	228	178	10	121	163	2	6.3	122
GUBW1H*	202	202	176	255	170	170	135	228	178	10	121	163	2	7.5	143
GUBW2*	250	250	140	305	225	225	93	275	232	10	160	206	4	9	95
GUBW3*	260	260	193	310	228	228	150	285	228	10	160	206	4	11	181
GUBW3L*	360	360	219	430	325	325	160	395	318	10	260	320	4	22	222
GUBW4* (-20 °C)	450	450	281	525	410	410	203	485	410	10	260	406	4	44	293
GUBW4*	450	450	281	525	410	410	203	485	410	10	260	406	4	51	466
GUBW4A* (-20 °C)	450	450	211	525	410	410	133	485	410	10	260	406	4	39	466
GUBW4A*	450	450	211	525	410	410	133	485	410	10	260	406	4	46	400
GUBW5*	555	555	400	647	514	514	275	595	500	14	260	504	4	80	749

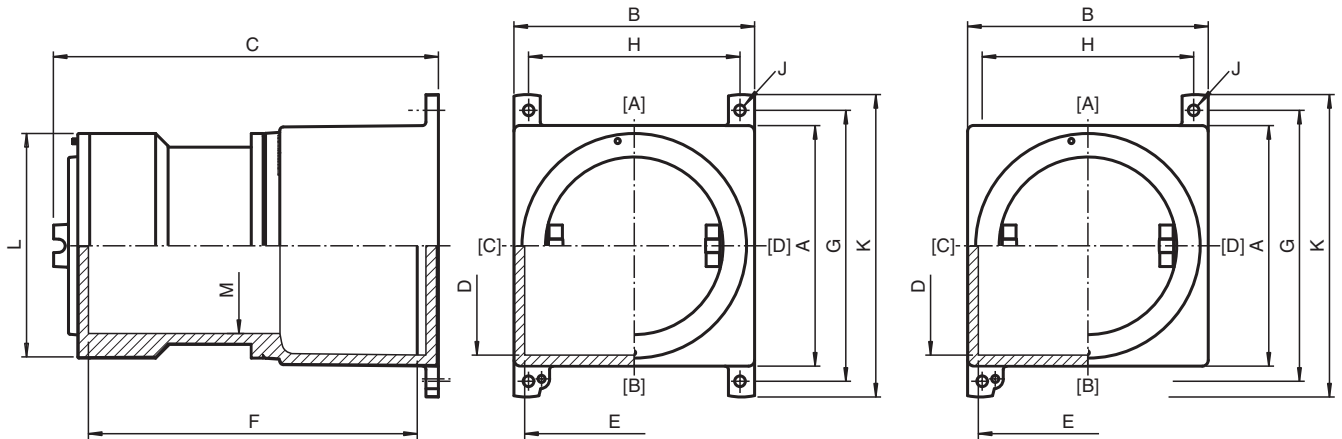
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**Dimensions and Enclosure Details GUBE\***



Type	External dimensions [mm]				Internal dimensions [mm]			Mounting [mm]			Diameter [mm]		Mounting brackets quantity	Mass [kg]	Max. power dissipation at T4/+40 °C [W]
	A	B	C	K	D	E	F	G	H	J	L	M			
GUBE0*	150	150	252	200	125	125	224	178	125	8	136	114	2	3.3	111
GUBE0H*	150	150	292	200	125	125	255	178	125	8	136	114	2	4.8	125
GUBE1*	202	202	301	255	170	170	255	228	178	10	189	163	2	9.1	185
GUBE1H*	202	202	345	255	170	170	299	228	178	10	189	163	2	10.4	206
GUBE2*	250	250	340	305	225	225	291	275	232	10	231	206	4	13	283
GUBE3*	260	260	391	310	228	228	345	285	228	10	231	206	4	15.2	323
GUBEB3L*	360	360	405	430	325	325	345	395	318	10	348	320	4	32.5	405
GUBE3L*	360	360	495	430	325	325	435	395	318	10	348	320	4	35	458
GUBE4* (-20 °C)	450	450	545	525	410	410	470	485	410	10	437	406	4	59	675
GUBE4*	450	450	545	525	410	410	457	485	410	10	437	406	4	69	675
GUBE4A* (-20 °C)	450	450	475	525	410	410	397	485	410	10	437	406	4	54	609
GUBE4A*	450	450	475	525	410	410	384	485	410	10	437	406	4	64	609

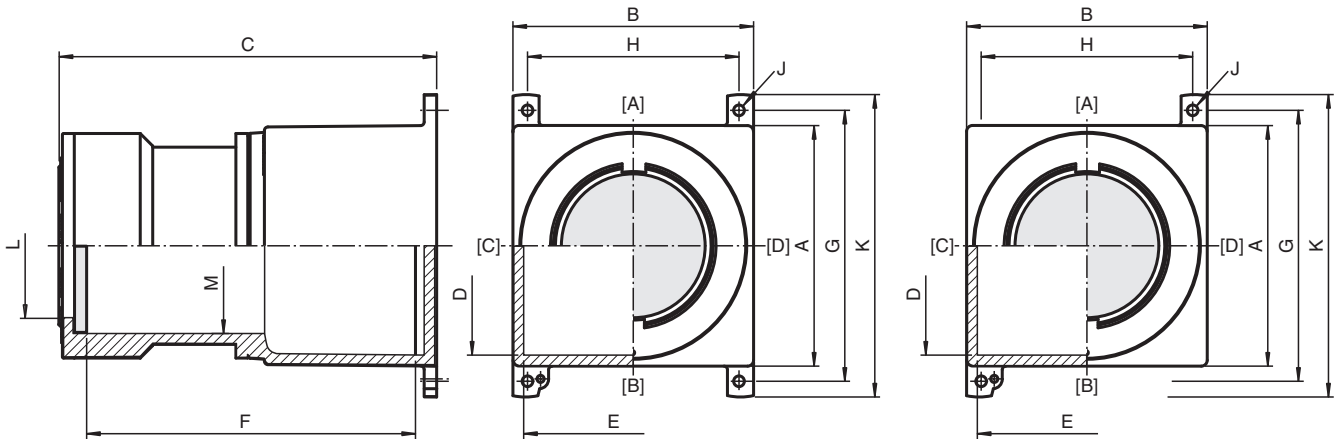
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**Dimensions and Enclosure Details GUBWE\***



Type	External dimensions [mm]				Internal dimensions [mm]			Mounting [mm]			Diameter [mm]		Mounting brackets quantity	Mass [kg]	Max. power dissipation at T4/+40 °C [W]
	A	B	C	K	D	E	F	G	H	J	L	M			
GUBWE0*	150	150	242	200	125	125	212	178	125	8	79	114	2	3.5	111
GUBWE0H*	150	150	278	200	125	125	242	178	125	8	79	114	2	5	125
GUBWE1*	202	202	281	255	170	170	240	228	178	10	121	163	2	9	185
GUBWE1H*	202	202	323	255	170	170	284	228	178	10	121	163	2	10.3	206
GUBWE2*	250	250	340	305	225	225	272	275	232	10	160	206	4	12.5	283
GUBWE3*	260	260	371	310	228	228	330	285	228	10	160	206	4	15.5	323
GUBWEB3L*	360	360	384	430	325	325	322	395	318	10	260	320	4	33.5	405
GUBWE3L*	360	360	474	430	325	325	412	395	318	10	260	320	4	36	458
GUBWE4* (-20 °C)	450	450	522	525	410	410	445	485	410	10	260	406	4	61	675
GUBWE4*	450	450	522	525	410	410	445	485	410	10	260	406	4	68	675
GUBWE4A* (-20 °C)	450	450	452	525	410	410	372	485	410	10	260	406	4	56	609
GUBWE4A*	450	450	452	525	410	410	372	485	410	10	260	406	4	63	609

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## Cable Entries max. Quantity per Size

Type	Cover	Faces A ... D									Bottom				
	M12	M20	M25	M32	M42	M50	M63	M75	M85	M110	M20	M25	M32	M42	M50
	1/4"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	1/2"	3/4"	1"	1-1/4"	1-1/2"
GUB00*	1	4	3	2	1	1	1	-	-	-	2	2	1	-	-
GUB0*	1	6	5	3	2	2	1	1	-	-	4	3	1	-	-
GUB0H*	1	10	8	4	3	2	1	1	1	1	4	3	1	-	-
GUB1*	2	8	8	5	2	2	2	1			6	4	2	1	1
GUB1H*	2	12	10	5	4	4	2	1	1	1	6	4	2	1	1
GUB1PF*	1	8	6	3	2	2	1	-	-	-	4	3	1	1	1
GUB2*	3	10	10	6	3	3	2	2	-	-	10	8	4	2	2
GUB3*	3	20	15	10	6	5	3	2	2	1	10	8	4	2	2
GUB3L*	8	30	25	15	8	8	5	3	2	1	20	12	10	4	4
GUB4*	10	45	35	20	14	10	8	5	3	1	25	15	11	5	5
GUB4A*	10	28	20	12	10	5	4	3	3	-	25	15	11	5	5
GUB5*	12	70	60	35	20	15	12	6	5	3	35	20	18	6	6

Metric ISO pitch 1.5mm, NPT ANSI ASME B1.20.1

Table shows drilling pattern for ambient temperature range -20 ... +60 °C.

For lower temperatures please contact Pepperl+Fuchs

For types of cable glands and combination of different gland sizes please contact Pepperl+Fuchs