Control Panels/Control Stations, Copper free aluminum GUB* Stainless steel GUBX*

Marking

Control Panels/Control Stations, Copper free aluminum GUB* Control Panels/Control Stations, Stainless steel GUBX*
ATEX certificate: INERIS 14 ATEX 0035X ATEX marking: Ex 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
IECEx certificate: IECEx INE 14.0042X CCC certificate: 2023122303116246 UL approval: cETLus Control panels E5003368 approved for: Class I, Division 1, Groups A, B, C, D Class II, Division 1, Groups E, F, G Type 4, 4X, 7, 9

The *-marked letters of the type code are placeholders for versions of the device.

Pepperl+Fuchs Group Lilienthalstraße 200, 68307 Mannheim, Germany
Internet: www.pepperl-fuchs.com

Target Group, Personnel

Responsibility for planning, assembly, commissioning, operation, maintenance, and dismounting lies with the plant operator.

The personnel must be appropriately trained and qualified in order to carry out mounting, installation, commissioning, operation, maintenance, and dismounting of the device. The trained and qualified personnel must have read and understood the instruction manual.

Reference to Further Documentation

Observe directives, standards, and national laws applicable to the intended use and the operating location.

The corresponding datasheets, manuals, declarations of conformity, EU-type examination certificates, certificates, and control drawings if applicable (see datasheet) are an integral part of this document. You can find this information under www.pepperl-fuchs.com.

In order to access this documentation, enter the product name, i. e. the type code, or the item number of the product in the search field of the website.

For specific device information such as the year of construction, scan the QR code on the device. As an alternative, enter the serial number in the serial number search at www.pepperl-fuchs.com.

Intended Use

The device is only approved for appropriate and intended use. Ignoring these instructions will void any warranty and absolve the manufacturer from any liability.

The enclosures of the GUB* series are made of copper free aluminum.

The enclosures of the GUBX* series are made of stainless steel.

The device can be used indoors.

The device can be used outdoors.

The device can be used in Zone 1.

The device can be used in Zone 21.

The device can be used in Zone 2.

The device can be used in Zone 22.

The device is designed for wall mounting.

The device is designed for mounting to a steel framework.

Use suitable fixing material for mounting.

Mount the enclosure at the fixing points provided.

Improper Use

Do not mount the device on the ceiling.

Protection of personnel and the plant is not ensured if the device is not used according to its intended use.

Mounting and Installation

Ex components are not intended to be used alone. Mounting and usage of Ex components in devices or systems must be certified separately. Ex components have the U marking at the end of the certificate number.

Observe the instruction manuals for the associated components.

Observe the installation instructions according to IEC/EN 60079-14.

Observe directives, standards, and national laws applicable to the intended use and the operating location.

Examples for such regulations are regulations regarding electricity, grounding, installation as well as hygiene and safety.

If you intend to install the device or enclosure in areas that may be exposed to aggressive substances, ensure that the stated surface materials are compatible with these substances. If required, contact Pepperl+Fuchs for further information.

Ensure that the device provides and maintains a degree of protection of at least IP66 according to IEC/EN 60079-0.

Observe the requirements according to IEC/EN 60079-31regarding excessive dust deposits.

To ensure compliance with the temperature class, ensure that there is adequate free air space around the enclosure.

The enclosure cover is heavy. In order to avoid personal injuries or property damage, make appropriate provisions for the mounting procedure.

Do not damage the flamepath surfaces between enclosure and enclosure cover during the opening of the control panel.

If one of the flamepath surfaces is damaged, exchange enclosure and enclosure cover.

Do not add additional components into the control panel, which are not listed in the original bill of materials.

Before fixing the enclosure cover to the enclosure, protect the flamepath surfaces with a thin layer of suitable protective grease.

When the cover is fitted, ensure that all fasteners are fully tightened.

The delivered control panel is completely wired. Do not modify or manipulate this control panel. Observe the wiring diagram when connecting the control panel.

Ensure that there are no external heat sources around the enclosure.

Safety-relevant markings are found on the nameplate supplied. Ensure that the nameplate is present and legible. Take the ambient conditions into account.

Additional warning markings may be affixed next to the nameplate.

Ensure that the enclosure is not damaged, distorted, or corroded.

Ensure that all seals are clean, undamaged, and correctly fitted.

Tighten all screws of the enclosure/enclosure cover with the appropriate torque.

Close all unused enclosure holes with the appropriate stopping plugs.

Only use stopping plugs that are suitably certified for the application.

If mounting the enclosure on concrete use expansion anchors. When mounting the enclosure to a steel framework use vibration resistant mounting material.

If external connections are present, ensure that the connections are in good condition, and are not damaged or corroded.

In order to prevent condensation in the enclosure, use suitably certified breather drains.

In order to minimize power dissipation, observe the maximum possible conductor lengths.

If radio frequency sources are present in the device, the usage of the device is bound to local restrictions. Ensure that the local restrictions allow usage of this device before commissioning.

Associated Apparatus / Intrinsically Safe Circuits

When the control panel is equipped with an associated apparatus with intrinsically safe circuits and the panel is in addition equipped with a thermal probe for protecting the I.S. apparatus against ambient temperatures where it is not designed for, this thermal probe has to be connected to either an internal or external switch which switches OFF the power for the I.S. apparatus in case the temperature inside of the panel reaches the upper or lower thresholds of the I.S. apparatus. If an external temperature switch is used, the user has to confi gure the settings of that switch according to the following rules:

- Maximum temperature response threshold of [(TIEx-2) ±2°C] TIEx = Maximum value of the certified ambient temperature of the internal I.S. apparatus.
- Minimum temperature response threshold of [(TminEx+2) ±2°C]. TminEx = minimum value of the certified ambient temperature of the internal I.S. apparatus.

Requirements for Cable Glands

Only use cable glands that are suitably certified for the application.

Only use cable glands with a temperature range appropriate to the application.

For cable glands only use incoming cable diameters of the appropriate size.

For control panels with IECEx certification, only use cable glands with metric thread or NPT thread.

Use seals that are suitable for the specified application.

Ensure that the degree of protection is not violated by the cable glands.

Install cables and cable glands in a way that they are not exposed to mechanical hazards.

The cables and connection lines must be free from mechanical stress. Use appropriate strain relief, which must be fitted outside of the enclosure.

Ensure that all cable glands are in good condition and are securely tightened.

Close all unused cable glands with the appropriate sealing plugs.

Observe the specific ambient conditions of sealing plugs.

Tighten all cable glands with the appropriate torque.

Ground metal cable glands.

Special Requirements for North America and Canada

Do not paint or varnish the surfaces of the flamepath.

Clean and deburr all holes and cutouts.

Break all sharp edges according to UL1439.

For information on drilling and tapping conduit openings, see 'Variant-Specific Data'.

Gauging requirements for field-threaded entries: Metric ISO thread class 6H, NPT ASME B1.20.1 (gauging per ASME B1.20.17, flush to +3 ½ turns past L1).

For information on connection to threaded rigid metal conduit or cable sealing fittings, see 'Mounting and Installation.

Warning!

Atmosphere-Specific use only

This equipment shall only be operated in hazardous locations consisting of 'Acetic Acid (Glacial), Acetone, Ammonium Hydroxide (20% by weight), ASTM reference fuel C, Diethyl Ether, Ethyl Acetate, Ethylene Dichloride, Furfural, n-Hexane, Methyl Ethyl Ketone, Methanol and Toluene', or non-hazardous areas.

Operation, Maintenance, Repair

Observe the requirements according to IEC/EN 60079-14 during operation.

Observe IEC/EN 60079-17 for maintenance and inspection.

Observe the requirements according to IEC/EN 60079-19 for repair and overhaul.

The device must be disconnected from the power supply prior to installation and maintenance. The power supply may be activated only after all the circuits required for operation have been fully assembled and connected.

If the control panel was affected by a short circuit, check the following.

Check the functionality of the control panel.

Check the wear on the device and the device components at specific intervals. The interval between checks depends on the operating conditions and loads that occur.

If the enclosure is damaged, replace enclosure and enclosure cover.

Check all surfaces of the flamepath for damage. If an actuator is present, check the flamepaths of the actuator for damage.

If the surfaces of the flamepath are damaged, replace the enclosure and the enclosure cover. If the surfaces of the flamepath of an actuator are damaged replace the complete actuator.

Do not paint or varnish the surfaces of the flamepath.

If the protective grease on the surfaces of the flamepath has become old, remove the protective grease and fat with new suitable protective grease.

Enclosures with degree of protection IP66/67 have seals in the flamepath.

Only use screws with a defined minimum yield stress for closing the enclosure cover.

Avoid electrostatic charges which could result in electrostatic discharges while installing, operating, or maintaining the device.

If cleaning is necessary while the device is located in a hazardous area, in order to avoid electrostatic charging only use a clean damp cloth.

Do not modify or manipulate the device.

Ensure that all fasteners are present.

Ensure that external ground connections exist, are in good condition, and are not damaged or corroded.

If there is a defect, the device must be repaired by Pepperl+Fuchs.

Alternatively the device can be repaired by a qualified electrician in compliance with IEC/EN 60079-19.

Schedule of Limitations

The width of the flameproof joints is superior to those specified in the tables of EN/IEC 60079-1.

Delivery, Transport, Disposal

Store the device in a clean and dry environment. The permitted ambient conditions must be considered, see datasheet.

Check the packaging and contents for damage.

Check if you have received every item and if the items received are the ones you ordered.

The device, built-in components, packaging, and any batteries contained within must be disposed in compliance with the applicable laws and guidelines of the respective country.

Technical Data

General	
Types and variants	GUB* - see type code table GUBX* - see type code table
Electrical specifications	
Operating voltage	1500 V DC / 1000 V AC max.
Operating current	recommended: 1600 A max.
Mechanical specifications	
Dimensions	see data table values might differ slightly due to manufacturing tolerances for custom designed solutions dimensions and mass may differ
Thread type	metric ISO pitch 1.5 mm or NPT ANSI ASME B1.20.1
Enclosure cover	threaded round cover
Degree of protection	IP66 (IP66/IP67 with O-ring)
Mass	see data table valid for empty enclosure, will increase according to integrated components
Mounting	see data table
Cable entry	see data table
Material	
Enclosure	aluminum alloy or AISI 316L stainless steel
Glass	thermo-resistant tempered glass
Finish	aluminum: epoxy coated RAL 7005 (grey) stainless steel: shot peened
O-Ring	silicone
Cover seal	none, O-ring for IP66/67
Cover fixing	flamepath thread
Grounding	M6 external grounding points
Ambient conditions	
Ambient temperature	GUB*: -60 ... 180 °C (-76 ... 356 °F) depending on integrated components GUBX*: -60 ... 60 °C (-76 ... 140 °F) depending on integrated component
Data for application in connection with hazardous areas	
Maximum power dissipation	see data table maximum power dissipation at T4/+40 °C enclosure without window

Conformity	
Degree of protection	EN 60529
CE marking	0080 or 0102, see type label

Type Code / Model Number

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

1	Enclosure type
GUB	enclosure Ex d IIC

2	Material
	copper-free aluminum

3	Window
	no window
W	window

4	Enclosure variant
	standard variant
E	variant with extension

5	Enclosure size
00 ... 5	see dimensions data table

6	Electrical circuits
D	without intrinsically safe circuits
I	intrinsically safe circuits integrated

7	Type of application
U	empty enclosure
T	terminal box
CP	control panel
CS	control station
DB	distribution board
DMT	electronic earthing system
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

Type Code / Model Number

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

Example: GUBX3.D.CP-Y0001
Control panel GUB size 3 in stainless steel, with extension and window, without intrinsically safe circuits

1	Enclosure type
GUB	enclosure Ex d IIC

2	Material
X	stainless steel AISI 316L

3	Window
	no window
W	window

4	Enclosure variant
	standard variant
E	variant with extension

5	Enclosure size
00 ... 5	see dimensions data table

6	Electrical circuits
D	without intrinsically safe circuits
I	intrinsically safe circuits integrated

7	Type of application
U	empty enclosure
T	terminal box
CP	control panel
CS	control station
DB	distribution board
DMT	electronic earthing system
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

Class of Temperature / Ambient Temperature for Cable Entries and Cable

Only use cable entries and cables suitable for the class of temperature / ambient temperature as reported in the following table.

Max. ambient temperature [°C]	Class of temperature type of protection Ex d IIA, IIB, IIC				
	T6 [°C]	T5 [°C]	T4 [°C]	T3 without window [°C]	T3 with window [°C]
40	n.a.	n.a.	110	150	140
50	n.a.	n.a.	110	150	140
60	n.a.	90	110	150	150
70	n.a.	90	110	160	150
80	-	90	115	160	150

Connection with cables suitable for the above mentioned temperatures.

Comparative Table Marking / Thread of the Cable Entry

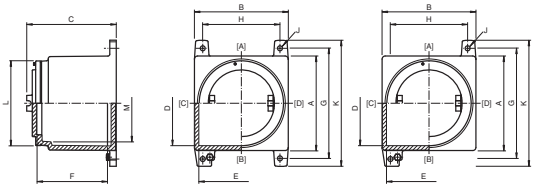
Threaded entries in the enclosures are identified by the following coding:

Markings according to the requirements of IEC 60079-1 clause 13.2			
00 C = 1/4" ISO228	00 N = 1/4" NPT	00 M = M12 x 1.5	9PG = PG9
1 C = 1/2" ISO228	0 N = 3/8" NPT	0 M = M16 x 1.5	11PG = PG11
3 C = 1" ISO228	1 N = 1/2" NPT	1 M = M20 x 1.5	13PG = PG13
00 G = 1/4" ISO 7/1	2 N = 3/4" NPT	2 M = M25 x 1.5	16GP = PG16
0 G = 3/8" ISO 7/1	3 N = 1" NPT	3 M = M32 x 1.5	21PG = PG21
1 G = 1/2" ISO 7/1	4 N = 1 1/4" NPT	4 M = M40 x 1.5	29PG = PG29
2 G = 3/4" ISO 7/1	5 N = 1 1/2" NPT	42 M = M42 x 1.5	36PG = PG36
3 G = 1" ISO 7/1	6 N = 2" NPT	5 M = M50 x 1.5	42PG = PG42
4 G = 1 1/4" ISO 7/1	7 N = 2 1/2" NPT	6 M = M63 x 1.5	48PG = PG48
5 G = 1 1/2" ISO 7/1	8 N = 3" NPT	7 M = M75 x 1.5	
6 G = 2" ISO 7/1	9 N = 4" NPT	8 M = M85 x 1.5	
7 G = 2 1/2 " ISO 7/1		9 M = M110 x 1.5	
8 G = 3" ISO 7/1			
9 G = 4" ISO 7/1			

G" means also equivalent type according UNI6125 or EN10266-2.
Example: diameter of the hole Ref. 2 M = thread M25 x 1.5.

Variant-Specific Data

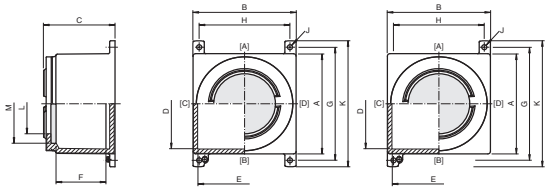
Dimensions and Enclosure Details GUB*



Type	External dimensions [mm]				Internal dimensions [mm]			Mounting [mm]			Diameter [mm]		Mounting brackets quantity	Mass [kg]	Max. power dissipation at T4/+40 °C [W]	UL
	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	X
GUB0*	150	150	145	200	125	125	117	178	125	8	136	114	2	3.5	78	X
GUB0H*	150	150	185	200	125	125	150	178	125	8	136	114	2	4.5	91	X
GUB1*	202	202	155	255	170	170	110	228	178	10	189	163	2	6.4	122	X
GUB1H*	202	202	200	255	170	170	150	228	178	10	189	163	2	7.6	143	X
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	X
GUB3*	260	260	215	310	228	228	169	285	228	10	231	206	4	11.5	222	X
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

Dimensions and Enclosure Details GUBW*

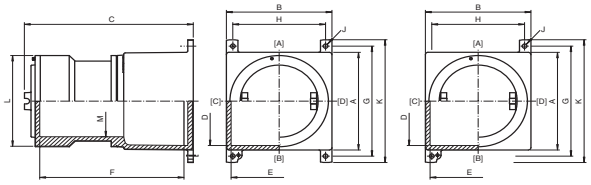


Type	External dimensions [mm]				Internal dimensions [mm]			Mounting [mm]			Diameter [mm]		Mounting brackets quantity	Mass [kg]	Max. power dissipation at T4/ +40 °C [W]	UL
	A	B	C	K	D	E	F	G	H	J	L	M				
GUBW00*	119	119	121	166	92	92	85	145	95	8	64	97	2	2.1	48	X
GUBW0*	150	150	135	200	125	125	105	178	125	8	79	114	2	3.6	78	X
GUBW0H*	150	150	171	200	125	125	137	178	125	8	79	114	2	4.6	91	X
GUBW1*	202	202	134	255	170	170	95	228	178	10	121	163	2	6.3	122	X
GUBW1H*	202	202	176	255	170	170	135	228	178	10	121	163	2	7.5	143	X
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	-

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

Values might differ slightly due to manufacturing tolerances

Dimensions and Enclosure Details GUBE*

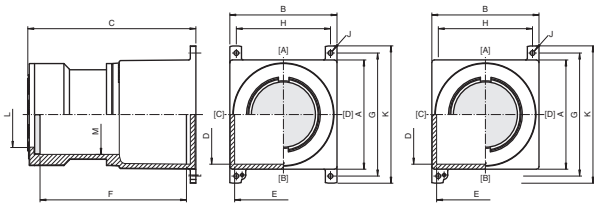


Type	External dimensions [mm]				Internal dimensions [mm]			Mounting [mm]			Diameter [mm]		Mounting brackets quantity	Mass [kg]	Max. power dissipation at T4/+40 °C [W]	UL
	A	B	C	K	D	E	F	G	H	J	L	M				
GUBE0*	150	150	252	200	125	125	224	178	125	8	136	114	2	3.3	111	X
GUBE0H*	150	150	292	200	125	125	255	178	125	8	136	114	2	4.8	125	X
GUBE1*	202	202	301	255	170	170	255	228	178	10	189	163	2	9.1	185	X
GUBE1H*	202	202	345	255	170	170	299	228	178	10	189	163	2	10.4	206	X
GUBE2*	250	250	340	305	225	225	291	275	232	10	231	206	4	13	283	X
GUBE3*	260	260	391	310	228	228	345	285	228	10	231	206	4	15.2	323	X
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	-

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

Values might differ slightly due to manufacturing tolerances

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]	UL
	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	X
GUBWE0H*	150	150	278	200	125	125	242	178	125	8	79	114	2	5	125	X
GUBWE1*	202	202	281	255	170	170	240	228	178	10	121	163	2	9	185	X
GUBWE1H*	202	202	323	255	170	170	284	228	178	10	121	163	2	10.3	206	X
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	-
GUB-WEB3L*	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	-

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

Values might differ slightly due to manufacturing tolerances

Cable Entries max. Quantity per Size

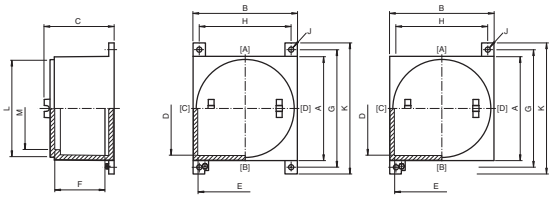
Type	Cover	Faces A ... D									Bottom				
	M12	M20	M25	M32	M42	M50	M63	M75	M85	M110	M20	M25	M32	M42	M50
	1/4"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	1/2"	3/4"	1"	1-1/4"	1-1/2"
GUB00*	1	4	3	2	1	1	1	-	-	-	2	2	1	-	-
GUB0*	1	6	5	3	2	2	1	1	-	-	4	3	1	-	-
GUB0H*	1	10	8	4	3	2	1	1	1	1	4	3	1	-	-
GUB1*	2	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 contract Pepperl+Fuchs

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

Dimensions and Enclosure Details GUBX*



Type	External dimensions [mm]				Internal dimensions [mm]			Mounting [mm]			Diameter [mm]		Mounting brackets quantity	Mass approx. [kg]	Max. power dissipation at T4/ +40 °C [W]
	A	B	C	K	D	E	F	G	H	J	L	M			
GUBX00*	112	112	131	163	92	92	98	145	95	8	112	97	2	5.3	48
GUBX0*	150	150	153	205	125	125	113	178	125	8	136	114	2	12	78
GUBX0H*	150	150	190	205	125	125	150	178	125	8	136	114	2	16	91
GUBX1*	200	200	157	255	173	173	110	228	178	10	189	163	2	23	122
GUBX1H*	200	200	197	251	173	173	150	228	178	10	189	163	2	27	143
GUBX1PF*	176	176	137	220	150	150	95	196	154	10	170	147	2	23	95
GUBX2*	256	256	160	305	225	225	114	275	232	10	235	206	4	30	181
GUBX3*	258	258	215	310	225	225	165	285	228	10	235	206	4	37	222
GUBX3L*	347	347	255	430	325	325	185	395	318	10	348	320	4	91	293
GUBX4*	440	440	316	530	410	410	228	485	410	14	437	406	4	180	466
GUBX4A*	440	440	246	530	410	410	158	485	410	14	437	406	4	155	400
GUBX5*	540	540	376	640	510	510	273	595	510	16	540	504	4	216	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

For custom designed solutions, such as for different termperature ranges, dimensions and mass may differ

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"
GUBX00*	1	4	3	2	1	1	1	-	-	-	2	2	1	-	-
GUBX0*	1	6	5	3	2	2	1	1	-	-	4	3	1	-	-
GUBX0H*	1	10	8	4	3	2	1	1	1	1	4	3	1	-	-
GUBX1*	2	8	8	5	2	2	2	1	-	-	6	4	2	1	1
GUBX1H*	2	12	10	5	4	4	2	1	1	1	6	4	2	1	1
GUBX1PF*	1	8	6	3	2	2	1	-	-	-	4	3	1	1	1
GUBX2*	3	10	10	6	3	3	2	2	-	-	10	8	4	2	2
GUBX3*	3	20	15	10	6	5	3	2	2	1	10	8	4	2	2
GUBX3L*	8	30	25	15	8	8	5	3	2	1	20	12	10	4	4
GUBX4*	10	45	35	20	14	10	8	5	3	1	25	15	11	5	5
GUBX4A*	10	28	20	12	10	5	4	3	3	-	25	15	11	5	5
GUBX5*	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 contract Pepperl+Fuchs

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

Stainless steel GUBX* enclosures are available with extensions and various viewing windows, too

For details please contact Pepperl+Fuchs