

1 Overview

The electronic enclosure PEG-F is made for use in cars, in agricultural or construction machinery

- Environmental protection class IP69K according to DIN EN 60529, (only with pressure compensation element (PCE))
- Flame retardant material according to ISO 60695-11-10
- Temperature range from -40 °C to 85 °C
- Contacting by using an 18-pin HDSCS connector
- 2 different lengths (75mm or 98mm) with 2 or 3 fixing points

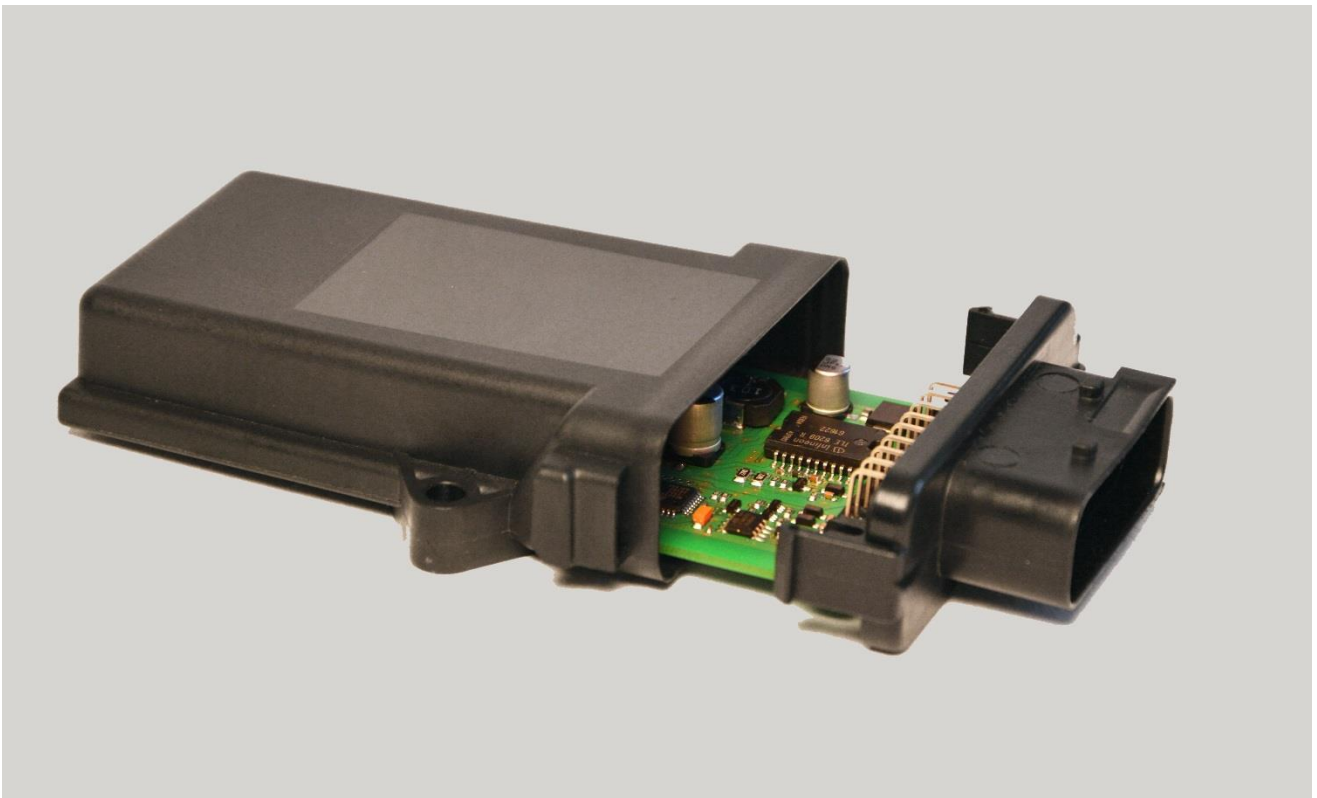


Figure 1: long variant with 2 fixing points (PCB only as an example)

2 Mechanical properties

Variants	Dimension* (LxWxH) [mm]	Mass* [g]
PEG-F 75-2: short, 2 fixing points	96.90 x 85.40 x 28.05	61**
PEG-F 98-2: long, 2 fixing points	119.90 x 85.40 x 28.05	72**
PEG-F 75-3: short, 3 fixing points	109.40 x 85.40 x 28.05	62**
PEG-F 98-3: long, 3 fixing points	132.40 x 85.40 x 28.05	73**
Label area (all variants)	58.00 x 36.00 x n/a	

* incl. enclosure cover

** Mass specifications have a tolerance of $\pm 5\%$.

2.1 Variants with 2 fixing points

2.1.1 Length 75 mm (PEG-F 75-2)

For dimensions of the enclosure refer to Figure 2: PEG-F 75-2: enclosure dimensions.

For dimensions of the PCB or for max. placement area refer to Figure 3: PEG-F 75-2: dimensions of the PCB and the max. placement area.

2.1.2 Length 98 mm (PEG-F 98-2)

For dimensions of the enclosure refer to Figure 4: PEG-F 98-2: enclosure dimensions.

For dimensions of the PCB or for max. placement area refer to Figure 5: PEG-F 98-2: dimensions of the PCB and the max. placement area.

Technical data sheet Electronic enclosure PEG-F

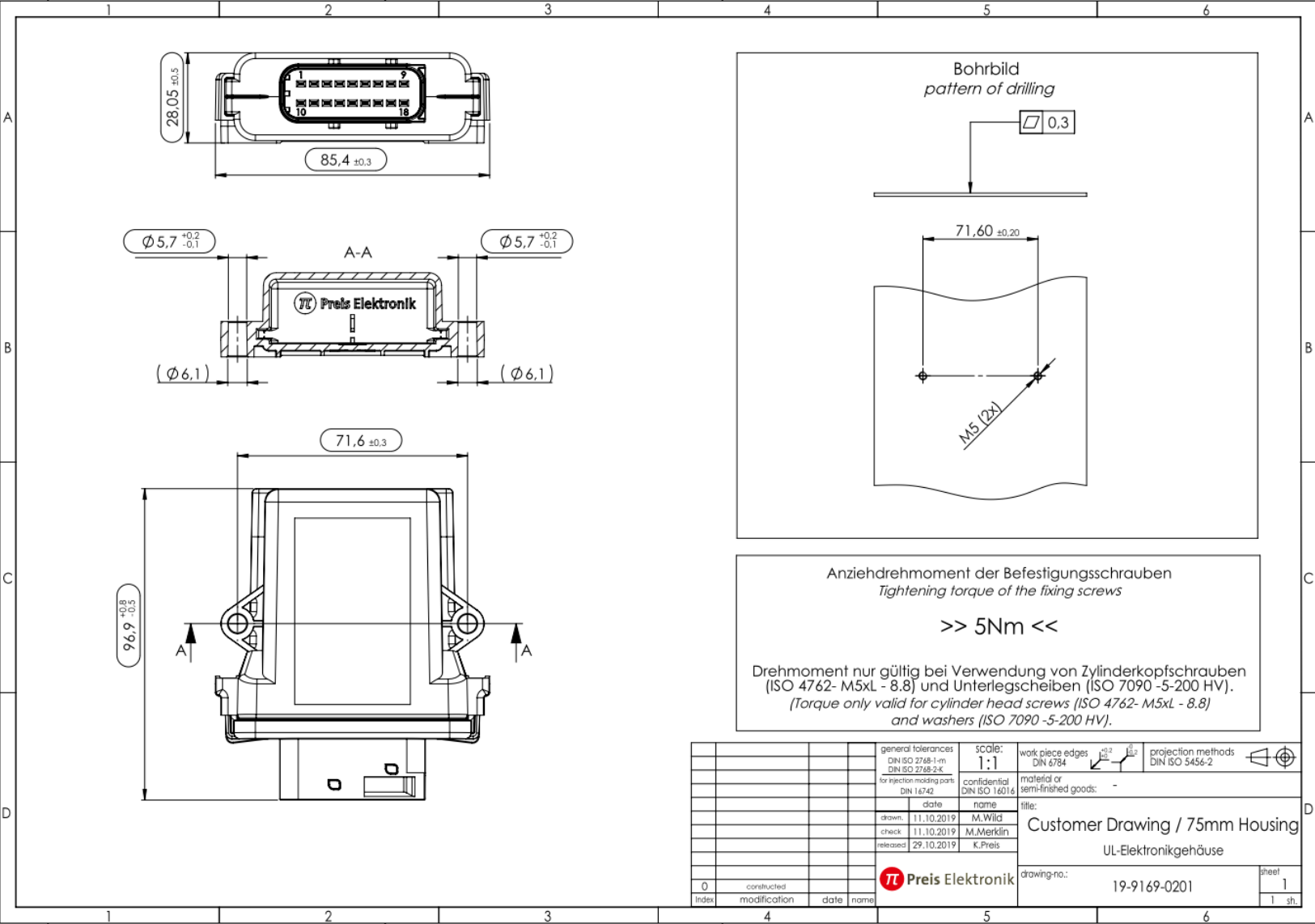


Figure 2: PEG-F 75-2: enclosure dimensions

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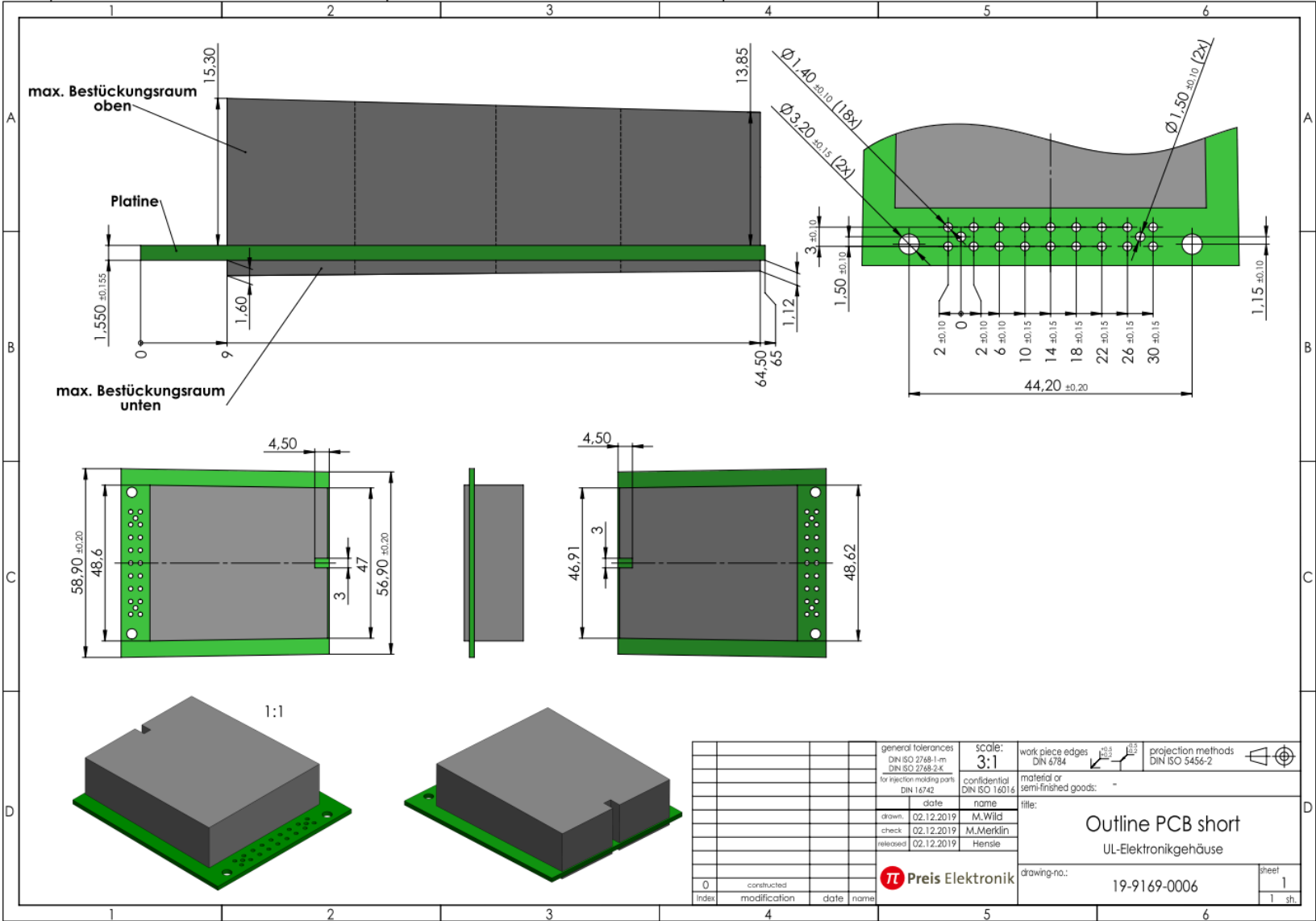


Figure 3: PEG-F 75-2: dimensions of the PCB and the max. placement area

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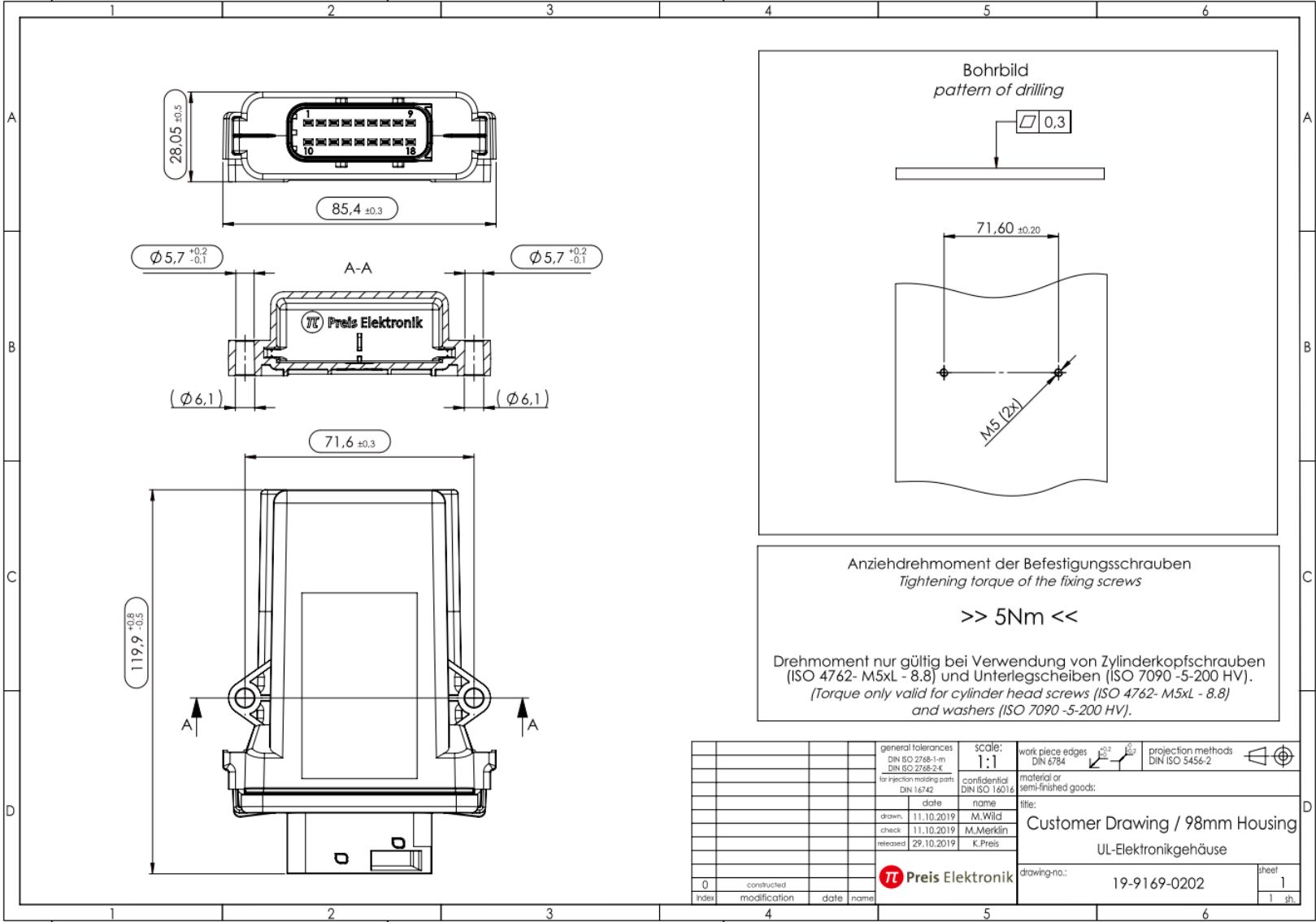


Figure 4: PEG-F 98-2: enclosure dimensions

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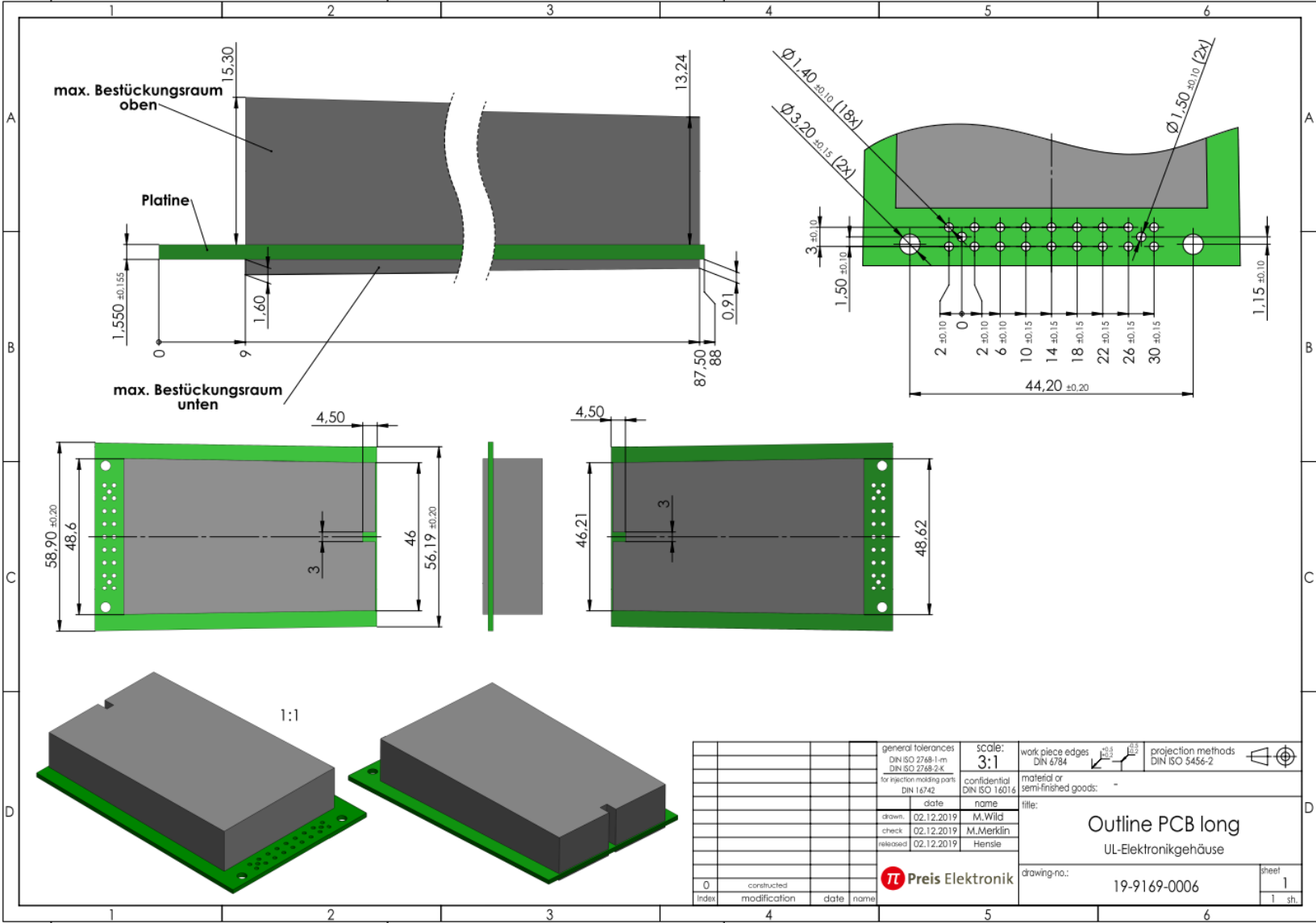


Figure 5: PEG-F 98-2: dimensions of the PCB and the max. placement area

2.2 Variants with 3 fixing points

Variants with 3 fixing points are only available through the conclusion of a long-term project agreement.

The dimensions of the PCB and the max. placement area are the same as within the variants with 2 fixing points.

2.2.1 Length 75 mm (PEG-F 75-3)

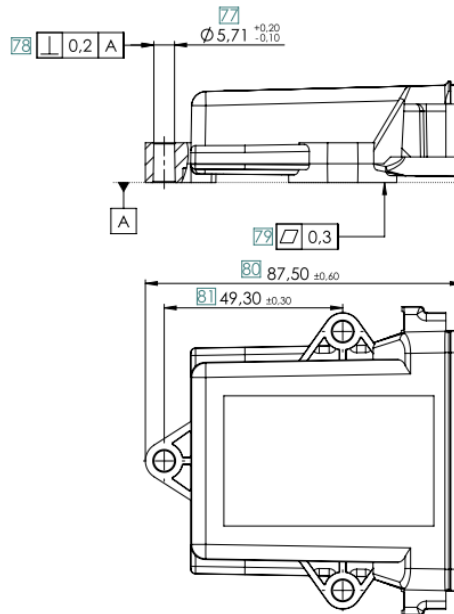


Figure 6: PEG-F 75-3

2.2.2 Length 98 mm (PEG-F 98-3)

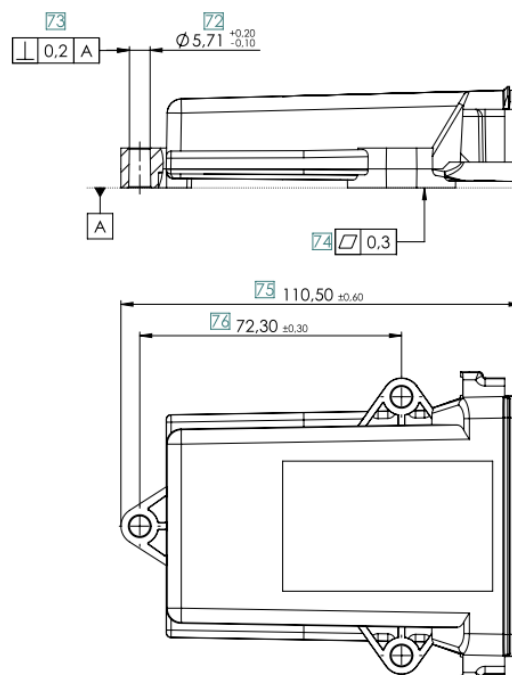


Figure 7: PEG-F 98-3

3 Electrical properties

The current-carrying capacity per pin is up to 10 A, according to the data sheet of the plug manufacturer Tyco Electronics.

If several neighboring pins with currents above 3 A are loaded simultaneously, an individual thermal analysis must be carried out.

4 Further details

4.1 Connector

Tyco Electronics AMP MCP 1.5K series, 18 pole, black coding.

Manufacturer part number: 1563759-1

4.2 Material

Enclosure body, cover: Ultradur B4406G6 (PBT GF30 FR) plastic

Sealing: TC6FTZ plastic

Terminal pins: CuSn6

4.3 Certificates and proofs of quality

Dust- and waterproof according to Protection class IP69K (while using a PCE only)

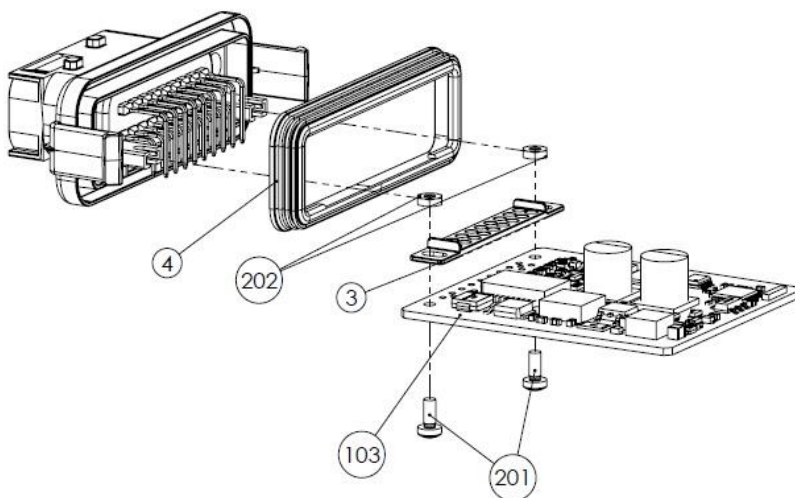
Flame retardant: Flame class V-0 (acc. to material's YellowCard)

PEG-F enclosure is proven to be resistant to diesel, biodiesel, urea, cavity protection, preservatives, de-preservatives, windshield cleaners, automotive wash chemicals, glass cleaners, rim cleaners, cold cleaners, ammonia-based cleaners, alcohol, roadway de-icers according to ISO 16750-5.

5 Scope of delivery

Set delivered is consisting of the following components:

- Enclosure body (not pictured)
- Enclosure cover with plug body and pins
- Sealing ④
- joining aid ③ for the PCB, for assembling the pins to the PCB



PCB, screws, nuts and PCE are not included.

6 Application notes

The electronic enclosure PEG-F is particularly suitable for use in harsh environmental conditions such as in cars, in agricultural or construction machinery. Not suitable for use in the engine compartment!

IP69K tightness is achieved only by using a PCE (not included).

As PCE the DAE 14x8 with the article designation DAE_DC_DF_1_S1.4 from the company Schreiner (<http://www.schreiner-group.com/>) is recommended. In the data sheet for this PCE you will find detailed information about the assembly of the PCE. These must be strictly adhered to.

When using another PCE, the corresponding installation instructions must be observed.

7 Assembly notes

Tightening torque of the fixing screws: **5 Nm**

Its recommended to use cylinder head bolts (ISO 4762-M5xL - 8.8) and washers (ISO 7090 5 200 HV).

Pressure force to close the enclosure (locking the enclosure cover):

Minimum: 210 N

Maximum: 500 N

The pressure force should act perpendicular to the end face of the enclosure.

When closing the enclosure, press the enclosure body onto the enclosure cover, not the other way round.

The enclosure cover is to support a large area.

For easy and non-destructive disassembly, a release tool is recommended which is available on request.

8 Ordering information

Part number: **PEG-F XX-Y**

XX = Length in mm	Y = fixing points count
75	2 = two
98	3 = three

Current prices and quantity schedules are included in our separate order and delivery conditions.

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