

AIRSKIN® Modules



Fact Sheet

airskin.io



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AIRSKIN® Module 200x100-H0

[BLASMOD200X100H0]



Product Description

AIRSKIN® Module 200x100-H0 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 200 by 100 mm and a mounting structure with magnetic connectors. The total installed thickness is 34 mm and compressibility is a maximum of 16 mm.

Weight of Product: 160 g

Weight including Packaging: 250 g

Package size: 105x220x65 mm

Consists of

1 AIRSKIN® Pad 200x100

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H0

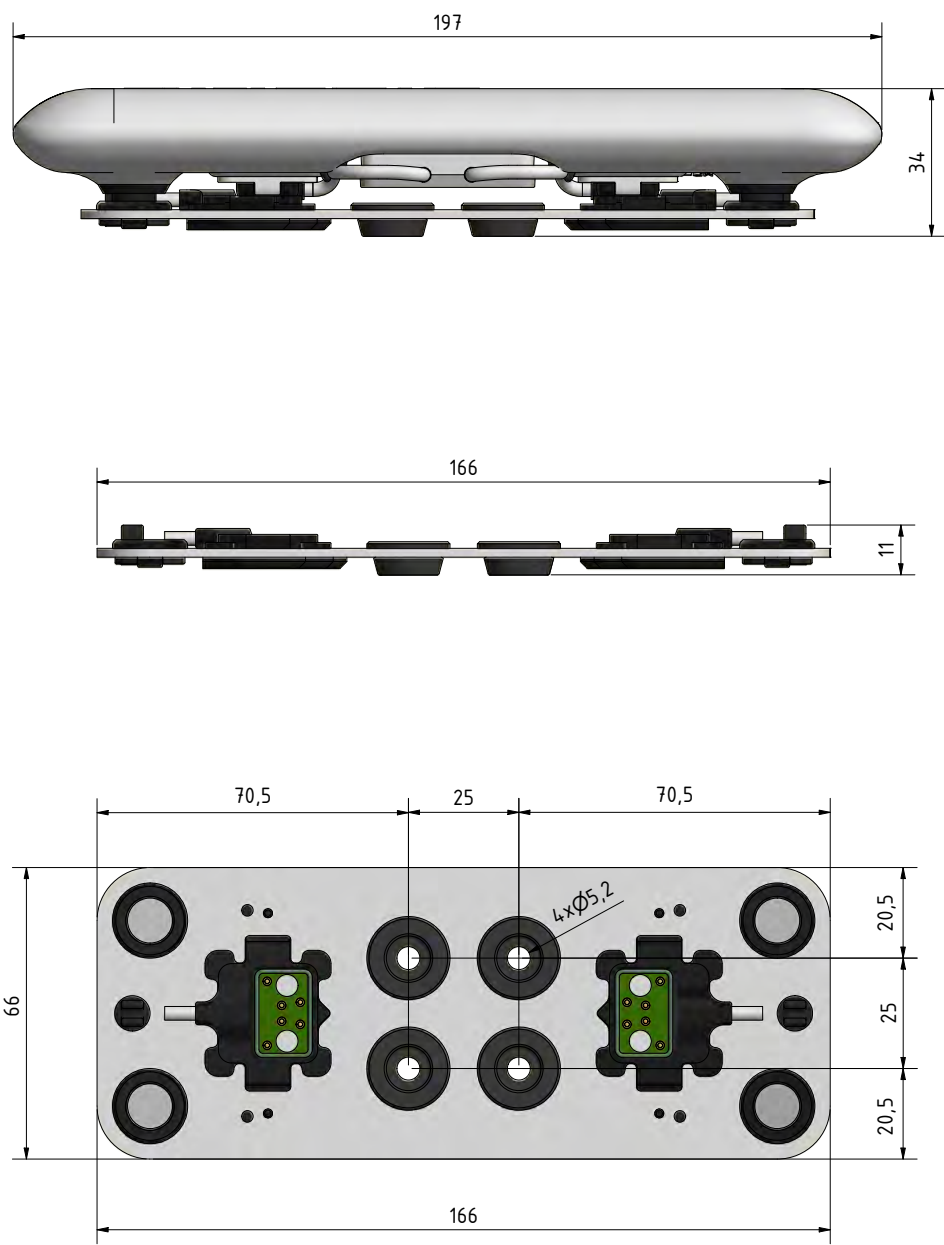
ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module

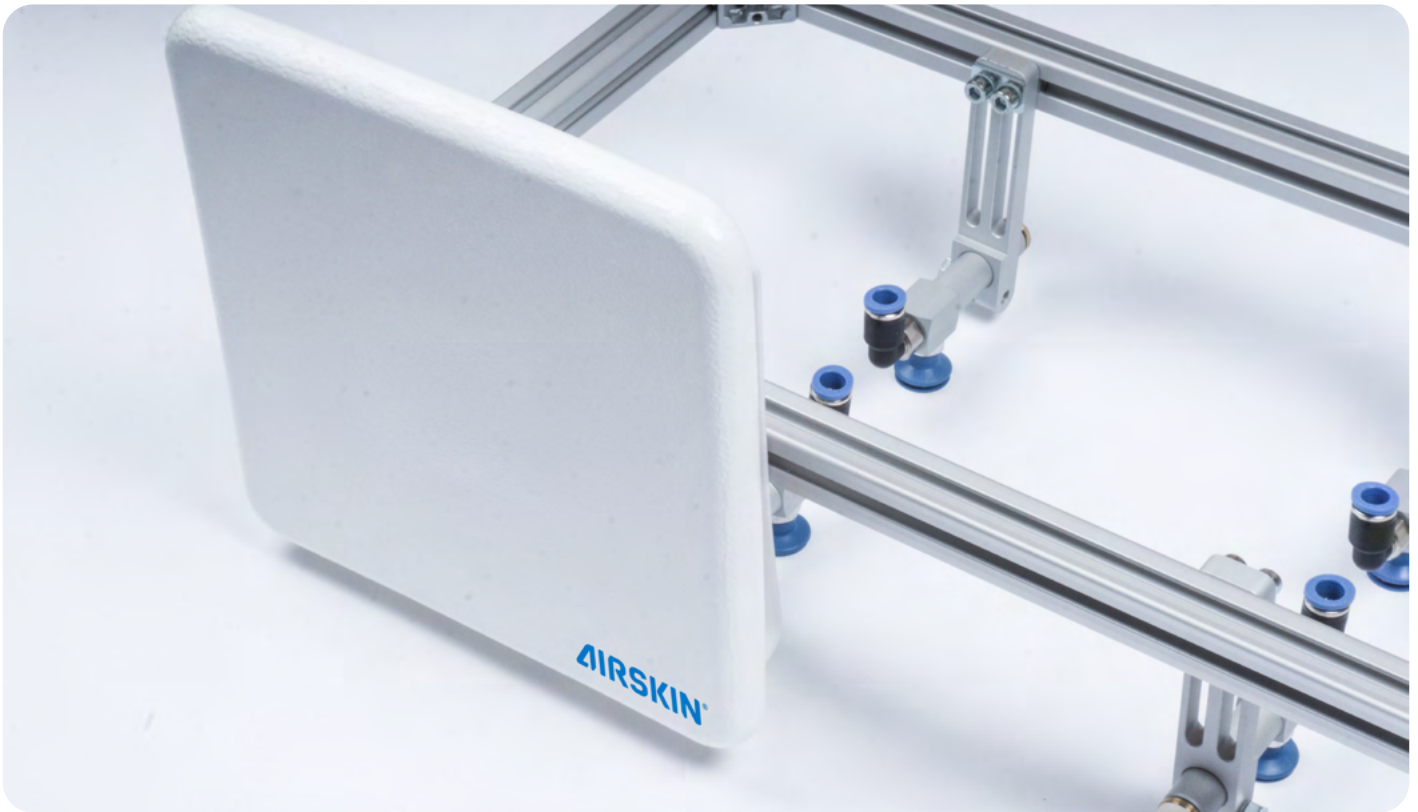


Product Detail



AIRSKIN® Module 200x200-H0

[BLASMOD200X200H0]



Product Description

AIRSKIN® Module 200x200-H0 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 200 by 200 mm and a mounting structure with magnetic connectors. The total installed thickness is 34 mm and compressibility is a maximum of 16 mm.

Weight of Product: 240 g

Weight including Packaging: 340 g

Package size: 210x220x65 mm

Consists of

1 AIRSKIN® Pad 200x200

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H0

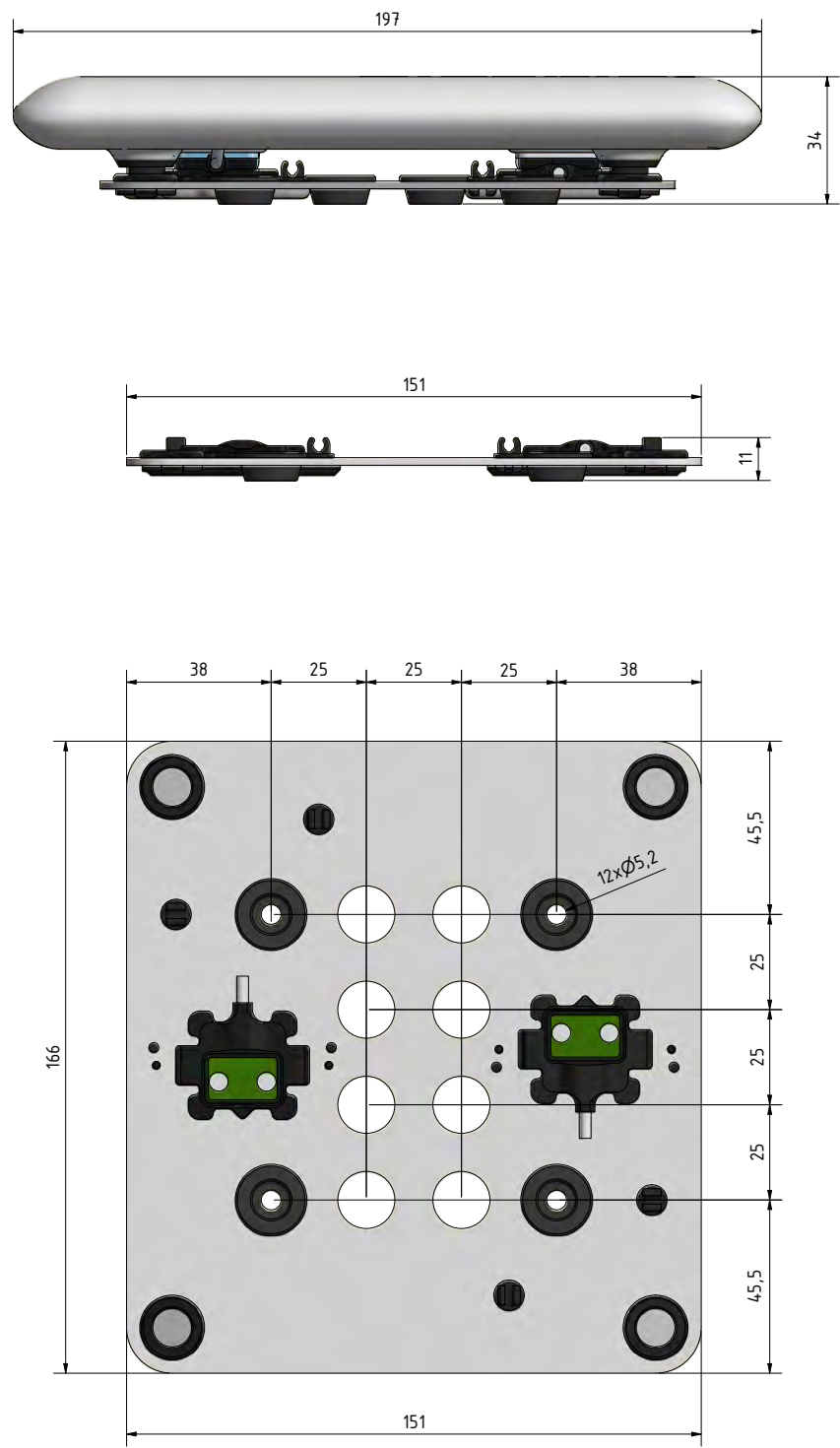
ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module



Product Detail



AIRSKIN® Module 300x200-H0

[BLASMOD300X200H0]



Product Description

AIRSKIN® Module 300x200-H0 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 300 by 200 mm and a mounting structure with magnetic connectors. The total installed thickness is 34 mm and compressibility is a maximum of 16 mm.

Weight of Product: 340 g

Weight including Packaging: 460 g

Package size: 315x220x65 mm

Consists of

1 AIRSKIN® Pad 300x200

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H0

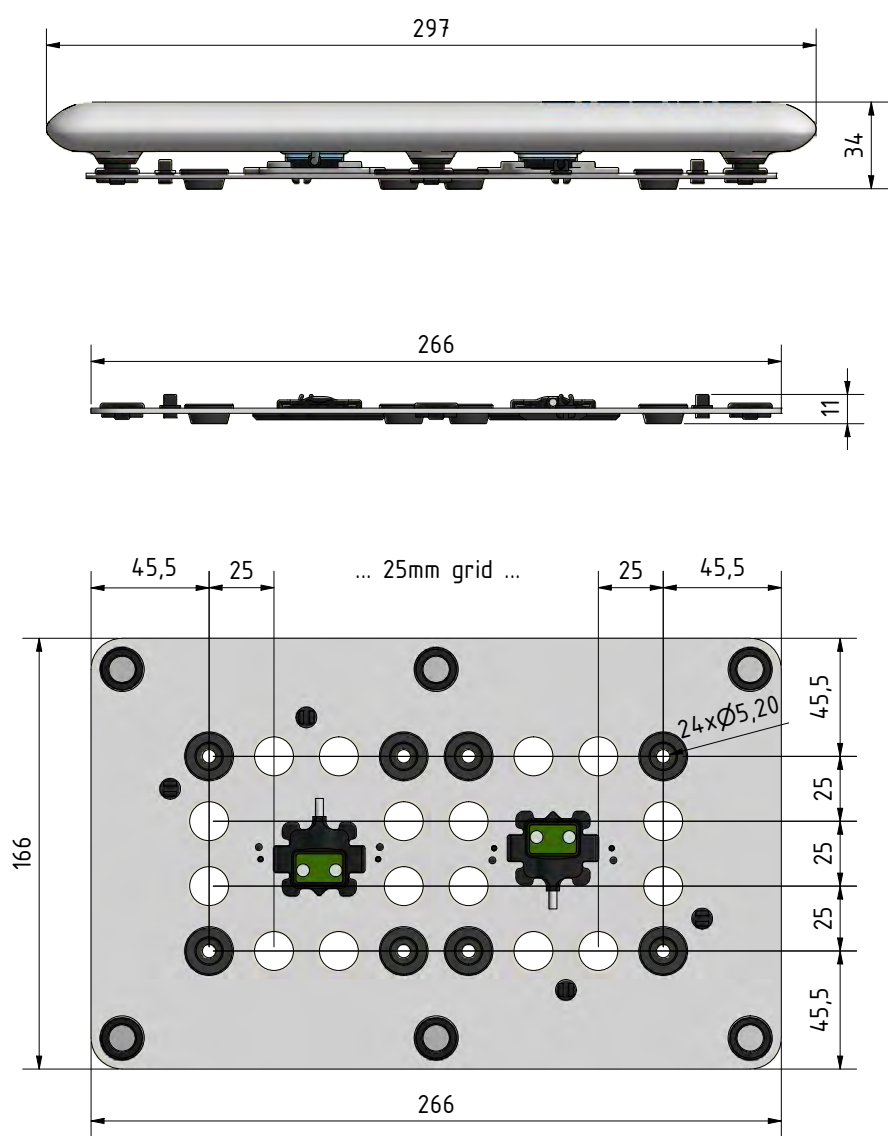
ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module



Product Detail



AIRSKIN® Module 400x200-H0

[BLASMOD400X200H0]



Product Description

AIRSKIN® Module 400x200-H0 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 400 by 200 mm and a mounting structure with magnetic connectors. The total installed thickness is 34 mm and compressibility is a maximum of 16 mm.

Weight of Product: 430g

Weight including Packaging: 570g

Package size: 420x220x65mm

Consists of

1 AIRSKIN® Pad 400x200

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H0

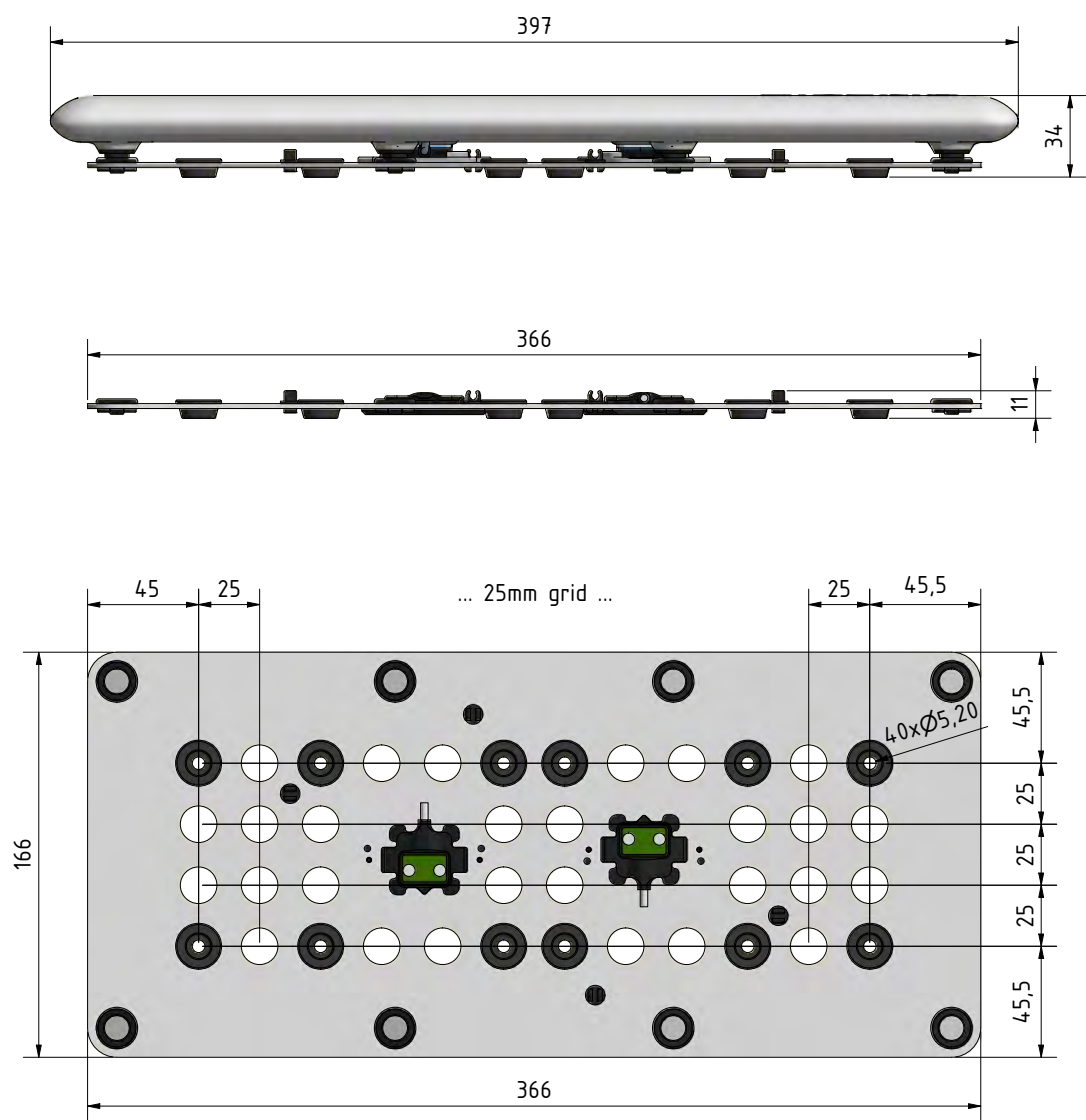
ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module



Product Detail



AIRSKIN® Module 200x160x100E-H0

[BLASMOD200x160x100EH0]



Product Description

AIRSKIN® Module 200x160x100-H0 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 200 by 160 by 100 mm and a mounting structure with magnetic connectors. The total installed thickness is 34 mm and compressibility is a maximum of 16 mm.

Weight of Product: 300 g

Weight including Packaging: 420 g

Package size: 210x220x130 mm

Consists of

1 AIRSKIN® Pad 200x160x100E

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H0

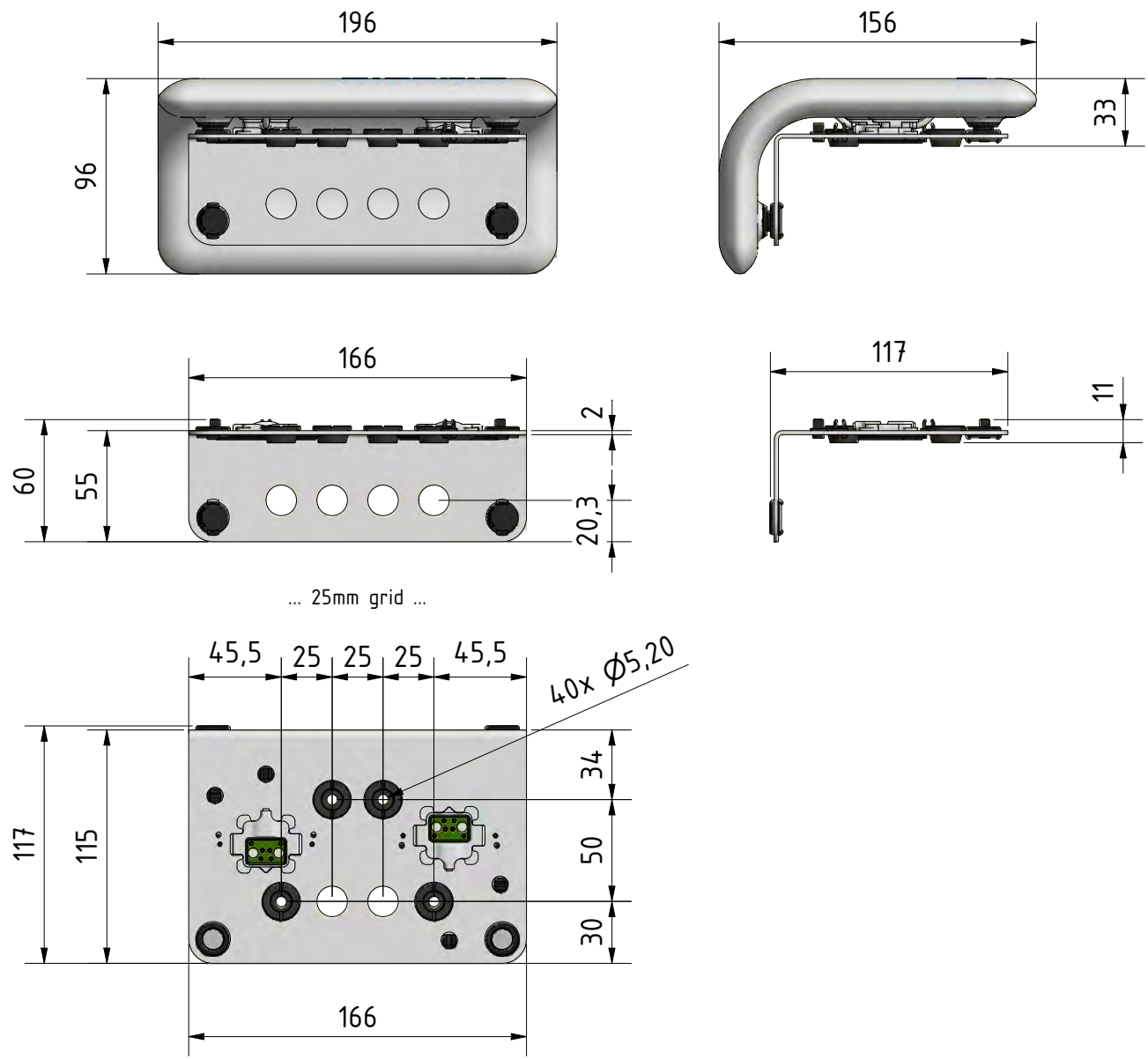
ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module



Product Detail



AIRSKIN® Module 200x200x100E-H0

[BLASMOD200x200x100EH0]



Product Description

AIRSKIN® Module 200x200x100-H0 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 200 by 200 by 100 mm and a mounting structure with magnetic connectors. The total installed thickness is 34 mm and compressibility is a maximum of 16 mm.

Weight of Product: 350 g

Weight including Packaging: 480 g

Package size: 210x220x130 mm

Consists of

1 AIRSKIN® Pad 200x200x100E

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H0

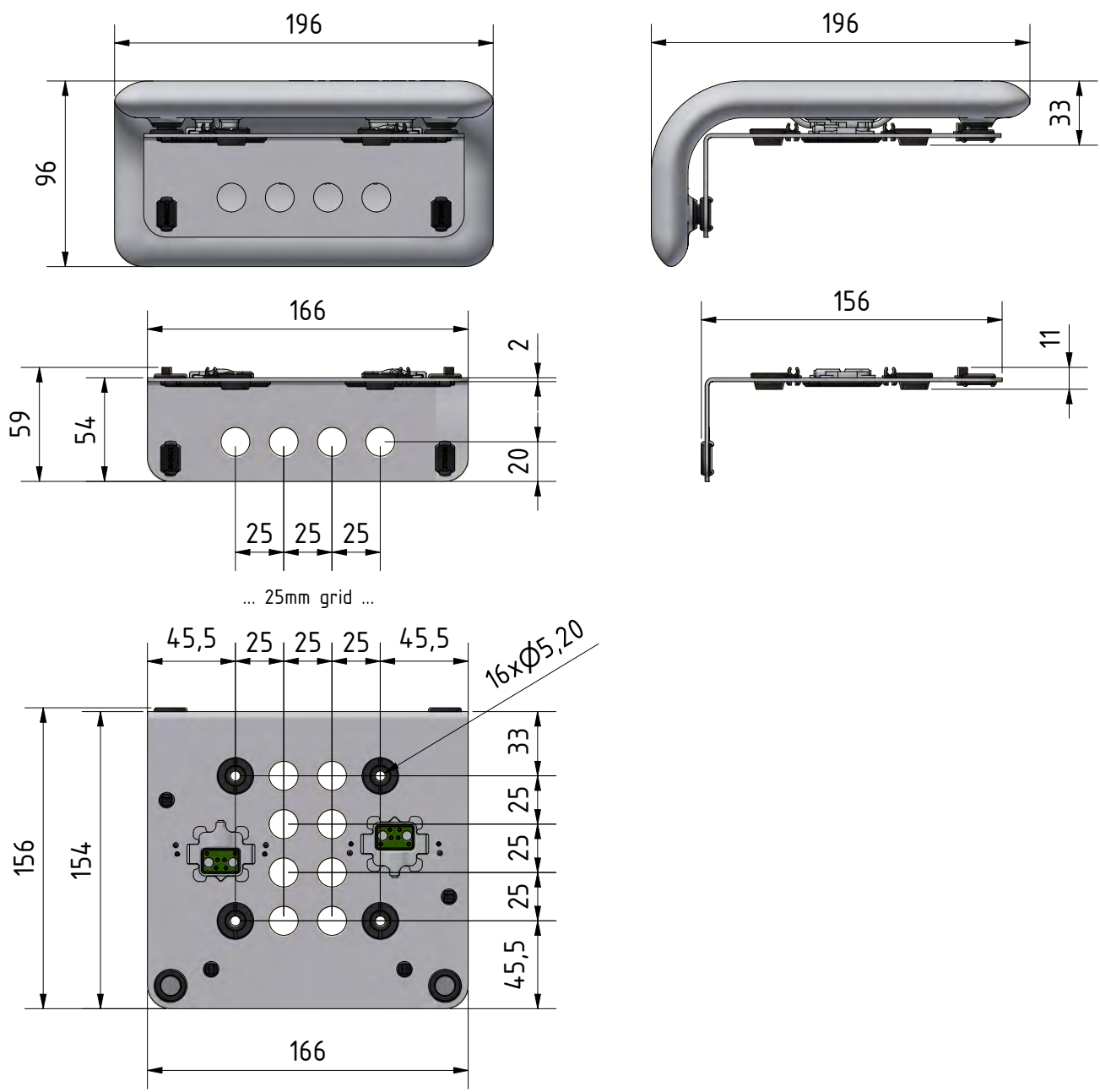
ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module

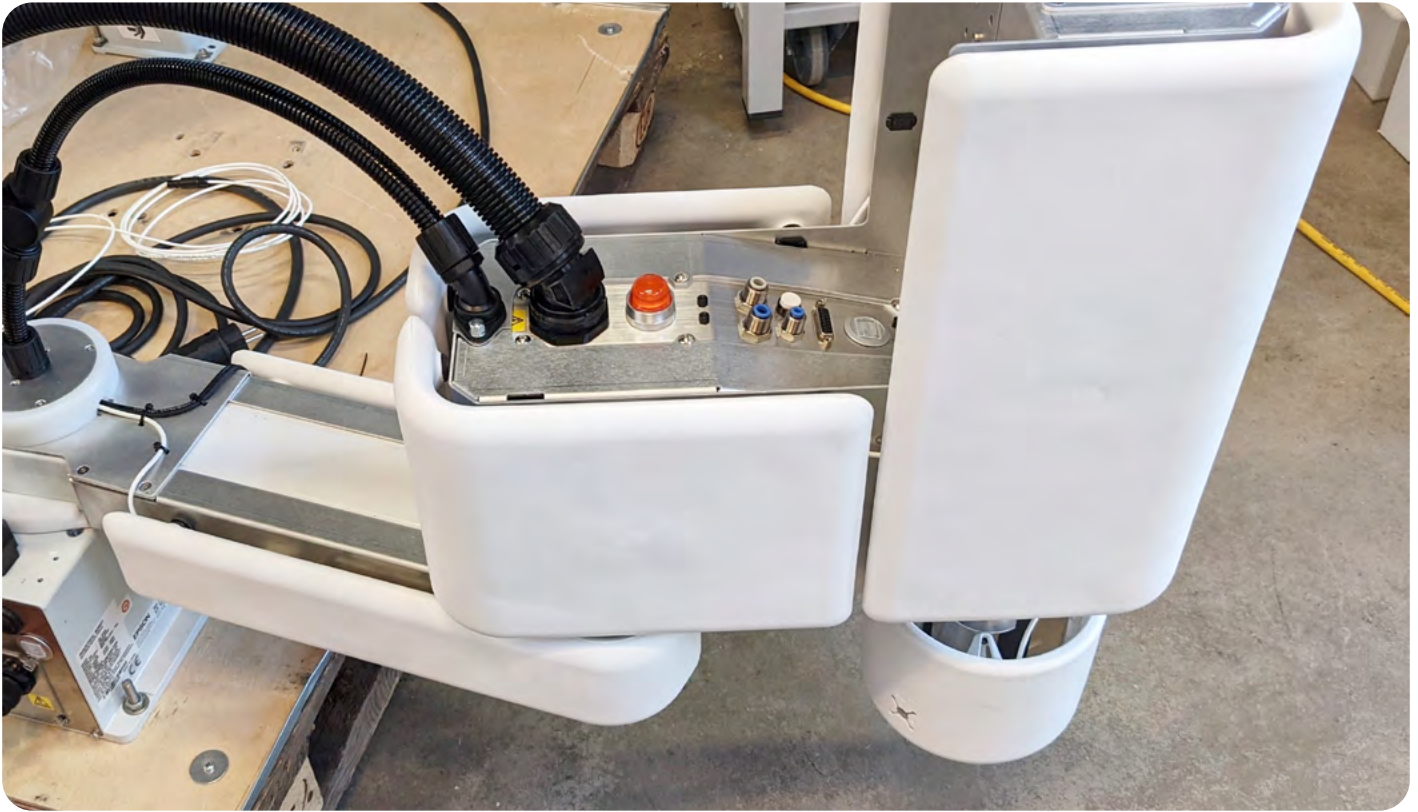


Product Detail



AIRSKIN® Module 200x260x100E-H0

[BLASMOD200x260x100EH0]



Product Description

AIRSKIN® Module 200x260x100-H0 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 200 by 260 by 100 mm and a mounting structure with magnetic connectors. The total installed thickness is 34 mm and compressibility is a maximum of 16 mm.

Weight of Product: 400 g

Weight including Packaging: 540 g

Package size: 315x220x130 mm

Consists of

1 AIRSKIN® Pad 200x260x100E

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H0

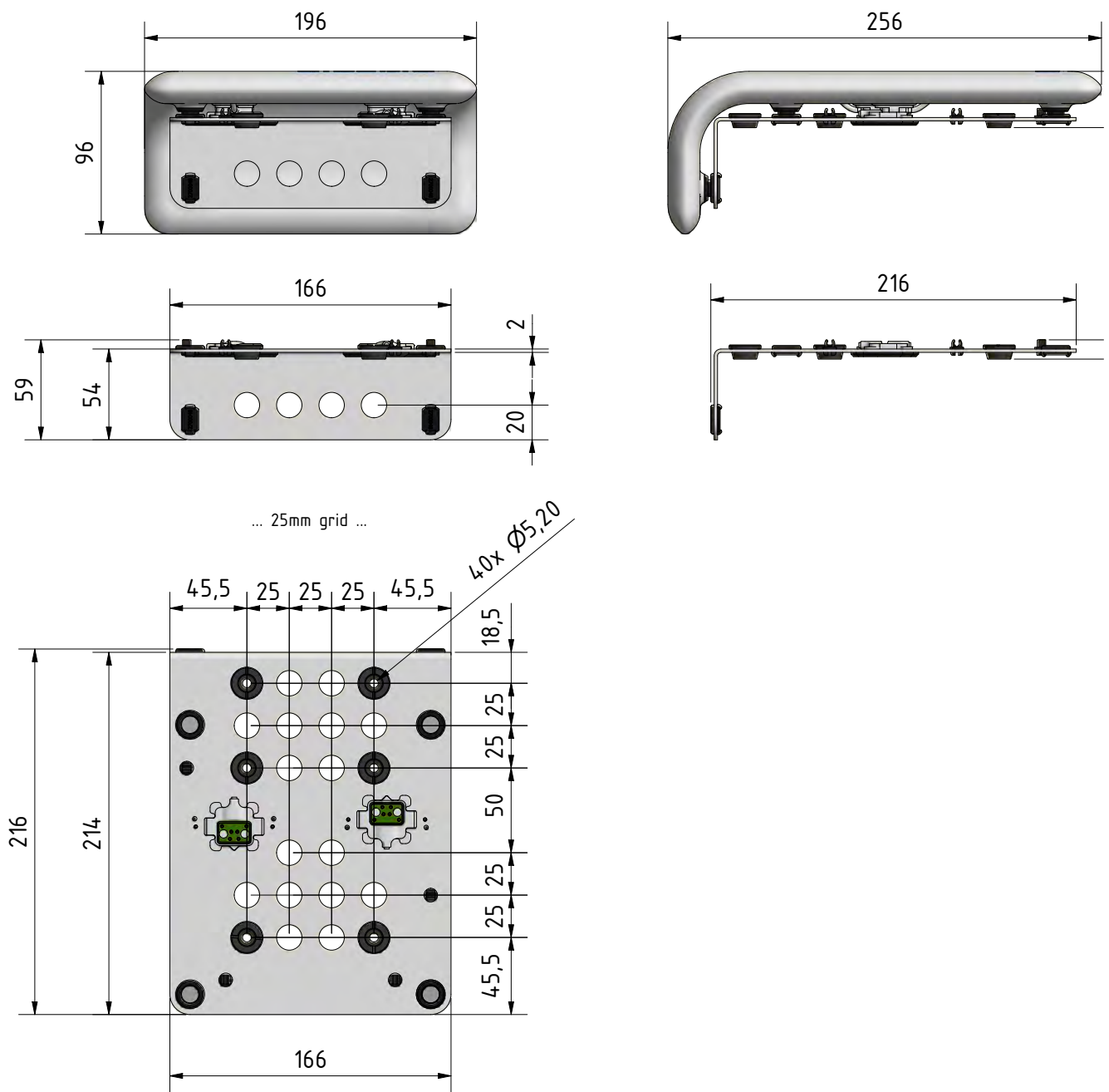
ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module



Product Detail



AIRSKIN® Module 400x200x100E-H0

[BLASMOD400x200x100EH0]



Product Description

AIRSKIN® Module 400x200x100-H0 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 400 by 200 by 100 mm and a mounting structure with magnetic connectors. The total installed thickness is 34 mm and compressibility is a maximum of 16 mm.

Weight of Product: 645 g

Weight including Packaging: 805 g

Package size: 420x220x130 mm

Consists of

1 AIRSKIN® Pad 400x200x100E

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H0

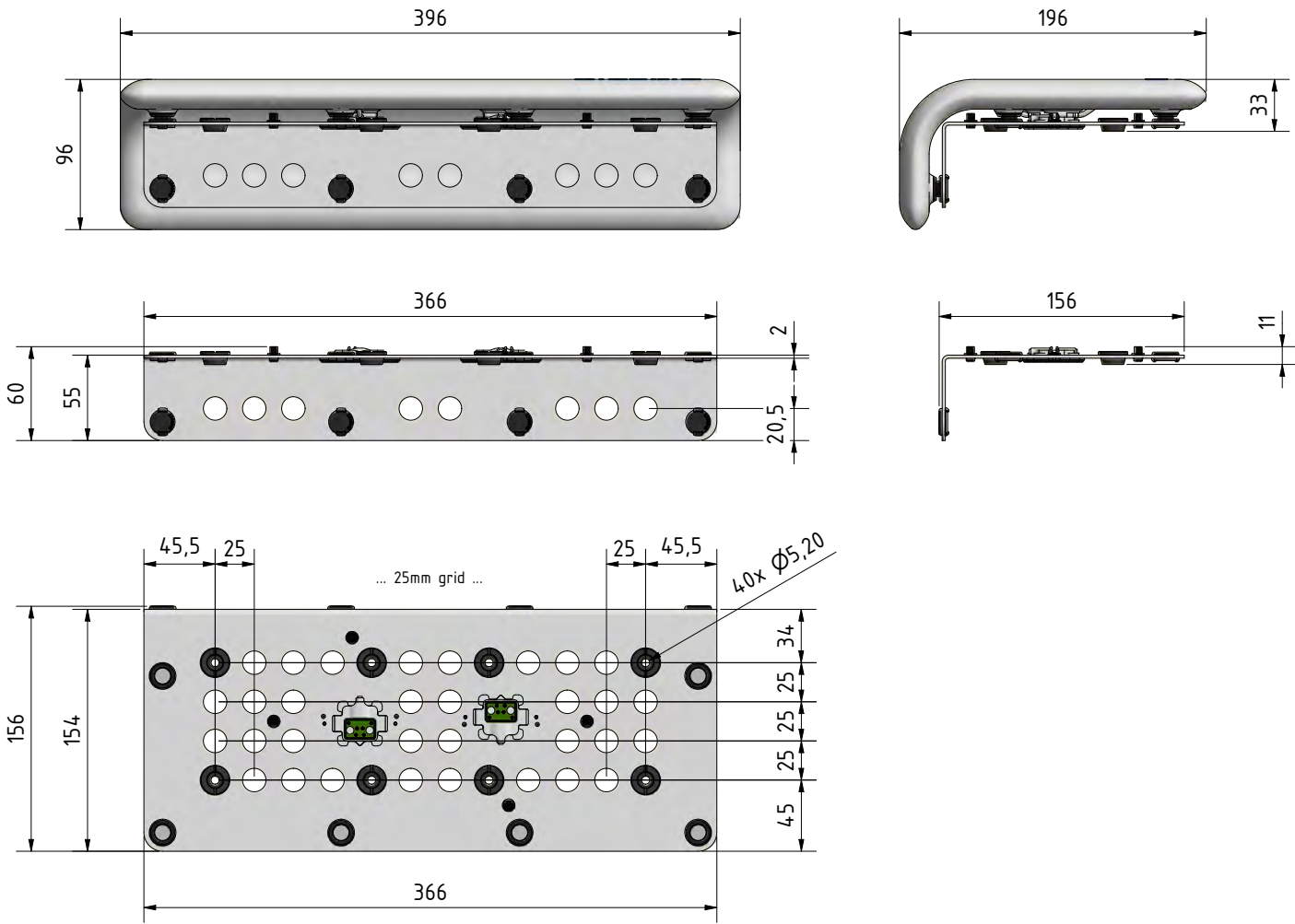
ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module



Product Detail



AIRSKIN® Module 90x300x90E-H0

[BLASMOD90x300x90EH0]



Product Description

AIRSKIN® Module 90x300x90-H0 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 90 by 300 by 90 mm and a mounting structure with magnetic connectors. The total installed thickness is 34 mm and compressibility is a maximum of 16 mm.

Weight of Product: 300 g

Weight including Packaging: 420 g

Package size: 420x220x130 mm

Consists of

1 AIRSKIN® Pad 90x300x90E

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H0

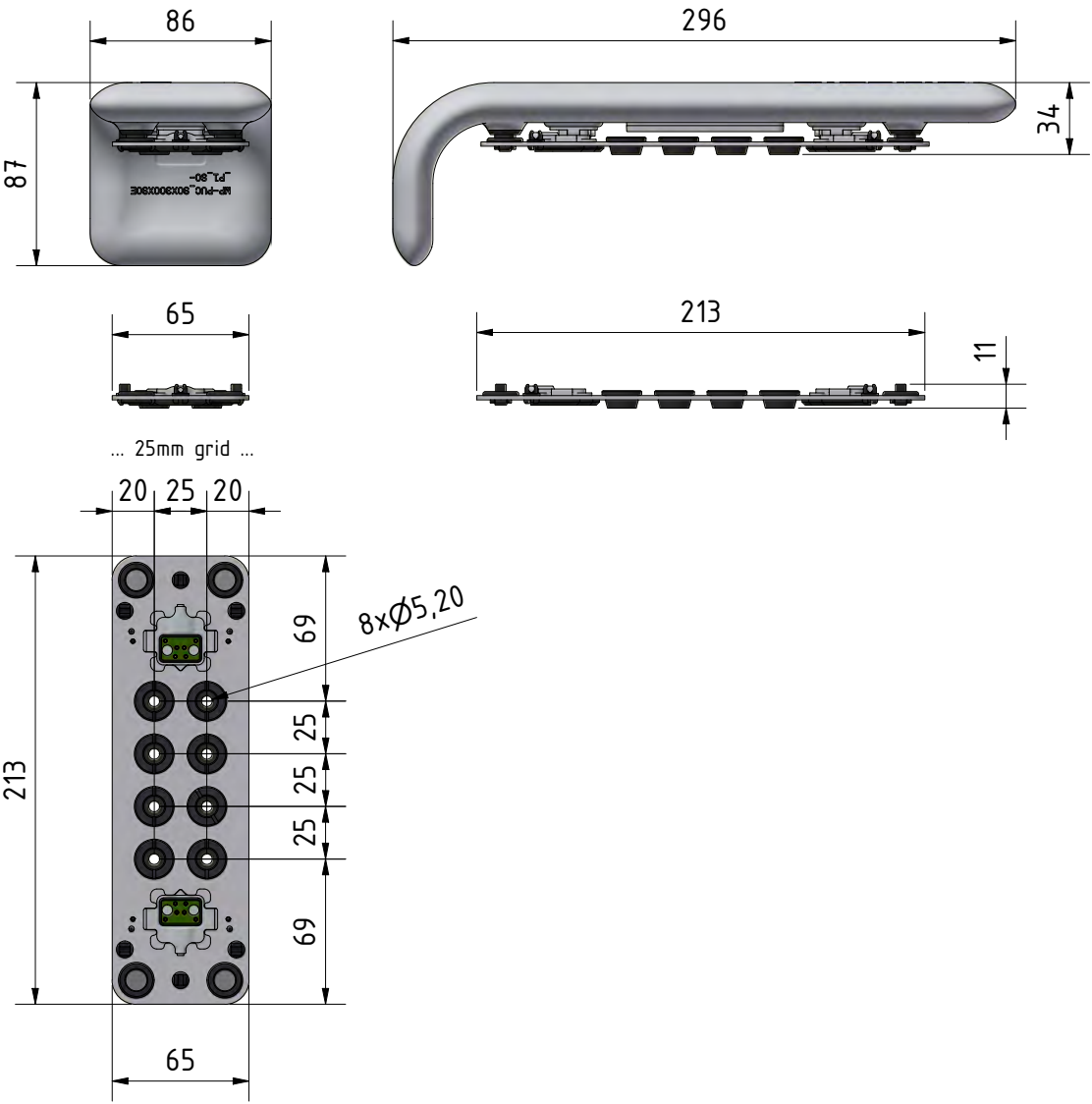
ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module



Product Detail



AIRSKIN® Module 90x400x90E-H0

[BLASMOD90x400x90EH0]



Product Description

AIRSKIN® Module 90x400x90-H0 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 90 by 400 by 90 mm and a mounting structure with magnetic connectors. The total installed thickness is 34 mm and compressibility is a maximum of 16 mm.

Weight of Product: 380 g

Weight including Packaging: 500 g

Package size: 420x220x130 mm

Consists of

1 AIRSKIN® Pad 90x400x90E

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H0

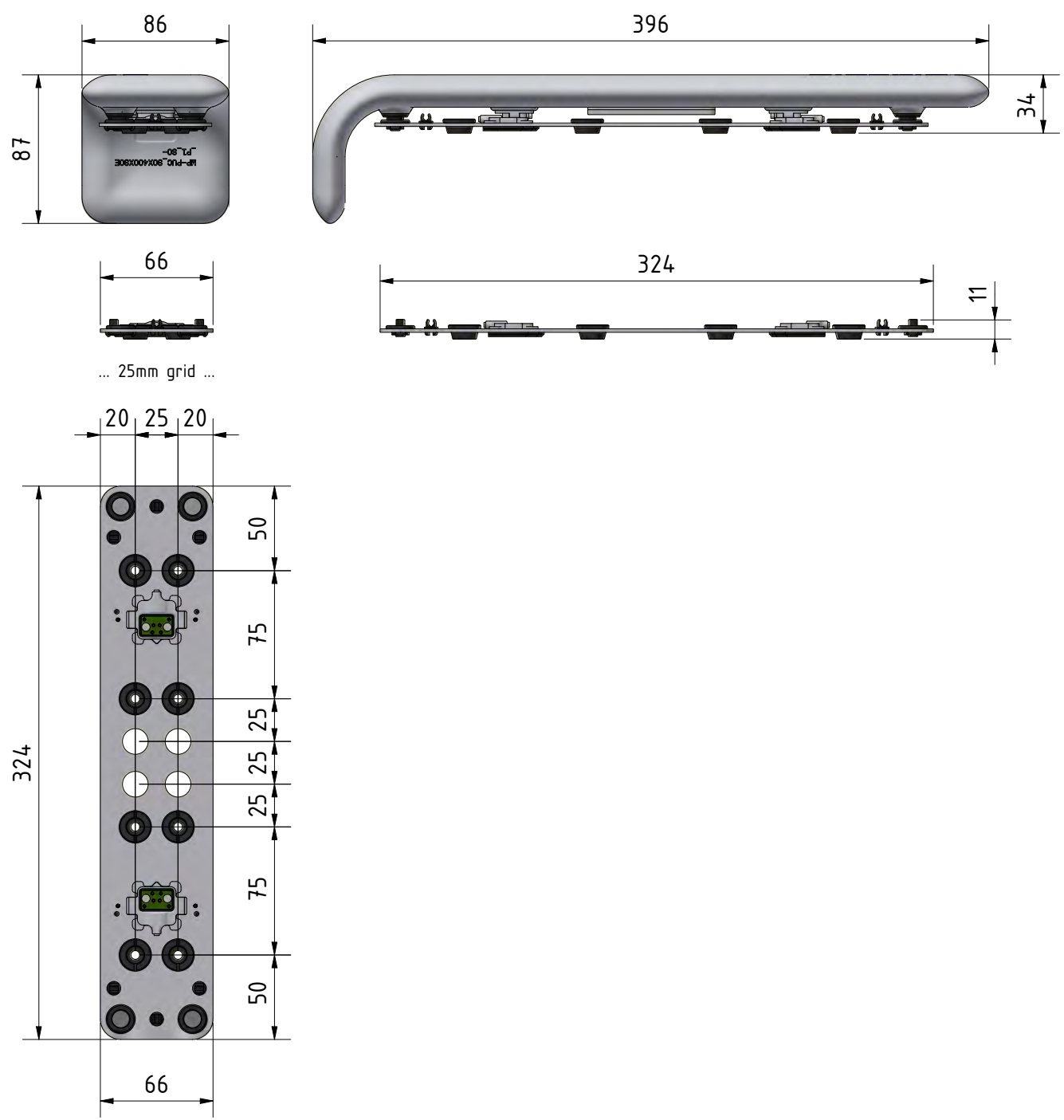
ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module



Product Detail

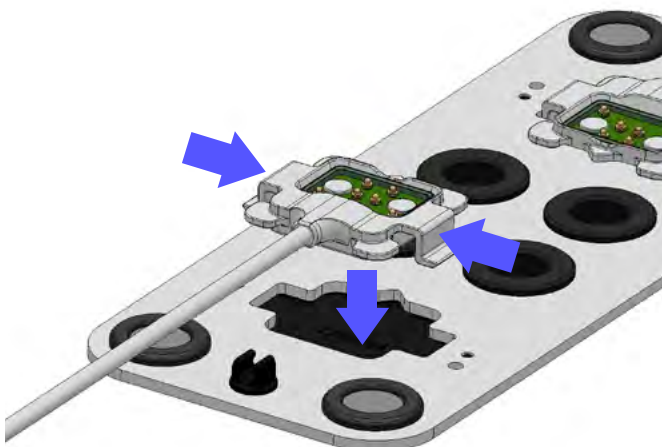
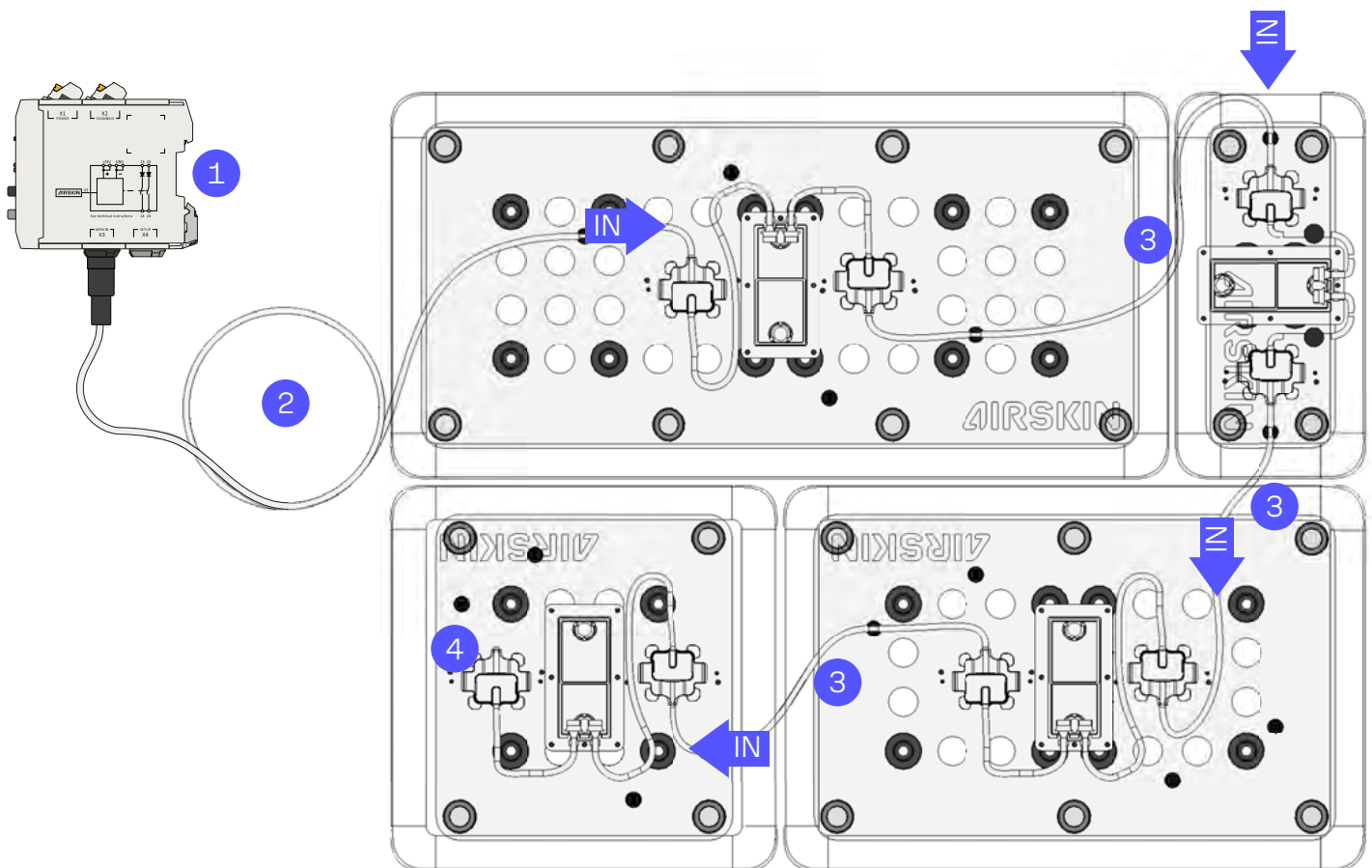


AIRSKIN® Installation and Cabling

Installation and Cabling

Operation of AIRSKIN® Modules requires:

- AIRSKIN® connection box **1** with connection cable **2**
- Up to 15 AIRSKIN® Modules in series with cables **3**
- Terminator **4**

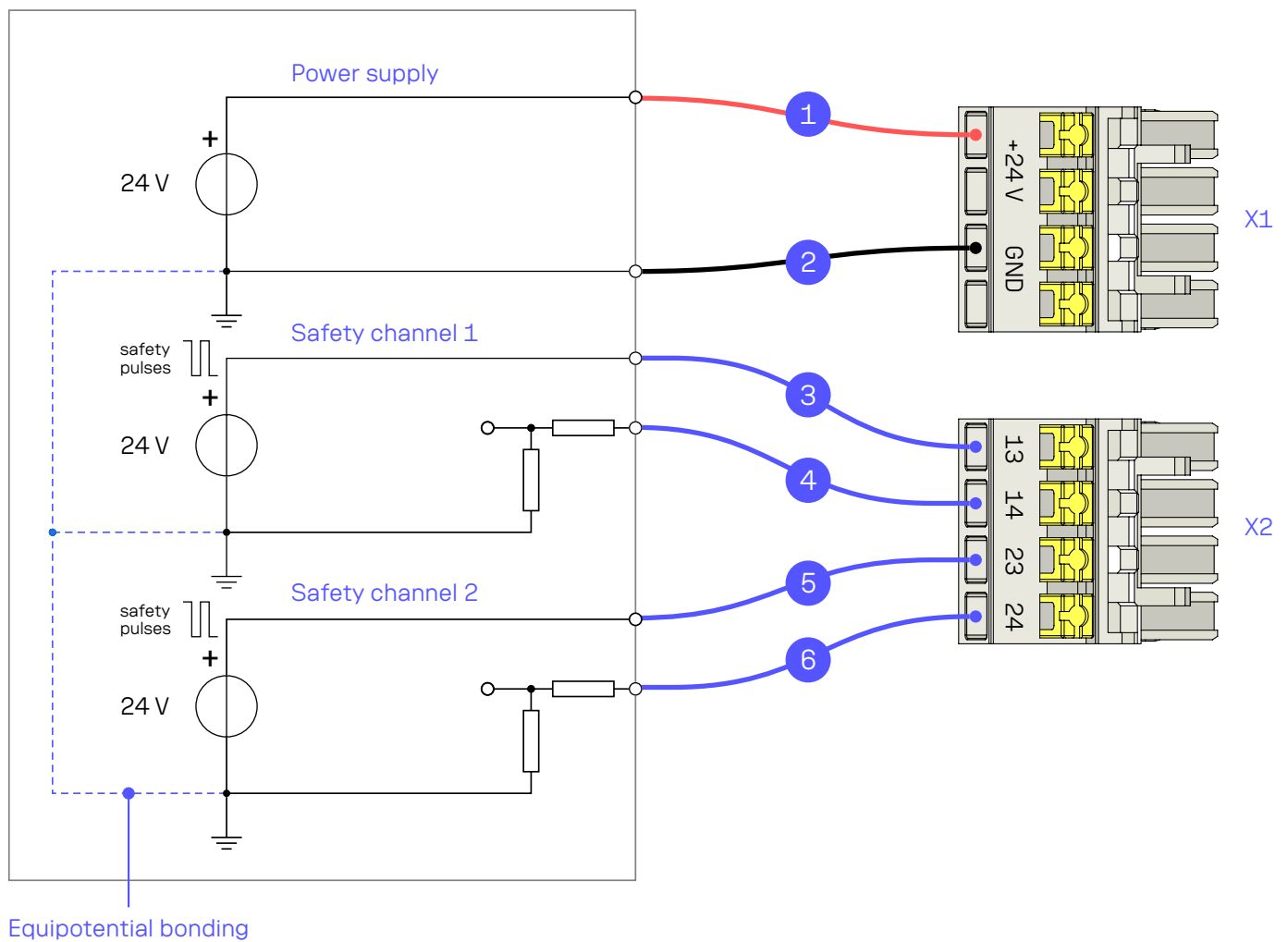


Note

- Please read the AIRSKIN® manual
- Electrical connection to robot controller via AIRSKIN® Connection Box
- Input voltage **1** + 24V DC
- Current consumption $\leq 0.8A$
- Not potential-free! When using an external power supply, grounds of power supply and **2** robot controller must be connected!

Safety Channels

- Inputs **3** and **5** + 24 V DC (text pulses allowed)
- Outputs **4** and **6** + 24 V DC (no collision - safety channels closed) or 0 V DC (collision or error - safety channels open)



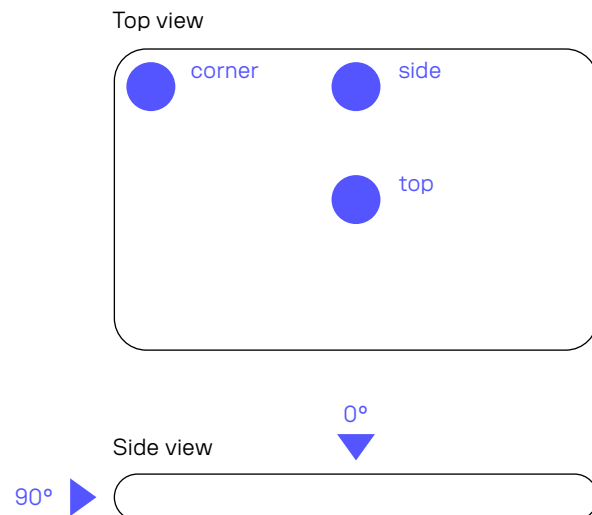
AIRSKIN® Actuation Characteristics

Equipment

- Robotiq FT 300 Force Torque Sensor on a lightweight robot arm
- Contact area: Cylinder with diameter 30 mm

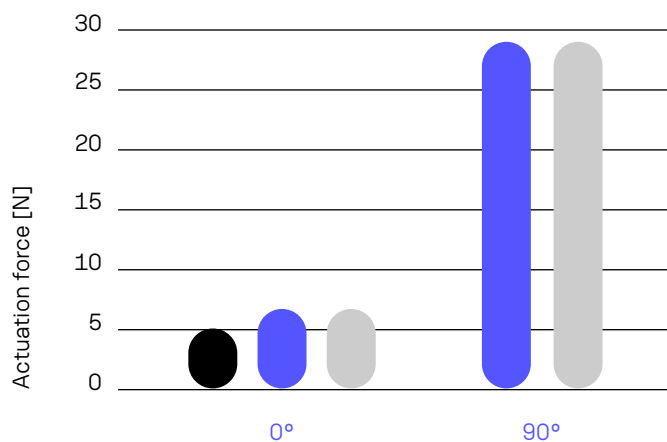
Measurement

The tip of the cylinder is moving towards the pad with 20 mm/s. When the AIRSKIN® module pad is activated, the resulting force is measured by the FT 300 sensor. The distance travelled by the tip after touching the AIRSKIN® surface is taken via the robot controller. Values are averaged over 5 measurements.



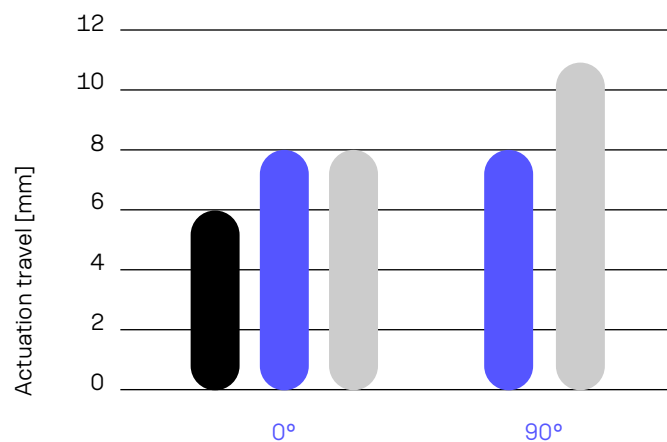
AIRSKIN® Modules H0

Actuation: Force



AIRSKIN® Modules H0

Actuation: Travel



**EG-Konformitätserklärung**

Original-Konformitätserklärung
Hersteller

Blue Danube Robotics GmbH
Donau-City-Straße 11, 15. OG, 1220 Wien,
Österreich

Bevollmächtigte Person, für die Zusammenstellung
der technischen Unterlagen:

Tobias Ferner
Donau-City-Straße 11, 15. OG, 1220 Wien,
Österreich

Produkt:

AIRSKIN®, „First Touch“, Taktile
Sicherheitssensor

Benannte Stelle für die Baumusterprüfung nach Anhang IX:

TÜV Austria GmbH
Deutschstraße 10, 1230 Wien, Österreich
17-00411

Hiermit erklären wir, dass das oben beschriebene Produkt allen einschlägigen Bestimmungen der
Maschinenrichtlinie 2006/42/EG entspricht.

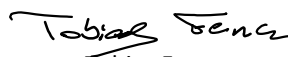
Weitere angewandte Richtlinien und harmonisierten Normen:

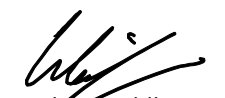
- EMV-Richtlinie 2014/30/EU
- RoHS-Richtlinie 2011/65/EG
- EN 61000-6-7 Elektromagnetische Verträglichkeit – Fachgrundnormen – Störfestigkeitsanforderungen an Geräte und Einrichtungen, die zur Durchführung von Funktionen in sicherheitsbezogenen Systemen (funktionale Sicherheit) an industriellen Standorten vorgesehen sind
- EN 55011 Industrielle, wissenschaftliche und medizinische Geräte – Funkstörungen – Grenzwerte und Messverfahren – Änderung 1 – Messung von gestrahlten Störaussendungen

Sonstige angewandten Normen oder Spezifikationen:

- EN 60664-5 Isolationskoordination für elektrische Betriebsmittel in Niederspannungsanlagen
- EN 60068-2-1 Umgebungseinflüsse - Prüfung A: Kälte
- EN 60068-2-2 Umgebungseinflüsse - Prüfung B: Trockene Wärme
- EN 60068-2-6 Umgebungseinflüsse - Prüfung Fc: Schwingen (sinusförmig)
- EN 60068-2-14 Umgebungseinflüsse - Prüfung N: Temperaturwechsel
- EN 60068-2-27 Umgebungseinflüsse - Prüfung Ea und Leitfad: Schocken
- EN 60068-2-30 Umgebungseinflüsse - Prüfung Db: Feuchte Wärme, zyklisch (12 + 12 Stunden)

Wien, 11. Juni 2018


Tobias Ferner
CTO


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Download

For more information CAD Data, KUKA Sim files and
Datasheets can be downloaded heres:

airskin.io/downloadkit

