

Scape X[®]

Objects

sxtv-002 / sxti-002 / sxsv-002 / sxsi-002 /
sxmv-002 / sxmi-002 / sxst-001

Operating instructions

Scape X® Objects

Contents

1. General information	5
1.1. Safety instructions	5
1.2. Information on cleaning	6
1.3. Transport instructions	6
2. Instructions for use	7
2.1. Handling the Scape X® stickers	9
2.1.1. Application	9
3. Troubleshooting tips	10
3.1. Manufacturer - Support	10
4. Appendix	11
4.1. Technical drawings - Scape X® Tags (sxti-002 /sxtv-002)	11
4.1.1. Perspective	11
4.1.2. Top view	12
4.1.3. Side view	13
4.2. Technical data - Scape X® Tags Invisible (sxti-002)	14
4.3. Technical data - Scape X® Tags Visible (sxtv-002)	14
4.4. Technical drawings - Scape X® Shape (sxsi-002 / sxsv-002)	15
4.4.1. Perspective	15
4.4.2. Top view	16
4.4.3. Side view	17
4.5. Technical data - Scape X® Shape Invisible (sxsi-002)	18
4.6. Technical data - Scape X® Shape Visible (sxvi-002)	18
4.7. Technical drawings - Scape X® Magnify (sxmi-002 / sxmv-002)	19
4.7.1. Perspective	19
4.7.2. Top view	20
4.7.3. Side view	21
4.8. Technical data - Scape X® Magnify Invisible (sxmi-002)	22
4.9. Technical data - Scape X® Magnify Visible (sxmv-002)	22
4.10. Technical drawings - Scape X® Stickers (sxst-001)	23
4.10.1. Foil sheet ID 1 - 24	23
4.11. Technical data - Scape X® Stickers (sxst-001)	24

Notes

This manual applies to the following objects:

- Scape X® Tags Visible (sxtv-002)
- Scape X® Tags Invisible (sxti-002)
- Scape X® Shape Visible (sxsv-002)
- Scape X® Shape Invisible (sxsi-002)
- Scape X® Magnify Visible (sxmv-002)
- Scape X® Magnify Invisible (sxmi-002)
- Scape X® Stickers (sxst-001)

Patent reference

U.S. Patent No. 12,026,328

Information in this document is subject to change without notice. ©2024 Interactive Scape GmbH. All rights reserved.

The document or extracts from the document may not be reproduced without the prior authorisation of Interactive Scape GmbH.

Interactive Scape GmbH is not liable for errors contained in this document or for any other incidental or consequential damages resulting from the delivery, application or use of this material.

All product names mentioned in this document are trademarks or registered trademarks of their respective owners.

1. General information

This manual describes the correct use of the **Scape X® Tags, Scape X® Shapes, Scape X® Magnify and ScapeX® Stickers**. Please refer to any supplementary documents.

In order to have **Scape X® objects** to function on a **Scape® Tangible** touchscreen, if not already set up, the **Scape X® object recognition module** must be activated in the **Touch and Object Assistant** of the screen.

You can find more information on this in the manual for the **Touch and Object Assistant**.

Stable functionality of the objects is only guaranteed when used on **Scape® Tangible** Touchscreens from Interactive Scape GmbH.

1.1. Safety instructions

Before and during use of your **Scape X® objects**, follow the safety instructions below to protect yourself, your surroundings and the **Scape X® objects** from damage.

Moisture, liquids and vapours

Moisture, liquids and vapours can impair the functionality of your **Scape X® objects** and your **Scape® Tangible**. The undersides of the objects in particular should always be completely dry during use.

- Use the **Scape X® objects** inside buildings only.
- Do not let the **Scape X® objects** get in contact with liquids.
- Protect your **Scape X® objects** from vapours and moisture.

Improper cleaning

Improper cleaning with harsh cleaning agents or solvents can cause damage to the **Scape X® objects**.

- Please note the information on cleaning your **Scape X® objects** ([chapter 1.2 Information on cleaning](#)).

Load and damage to the surface

Rough or sharp-edged materials can damage the underside of the **Scape X® objects** and impair object recognition.

- Do not place any heavy objects on the objects.
- Store the objects only on smooth or soft floors.
- Do not use objects with a dirty underside or on dirty screens.

1.2. Information on cleaning

Scape X® objects generally do not require maintenance. Nevertheless, it is recommended to clean the surfaces regularly to avoid scratching the undersides of the **Scape X® objects**.

Clean the undersides of the **Scape X® objects** regularly before and during use to avoid scratching the screen surface.

- Clear water or isopropanol (50%) is suitable for cleaning the surfaces.
- Apply the solution to a soft, lint-free cloth. Avoid coarse materials.
- Use soft textile cloths (e.g. microfibre cloths) to clean the plastic surfaces.
- Moisten the cloth and clean the **Scape X® objects** from all sides.
- Always wipe the underside of the objects from the inside to the outside to protect the sensitive edges of the underside of the objects

1.3. Transport instructions

Transport your **Scape X® objects** sufficiently padded and protected from moisture. We generally recommend using the original packaging.

2. Instructions for use

Remove the film on the underside (white film) of the Scape X® objects before use.

Transparent **Scape X® objects** are protected on the top and bottom by a film.

Attach your Scape X® Tags to an object for use.

Scape X® Tags (not **Scape X® Shape**) should not be touched directly during use. Direct contact with conductive materials affects object detection.

Do not attach any objects made of conductive materials directly to Scape X® Tags.

To connect objects made of conductive materials to **Scape X® Tags**, add a layer of non-conductive material between the **Scape X® Tags** and the object. Cardboard, acrylic or wood, for example, are suitable intermediate materials.

The thickness of the intermediate material must be **at least 10 mm**.

Conductive material that is placed over the **Scape X® Tag** or the intermediate material must have a minimum distance of 12 mm to the display.

Scape X® Tags must always lie completely and flat on the display.

Scape X® Tags must not be bent. Pay particular attention to this when removing glued-on objects.

Temperatures above 60°C will damage or destroy your Scape X® objects.

Clean the touch sensor and the objects used regularly during operation.

Fine sand and quartz dust in particular can lead to heavy wear on the sensor glass if objects are used intensively.

If necessary, use protective films to protect your touch sensor from scratching.

Interesting:

We test our objects in robot- assisted load tests on our displays for wear on the objects and effects on the sensor glass.

For these tests, we let a cobot use objects on a Scape Tangible 55 for approx. 15h / or 10km continuously.

A distance of 10 kilometres on the sensor corresponds to several years of intensive use of an object.

The robot simulates

average object use in a "normal" application

It performs random translational and rotational movements with the object on the display.

The object is repeatedly lifted and placed back on another area of the screen.

Only movements during which the object is in contact with the sensor are counted as distance travelled.

The force with which the object is pressed onto the screen is approx. 2N.

The test environment is neither clean nor excessively dirty.

Neither the sensor nor the object are cleaned during a test run.

As a result, we have so far not noticed any excessive object wear or damage to the sensor glass.

Avoid excessive strain on the touch sensor.

To ensure error-free object detection, the total mass of all objects on the device must not exceed **3kg**.



Signs of wear on the sensor and objects are unavoidable during normal use.

Avoid an application design that promotes the use of objects on a small exclusive area of the device.

Even if the maximum load for the sensor is higher, you should not exceed a weight per object of 500g.



Use on rough surfaces can cause significant wear or irreparable damage to Scape X® Objects.

If you have any questions about using the **Scape X® objects** or their installation on objects, or if you are unsure, please contact **Interactive Scape Hardware Support**.

You can reach them on weekdays on **+49 30 698 094 150**.

2.1. Handling the Scape X® stickers



The sticker is for single use only and should not be removed and reapplied elsewhere.



The substrate must be clean and level
(maximum unevenness, maximum curvature of 0.1 mm).



Do not stick directly onto conductive materials

If necessary, insulate conductive material with non-conductive material (e.g. transparent acrylic 10mm, dry cardboard 5mm, other materials should be tested beforehand).

The test can be carried out when the protective film is still on the sticker

2.1.1. Application

- Carefully remove the sticker from the protective film (e.g. with plastic tweezers)
- Avoid bubbles and creases by carefully smoothing with a soft cloth
- Do not bend the sticker
- Avoid touching the back (adhesive) with your fingers to prevent fingerprints.

3. Troubleshooting tips

If your **Scape X® objects** do not function as intended, please contact **Interactive Scape Hardware Support**. You can reach them on working days on **+49 30 698 094 150**.

3.1. Manufacturer - Support

Interactive Scape GmbH
Wilhelmine-Gemberg-Weg 6
10179 Berlin

+49 (0)30 698 094 150

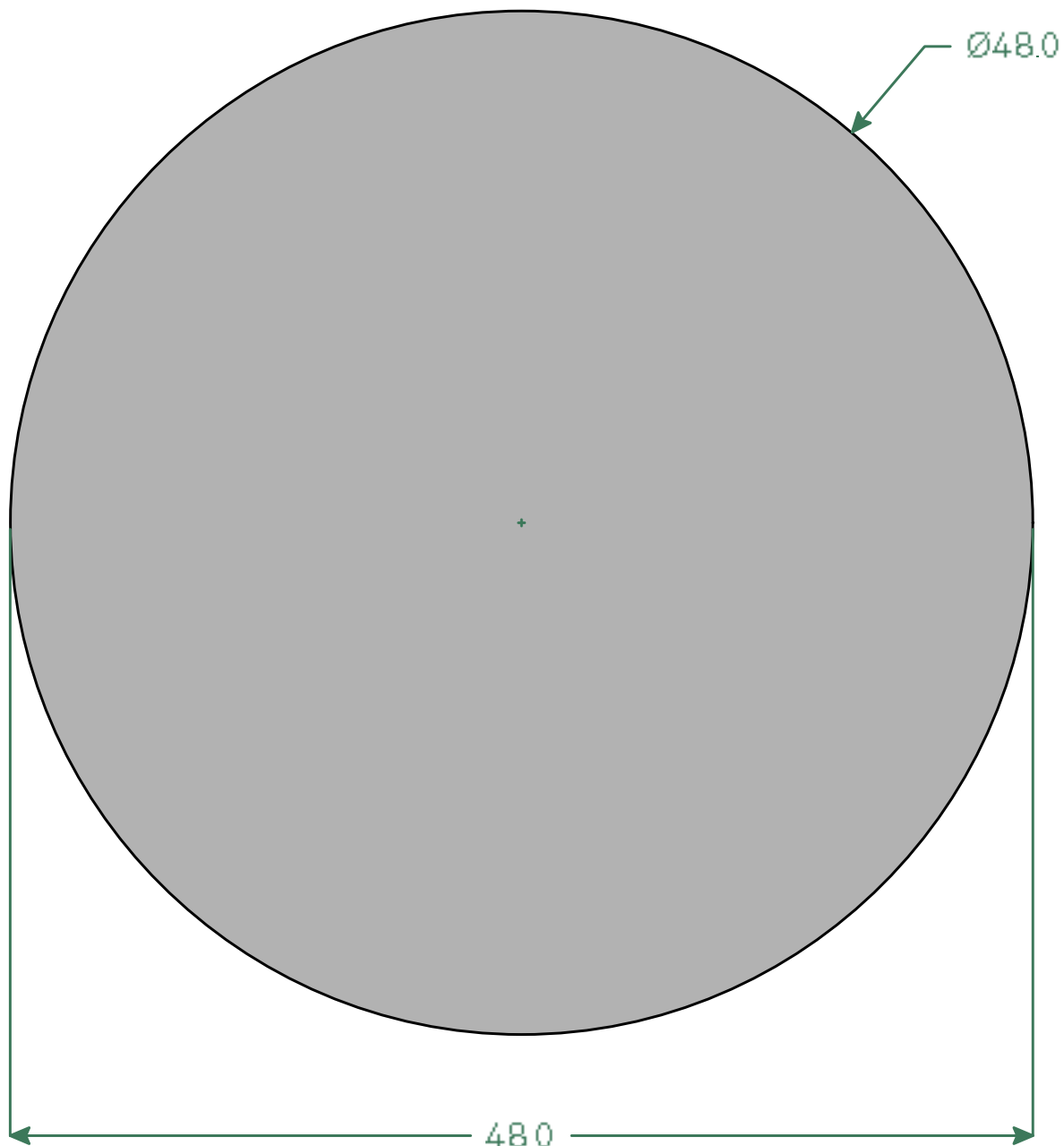
4. Appendix

4.1. Technical drawings - Scape X® Tags (sxti-002 /sxtv-002)

4.1.1. Perspective



4.1.2. Top view



4.1.3. Side view



4.2. Technical data - Scape X® Tags Invisible (sxti-002)

Article Number	sxti-002_1-12 / sxti-002_13-24
Dimensions	ø: 48.0 mm, h: 3 mm ±0.5mm
Weight	7 g
Material	Acrylic, transparent

Features

TUIO IDs	1 – 12
Rotational angular precision	< 1°, 0° adjustable
Compatible with	Scape® Tangible Displays 55" / 65" with Scape X® Object Recognition Module
Patent	U.S. Patent No. 12,026,328

4.3. Technical data - Scape X® Tags Visible (sxtv-002)

Article Number	sxtv-002_1-12 / sxtv-002_13-24
Dimensions	ø: 48.0 mm, h: 3 mm ±0.5mm
Weight	7 g
Material	Acrylic, transparent

Features

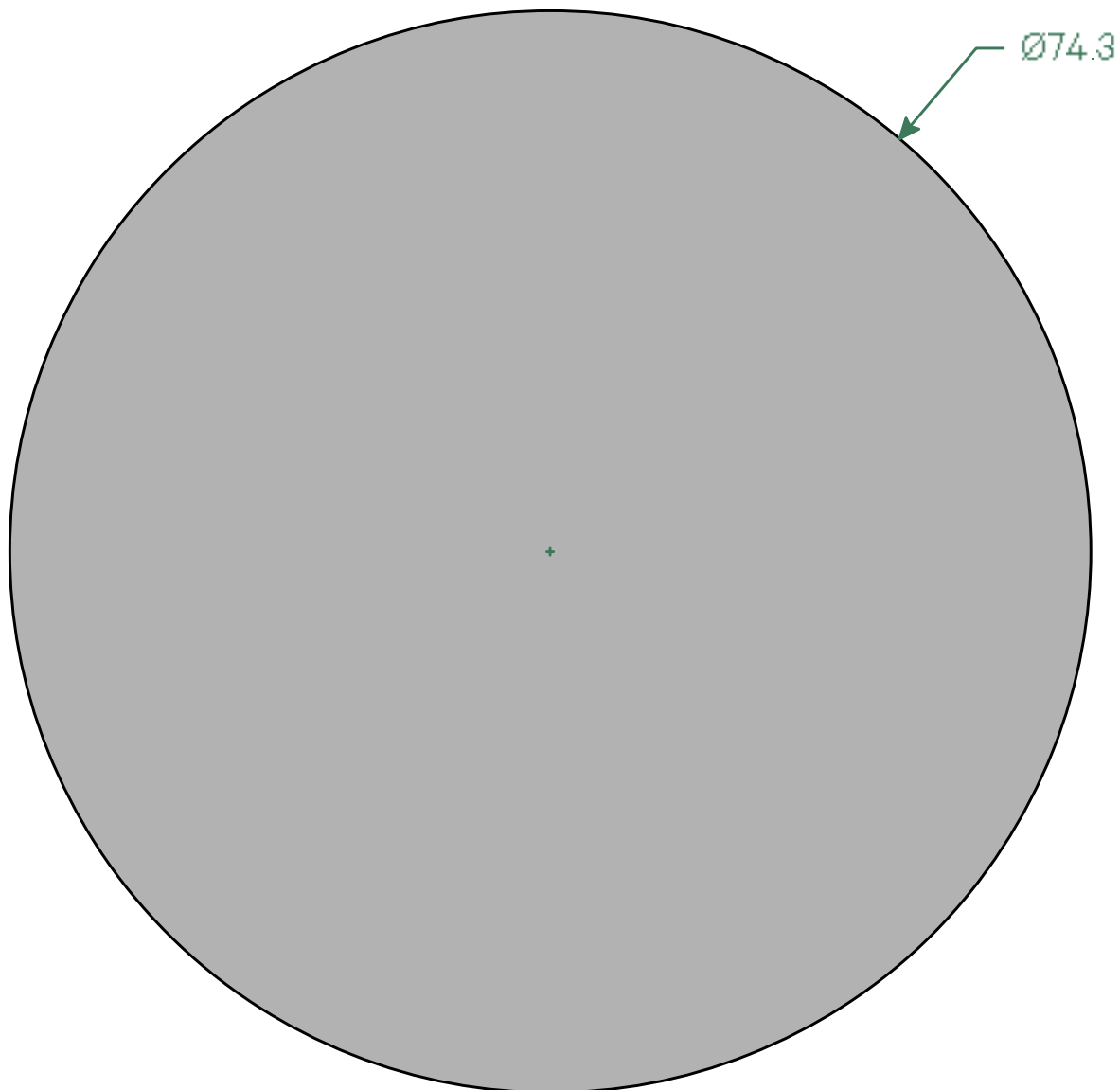
TUIO IDs	1 - 12
Rotational angular precision	< 1°, 0° adjustable
Compatible with	Scape® Tangible Displays 55" / 65" with Scape X® Object Recognition Module
Patent	U.S. Patent No. 12,026,328

4.4. Technical drawings - Scape X® Shape (sxsi-002 / sxsv-002)

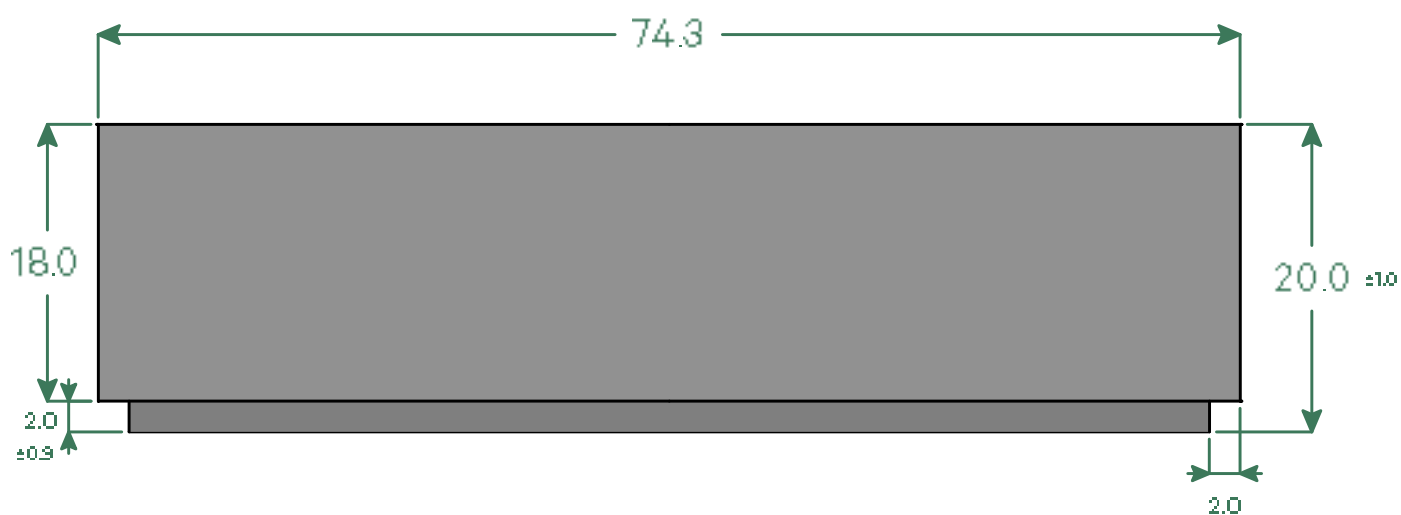
4.4.1. Perspective



4.4.2. Top view



4.4.3. Side view



4.5. Technical data - Scape X® Shape Invisible (sxsi-002)

Article Number	sxsi-002_1-6 / _7-12 / _13-18 / _19-24
Dimensions	ø: 74.3 mm, h: 20 mm ± 1 mm
Weight	103 g
Material	Acrylic, transparent

Features

TUIO IDs	1 - 24
Rotational angular precision	< 1°, 0° adjustable
Compatible with	Scape® Tangible Displays 55" / 65" with Scape X® Object Recognition Module
Patent	U.S. Patent No. 12,026,328

4.6. Technical data - Scape X® Shape Visible (sxvi-002)

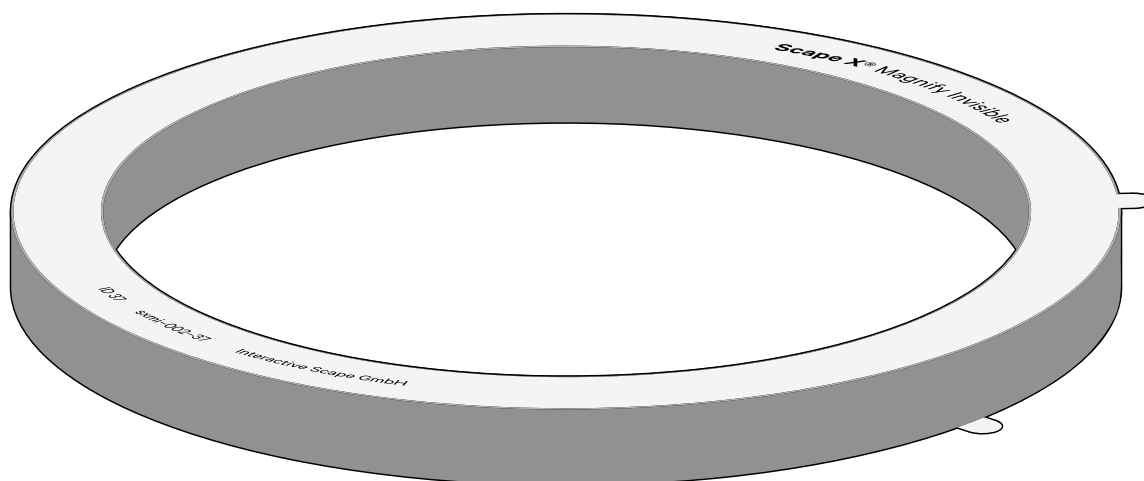
Article Number	sxsv-002_1-6 / _7-12 / _13-18 / _19-24
Dimensions	ø: 74.3 mm, h: 20 mm ± 1 mm
Weight	103 g
Material	Acrylic, black

Features

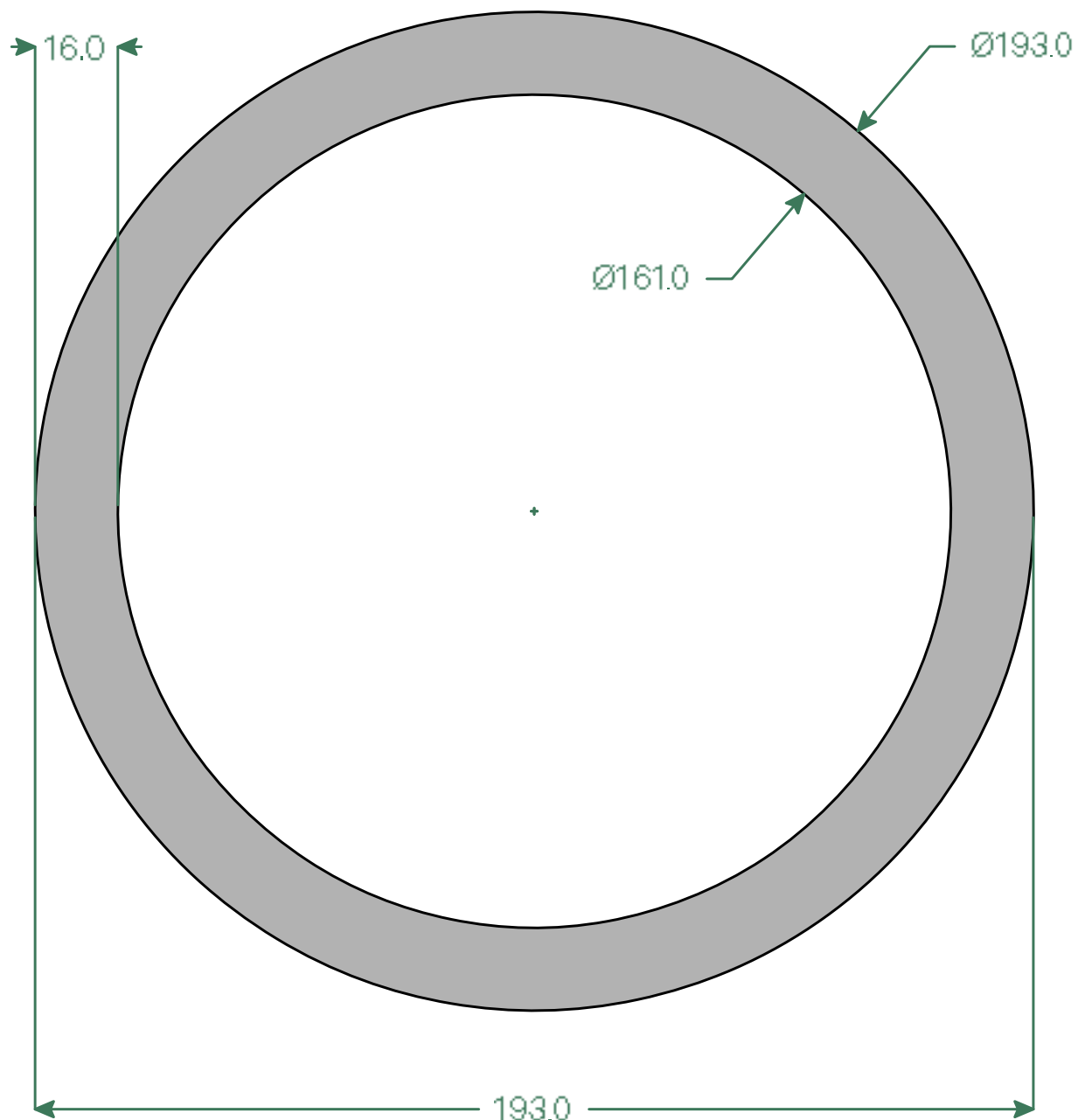
TUIO IDs	1 - 24
Rotational angular precision	< 1°, 0° adjustable
Compatible with	Scape® Tangible Displays 55" / 65" with Scape X® Object Recognition Module
Patent	U.S. Patent No. 12,026,328

4.7. Technical drawings - Scape X® Magnify (sxmi-002 / sxmv-002)

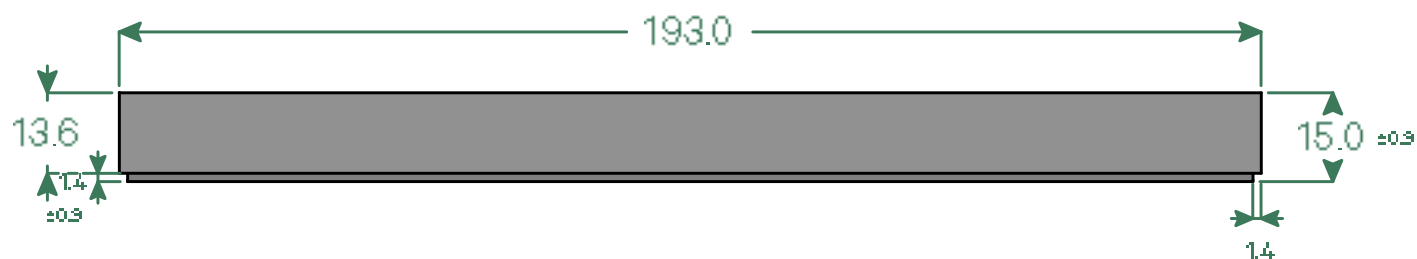
4.7.1. Perspective



4.7.2. Top view



4.7.3. Side view



4.8. Technical data - Scape X® Magnify Invisible (sxmi-002)

Article Number	sxmi-002-37p / sxmi-002_38p
Dimensions	Inner ø: 161.0 mm, Outer ø : 193.0 mm, h: 15.0 mm ± 0.9mm
Weight	148 g
Material	Acrylic, transparent

Features

TUIO ID	37, 38
Rotational angular precision	< 1°, 0° adjustable
Compatible with	Scape® Tangible Displays 55" / 65" with Scape X® Object Recognition Module
Patent	U.S. Patent No. 12,026,328

4.9. Technical data - Scape X® Magnify Visible (sxmv-002)

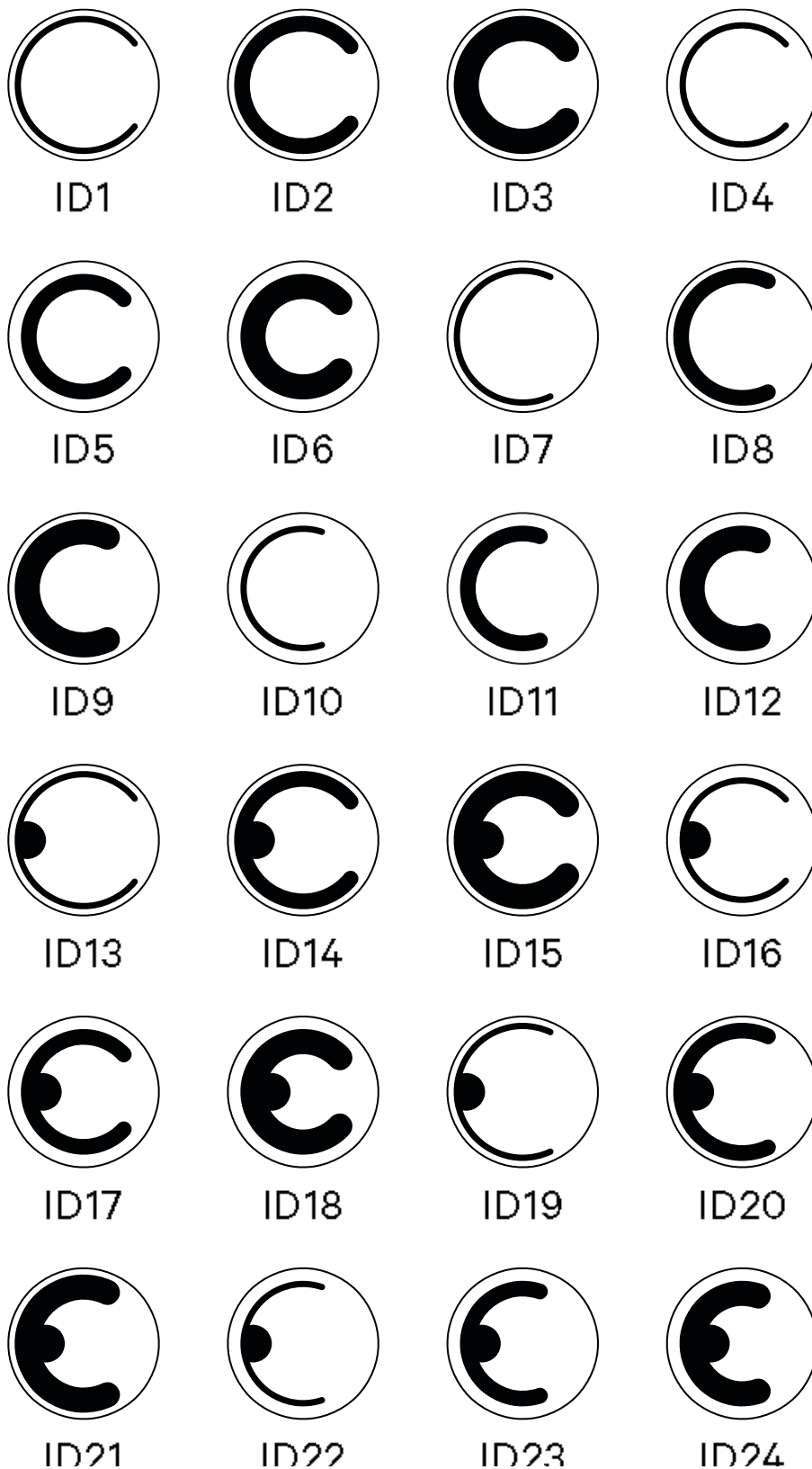
Article Number	sxmv-002-37p / sxmv-002_38p
Dimensions	Inner ø: 161.0 mm, Outer ø : 193.0 mm, h: 15.0 mm ± 0.9mm
Weight	148 g
Material	Acrylic, black

Features

TUIO ID	37, 38
Rotational angular precision	< 1°, 0° adjustable
Compatible with	Scape® Tangible Displays 55" / 65" with Scape X® Object Recognition Module
Patent	U.S. Patent No. 12,026,328

4.10. Technical drawings - Scape X® Stickers (sxst-001)

4.10.1. Foil sheet | ID 1 - 24



4.11. Technical data - Scape X® Stickers (sxst-001)

Item number	sxst-001
Dimension	
Stickers	ø: 48.0 mm
Bow	34.0x23.5 mm (LxW) 14.5g
Material	PET, print
Quantity	1 sheet with 24 self-adhesive stickers
Features	
TUIO IDs	1 - 24
Rotation angle precision	< 1°, 0° adjustable
Compatible with	Scape® Tangible Displays 32" / 43" / 55" / 65" with Scape X® object recognition module

